CONSOLIDATED EDISON COMPANY OF NEW YORK

SHARED SERVICES PANEL

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I. INTRODUCTION

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

A. Our names are Saddie L. Smith, Carlos Torres, Kenneth Jack, Terrence J. Walsh, and James Mueller. Our business addresses are 4 Irving Place, New York, NY 10003 (for Smith, Torres, and Walsh), 43-82 Vernon Blvd, Long Island City, New York 11101 (for Mueller), and 31-01 20th Avenue, Astoria, New York 11105 (for Jack).

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 & Rockland ("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.

(Torres) I am currently the Vice President of Emergency Management for the Company. I have been employed by Con Edison since 1985. I joined the Company as a management intern and have held numerous positions of increasing responsibility throughout my career, including a Field Engineering supervisor in Gas Operations, an engineer and manager in Steam Operations, a section manager in both Manhattan and Bronx/Westchester Electric Construction, project manager in Emergency Management director of Electric Operations Emergency Management, and general manager of Construction Services. In my current role as the Vice President of Emergency Management, I am responsible for overseeing the continued development of the Company's

emergency management program and ensuring its consistency with the Corporate Emergency Management Strategy. Also, as Emergency Management's lead liaison, I facilitate the communication, outreach and cooperation between Con Edison and the many federal, state, and local agencies and organizations the Company works with during events of local, regional and national concern.

I received a Bachelor of Science degree in Mechanical Engineering in 1985 and a Master of Science degree in Engineering Management in 1994, both from the New Jersey Institute of Technology - Newark College of Engineering. I also completed the Power Technologies Inc., distribution engineering course in 2004.

(Jack) I have been employed by Con Edison since 1994. I started my career with Con Edison as an engineering aide and then entered its management intern program. After completing the intern program, I held a variety of management positions of increasing responsibility in Central Field Services ("CFS") including Field Engineer, Senior Engineer, Manager, and Section Manager of Regional Operations. In 2004, I transferred to Substation Operations where I was the section manager of Operations Planning. In 2006, I was promoted to the position of General Manager, Transportation Operations.

I am responsible for all the garages throughout CECONY and O&R as well as Automotive Engineering and Fleet Administration. I received a Bachelor of Science degree in Mechanical Engineering from Polytechnic University in 1999.

(**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 8 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.

(Mueller) I have been employed by Con Edison since 1975. I was hired by Con Edison as a Customer Service Representative and held a variety of management positions of increasing responsibility in Customer Operations, including Branch Manager, Section Manager, Department Manager, and General Manager. In December

2003, I was assigned the position of Director of Human Resources Services and was then transferred to Director of The Learning Center in August 2006. I am responsible for all of the technical and skills training at The Learning Center. I also am responsible for the oversight and preparation of the O&M and capital budgets for Human Resources. I received a Bachelor of Arts degree from SUNY in 1974 and an MBA in Finance from Hofstra University in 1983.

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

A. All panel members testified in Case 08-E-0539.

II. PURPOSE OF TESTIMONY

Q. Please summarize the Panel's testimony.

A. We describe numerous Shared Services efforts needed to support programs throughout the Company, including electric and common programs. Throughout this testimony, we also discuss measures that Shared Services is taking to mitigate costs now, in the rate year, and beyond.

First, we explain the Company's 2010 $75.5 million capital request for general equipment. As is demonstrated in our testimony, general equipment is necessary for the day-to-day operations of the Company.

The capital request for general equipment is actually a decrease of $23.4 million in expenditures from the historic year level.

Second, we provide information in support of Emergency Management's implementation plan, including ongoing and planned spending improvements to the emergency management program designed to enhance our response and better meet the expectations and needs of our customers. We also explain the Company's compliance efforts under the Commission's audit related to emergency management in Case 06-M-1078.

Third, 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 is explained in the testimony, we made no program change for these costs. The Company expects to provide current costs for this volatile commodity throughout this proceeding but believes, as was determined in Case 08-E-0539, that the costs allowed in this case should be based on the most current information available at the time the decision in this case is made. Additionally, we describe approximately $500,000 in capital projects for CFS in 2010.

Fourth, we address three Information Technology ("IT") related programs: SCADA Net, the ICON Radio Wireless

System, and the Computer Cost Program The total request for IT capital in 2010 for IT programs is $13 million and we have an incremental O&M request of $0.3 million for the rate year.

Fifth, we describe the proposed O&M costs for the rate year, the twelve months ending March 31, 2011, associated with career path and supervisor technical training; the Company's HR Workforce Strategy and the costs associated with this program; and the Company's request for recovery of strike contingency expenses. Additionally, we describe our ongoing capital program that supports our training programs. In the rate year, with the exception of strike contingency expenses, we project to expend an incremental $800,000 in O&M for these functions. We also expect to spend $3.3 million in capital for 2010.

Sixth, we explain the need to modernize, upgrade, and improve various equipment and infrastructures associated with the various buildings coming under Facilities' responsibilities. Over the next four years, Facilities is planning to undertake nearly 150 projects, some small, others large, in the following areas: (1) compliance with environmental, health & safety and regulatory requirements ("compliance projects"), (2) upgrading or improving building

infrastructure ("critical infrastructure projects"), (3) improving work space ("programmatic site improvements"), and (4) addressing user requests ("user requests"). We also discuss the Company's on-going efforts to harden facilities in the event of a hurricane; and to evaluate and repair the Astoria and Waterside dock facilities, Flush Facilities and the Astoria Hazardous Waste Storage Facility. In total, Facilities is requesting $28.2 million in O&M in the rate year, an increase of $16.0 million over the historic year, and $54.8 million in capital in 2010. The O&M increase is attributable to Local Law 26 for $7.5 million, $3.8 million for the Waterside Dock repairs, $2.5 Million for Local Law 11, with the balance associated with miscellaneous other improvement programs. The O&M decreased by $3.0 million when compared to our submittal in Case 08-E-0539 and this is attributable to the Company's deferring unreimbursed costs associated with the West 28th Street relocation. Finally, we provide information in support of the Phase 2 effort of the Single Entry Point Ordering System for the Purchasing Department and incremental costs for Energy Management that are expected to be incurred as a result of the updating of the New York Independent

System Operator ("NYISO") Transmission Owner load forecast reporting programs.

Q. Before beginning to explain the various projects, please explain the relationship of shared services efforts to the Company as a whole.

A. Shared Services efforts are comprised of 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. Most Shared Services efforts are common to the Company's Electric, Gas and/or Steam businesses, and, in some cases, to O&R. Where necessary, the Accounting Panel provides for the allocated share of these costs to Con Edison's electric service.

Q. Could you also discuss your position regarding implementation of the one-way downward-only reconciliation for Shared Services capital expenditures instituted in Case 08-E-0539?

A. Company witness Rasmussen addresses the Company's position on the reconciliation of these capital expenditures.

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 Corporate Instruction CI-610-2 Section 3.3.

Q. Do you have an exhibit detailing the procedures for general equipment?

A. Yes.

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

A. Yes, it was.

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 XM's.

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 provide additional detail regarding 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 the employees to complete their tasks in a safe and efficient manner.

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:

- Transportation (XM-2), Stores (XM-3), Laboratory (XM-5), and Tools & Work (XM-6) Equipment - Central Field Services.
- Communication (XM-8) and Computer (XM-10) Equipment - Information Resources.
- Office Furniture (XM-1) and Safety & Miscellaneous (XM-7) Equipment - Facilities Management.
- Shop (XM-4) Equipment - Maintenance and Construction - Van Nest Shops.

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

A. On an annual basis, each Control Agency develops projected costs of capital tools in each XM category. The projected spending levels are based on our 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 the Control Agencies of their expected needs by XM category over the next five year period. The Control Agencies review the submissions and compile all the requests. Even though a final budget is approved for a one-year period each November for each XM category, the finalized list remains fluid because of missing, broken or changing equipment needs from the field. Other operating needs may cause variations in the general equipment expenditures as well.

Q. Once the list is finalized, what does the Control Agency 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 ensure 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, mini-vans, etc.

Q. Does the Control Agency have a monitoring function for the XM budgets under it responsibility?

A. Yes. The Control Agency monitors commitments and expenditures to avoid exceeding the authorization levels established in the approved XM Budgets for each user organization.

Q. How much does the Company plan on spending for general equipment in 2009?

A. So far in 2009 (through March), we have expended $13.5 million in General Equipment, and project spending $75.4 million in total for General Equipment for 2009. This amount is $5.8 million lower than the 4-year historical average (2005-2008) and $23.5 million below 2008 actual spending levels.

Q. Going back to historical year 2008, what were the primary causes of the increases in that year as compared to 2007?

A. Additional purchases of work vehicles were the primary driver, having increased by $19.8 million compared to 2007 and $18.8 million compared to the 3-year average. This increase had been forecasted in the total XM budgeted levels for 2008 of $99.1 million, with actual expenditures at $98.9 million. Due to the lead time to procure specialty work vehicles (e.g., cable pullers, flush trucks, bucket trucks), purchase commitments were

initiated in order to have equipment available to align with the replacement of these vehicles based on the life-cycle of the equipment in 2008. Another increase was in XM-5 and XM-6 for Test Equipment and Work Tools for the field, up $5 million from 2007 levels. This increase resulted from greater equipment requirements due to various new and expanded programs as well as the required replacement of these tools at the end of their service life.

Q. What is the Company requesting for General Equipment over the next three years, starting in 2010?

A. In 2010, we project to expend $75.5 million, followed by $75.6 million in 2011 and $74.1 million in 2012.

Q. Are the 2010 forecasted expenditures higher than 2008 actual spending, the 2009 projected spending, or the 4-year historical average (2005-2008)?

A. No. We are trying to keep these expenditures from increasing year over year. This is evidenced by comparing the 2010 request to 2008 actual spending, 2009 projected spending, and the 4-year average (2005-2008). 2010 is forecast to be $23.4 million below 2008 actual spending levels, approximately the same compared to the 2009 projection, and $5.7 million lower than the 4-year historical average of general equipment expenditures (2005-2008). These same projections were

reflected in Case 08-E-0539. We would also note that for the five year forecast (2009-2013), the Company's projected spending is at an average of $77.5 million over the period, which is $3.7 million lower than the 4-year historical average (2005-2008).

Q. Do you expect any upcoming year to have a higher than average level of expenditures?

A. Yes. In 2013, we project an increase in 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 routine purchases of vehicles to replace those that have reached the end of their useful economic life, highly specialized equipment, such as cranes, are one-time purchases that appear as anomalies in the 5-year capital plan. These specialized machines can cost between $500,000 and $1.5 million. Their replacement is based on the economics of continuing to maintain existing equipment and evaluation of the specific nature of upcoming construction projects.

Q. Have you prepared an exhibit detailing historic and projected expenditures for XM 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. Do you have additional comments regarding funding XM requirements?

A. Yes. The significance of General Equipment 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. As an example, an underground splicing crew requires, among other 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. From this example, it is

easy to see how general equipment is interwoven throughout the Company's daily operations.

Q. Do you have exhibits that explain each category of general equipment?

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

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

A. Yes, we will.

Q. Please describe the categories of equipment known as XM-3, XM-5, and XM-6.

A. CFS' 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 ensure the 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, pressure gauges, etc. 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, tire repair equipment, etc. 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 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, improvements in safety, quality or productivity.

Q. Can you provide some examples of these changes?

A. Yes. Two examples of this are the replacement of retrieval devices and atmospheric gas detectors. The retrieval devices, included in the XM6 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 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, which 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. Tools and equipment are evaluated before being replaced; only those that are deemed un-repairable are replaced, except when the equipment is purchased due to operating or work practice changes requiring a new type of device that addresses the new requirement. 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 provide, by category, the projected number of devices that you are planning to purchase in 2010?

A. Yes. The numbers of devices projected to be purchased by category for 2010 were based upon the historic average for each category (2006 to 2008). Projected devices are as follows:

Budget Category	2010
XM-3	113
XM-5	1,124
XM-6	2,920

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

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

Q. What is the projected spending for 2010 for these categories?

A. We project to spend $598,000 in XM-3, $5.5 million in XM-5, and $6.8 million in XM-6 in 2010.

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. The XM-2 category provides for the purchase of mobile equipment, such as trucks, cars, cranes, construction equipment and forklifts used throughout our operations. The Control Agent for this equipment is CFS Fleet Administration group. Under this category of expenditures, the Company owns approximately 4,300 over-the-road self

propelled vehicles, ranging from 1,945 passenger vehicles to 254 bucket trucks and 33 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 6,300 items of transportation equipment. This figure includes highway, non-highway powered equipment, trailers and mounted equipment for tracking purposes.

Q. Please describe the manner in which this equipment is budgeted.

A. The XM-2 expenditures, detailed in Exhibit __ (SSP-2), are historical and projected spending related to the replacement of existing equipment. The Company has a pre-determined methodology for selecting mobile equipment based on age, maintenance, and reliability. The methodology is based on the equivalent, uniform, annual cost ("EUAC") method. The method 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 an asset. The Company's Transportation department maintains a database of these assets and their associated operating costs. It reviews the information annually to determine which assets to replace based on suggestions

from the EUAC model as well as case-by-case evaluations of certain assets.

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

A. The Company uses a vehicle replacement methodology referred to as "LC," "life-cycle," optimization model or "the model." 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 face increasing maintenance costs and reduced reliability that would impact our ability to respond to the maintenance of the T&D system. The 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 since the EUAC method minimizes the area underneath a total cost curve.

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 8 years. That analysis, as well as those performed for other classes of assets, is based on nearly 30 years of accumulated maintenance data. Hypothetically, however, a vacuum-truck assigned to one service region, say Staten Island, might be used slightly less, because the T&D system in that region has more overhead and underground residential equipment than in other areas. If there is more overhead equipment, vacuums and flushes may not be needed as often as it is in Manhattan, which is an all underground area.

Although the life-cycle model would normally select Staten Island's vehicle for replacement based on age, Transportation might elect to keep it in service a couple more years based on its condition and the expected decreased level of usage it has seen while it has been in service. The budget process includes a joint review of assets flagged as beyond their life cycle by CFS and the operating areas.

Q. Can you provide the actual historic spending levels?

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

Q. Can you also provide how many vehicles, by category, that you are planning to purchase in 2010?

A. Yes, they are set forth in Exhibit __ (SSP-1) on the pages entitled (XM-2) Vehicles.

Q. What would be the ramifications of not meeting the purchase requirements in this category?

A. The cost to operate mobile equipment beyond its economic life quickly compounds. The cost to maintain this equipment can rise substantially in a short period of time, if the replacement of equipment is deferred or delayed. These costs would be flowed through to the operations responsible for maintaining the T&D systems. Reduced spending on replacement equipment would also mean higher polluting, older and less reliable mobile equipment would be kept in service. Vehicle availability may decrease and in some cases equipment would age beyond our ability to purchase replacement parts, the consequence of which would be the introduction of an adverse effect on T&D personnel's ability to respond to emergencies and effect construction of needed T&D 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 electric system equipment failures, it would likely adversely affect the time to restore service to customers and thereby increase network and radial outage duration performance, which would also unfairly increase the Company's exposure to a $5 million revenue adjustment under the current Reliability Performance Mechanism. Inadequate vehicle availability would 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 it at risk. While some vehicles can feasibly be maintained longer than the life-cycle would suggest as "average" performance, some critical equipment can begin to suffer structural failures due to age. These failures can not reasonably be prevented through maintenance programs. Bucket-trucks, cable-pulling equipment, heavy trucks and cranes are examples of where a catastrophic mechanical failure 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 engineer-out high maintenance designs and common causes of failures. For instance, several years ago Transportation's engineers selected a model of bucket-truck in part because the nature of its design and robust components mitigated the need for costly overhauls every five years. This reduced the maintenance cost stream over the life of those assets by over $1.0 million. This increased the age at which they would economically be replaced and, therefore, reduced long-term capital expenditures associated with replacement. The department strategically designs purchase agreements to best leverage its buying power, reducing the up-front cost of the equipment. The department also employs highly-skilled mechanics, supervisors and managers, armed with the appropriate systems and technology to effectively diagnose and repair equipment. These three 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 maximizing the effect of our capital replacement programs.

Q. What affect does prolonging the expected life of an asset have on capital spending?

A. Prolonging the life of capital assets has allowed the Company to maintain or reduce projected spending levels in this category, notwithstanding the need for things like new diesel-emissions control equipment required since 2007. The 2007 EPA diesel emissions regulation added roughly $5,000-$7,000 to the purchase price of every diesel vehicle. The Company purchases roughly 170 diesel vehicles that were affected by this regulatory change, at a total cost of roughly $1 million annually. The Company has been working hard to absorb those costs without seeking rate relief. Over the next 5 to 10 years, the cost of the technology and improvements in manufacturing may reduce this cost; however, today it represents a very real constraint on the XM-2 budget. Transportation endeavors to find other ways to extend the economic life of other equipment, or consider simply deferring replacement of equipment that will result in increased costs to customers in the long-run.

Q. How are these costs estimated?

A. Transportation continually monitors its asset-management systems and projects what equipment will

require replacement. This is used to develop a 5-year capital plan.

Q. How specific are those estimates?

A. The estimates are largely for planning purposes. Transportation uses this information to suggest allocation of annual XM-2 spending among various operating areas for budgeting purposes. However, the specific assets that will be replaced and their ultimate invoice price are not known that far in the future. The Transportation department develops more specific estimates for the current and the upcoming budget year, whereas later years include only estimates.

Q. Please continue.

A. The next category is for items covered in General Equipment XM-1 "General Office Equipment" 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 purchases the Company's miscellaneous equipment, such as cafeteria and kitchen equipment, safety and training equipment, fire protection, audio visual and

photographic equipment as well as sign and advertising displays.

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

A. Our work forces would be prevented from meeting their objectives in an efficient and safe manner. It would also create personnel issues with those employees who, 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 for employee protection if overcome in confined space to allow lifting out by fellow employees from above. Self Contained Breathing Apparatus ("SCBA") and Respirators with Escape Bottles for entry by employees in work areas where atmosphere suspect to support human life are part of this 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 ensure no leaks when conditions require employees to wear respirators.

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

A. Over the period 2006 to 2008 we have spent, on average, $1.9 million for the replacement of furniture. The mix

has been on average 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 believe this mix will remain constant for both 2009 and 2010.

Q. Do the levels included in this case reflect any cost reduction efforts by the Company?

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. Note that at any given time, organizational requirements are shifted to meet organization's priorities. Thus, ergonomic chairs or safety lifting and SCBA devices would take priority over office furniture in ordering.

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

A. In the historic year 2008, we purchased $2.6 million in XM-7 equipment. The mix of equipment was 55% Audio and video, 20% Security cameras/card access controls, 15%

training equipment and 10% Safety equipment. We expect this mix to remain constant for 2009 and 2010.

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

A. Construction is the Control Agency for Shop Equipment XM-4. 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 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. 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. The impact of not having funds to perform this support work could have 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 2009?

A. The Bridgeport Milling Machine, which is heavily used and shows signs of wear, needs to be replaced as it's

over thirty years old. A milling machine that exhibits wear will affect accuracy in fabricating parts. We are also planning to replace the welding machines due to end of life cycle.

Q. What is the mix of equipment purchased in XM-4?

A. In the historic year 2008, we purchased $645,000 in XM-4 equipment. The mix of equipment was 54% Milling Machines, 32% Flow Jet/ Welding and Cutters, 11% saws and 3% Sanders. We expect this mix to continue in the years 2009 and 2010 with a small increase in the mix for saws due to replacement of the Marvel saws in 2010.

Q. Please describe the categories of equipment known as XM-8 and 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 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, microwave equipment. The equipment in XM-10 comprises computer equipment used throughout the Company, including 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 XM-8 and XM-10 category?

A. Items covered under the XM-10 categories are typically replaced on industry standard practice of 5 - 8 years or as business requirements dictate new technology specifications. XM-8 equipment has an extended life and is replaced at 10-15 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 March 31, 2009:

- Number of Desktops: 8,700
- Number of Laptops: 5,858

  Number of servers: 985
- Number of Networks: 1 Logical IP network

In addition to the corporate network, there are control networks that are separated by firewalls. Firewalls are devices that provide security between networks. The control networks are located in our energy control centers, electric control centers, and substations - 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.

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

A. There has been a steady growth in the total purchase of computer units beginning in 2007 through the current time frame. We anticipate this growth to continue. The projected growth is based on historical trends with an emphasis on the increase in Laptops/MDTs (Mobile Data Terminals) offset by a lessening demand for desktops. The rising number of Laptops/MDTs is based on the need for mobile dispatch applications to access corporate data from remote locations. Our mobile workforce requires immediate access to maps and procedures to perform their jobs wherever their work takes them.

Our purchases are identified as:

Category	2007	2008	Projected 2009	Projected 2010
Desktops	1,774	1,728	1,715	1,700
Laptops/MDTs	1,581	1,732	1,780	1,850
Servers	85	105	113	120
Total	3,440	3,565	3,608	3,670

Q. What is the budgeted level for XM-10 in 2009 and 2010?

A. The budgeted level for XM-10 is $21.1 million in 2009 and $19.8 million in 2010. The budgeted costs are based on each organization's forecast for replacement of equipment in the Five Year Capital Plan. Typically, prices for electronics go down offsetting any inflation concerns.

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-*, 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 provided 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. Do the levels included in this case reflect any cost reduction efforts by the Company?

A. Computer hardware is purchased in bulk and competitively bid to take advantage of volume discounts. 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 by 10%, which in turn reduces hardware purchases by $176,000 per year. SAN technology allows storage to be shared by multiple servers instead of dedicated to a single server to reduce stranded storage by 15%, which in turn reduces hardware purchases by $172,000 per year.

Q. How are computers used at Con Edison?

A. Computers have 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.

EMERGENCY MANAGEMENT

Q. Please provide a brief description of the Emergency Management organization.

A. Recently, the Company reorganized and expanded its Emergency Management organization consistent with the Company's Emergency Management Master Implementation Plan ("MIP") filed in Case 06-M-1078. The restructured

Emergency Management organization is comprised of four main groups. These groups are Electric Operations Emergency Management ("EOEM"), Operations Emergency Management ("OEM"), Emergency Management Operation Services ("EMOS"), and O&R Emergency Management ("OREM"). Emergency Management's vision is to meet our customers' needs through effective risk assessment, mitigation, preparedness, response and communications. Our goal is to achieve excellence as an industry leader in emergency management performance by utilizing effective emergency management principles. The implementation of the Emergency Management MIP will enhance the Company's ability to provide safe and reliable energy services by:

- Conducting effective risk assessments for operating and business functions;
- Developing appropriate prevention or risk mitigation strategies;
- Implementing comprehensive emergency preparedness programs;
- Responding with appropriate resources to address the emergency;

- Communicating with customers and other stakeholders timely and accurate information using voice, Internet, media and other appropriate methods;
- Recovering from events expeditiously; and
- Improving continuously.

The Company's enhanced emergency management programs detailed in our MIP resulted in the need for sixteen additional personnel within the Emergency Management organization. None of these positions pertain to staffing of the Orange and Rockland Emergency Management group. These additional positions were partially approved at 45% of the requested funding based upon the historic hiring practices adjustment adopted in Case 08-E-0539.

Q. I show the Panel a document which includes the O&M COST RY1 through RY3, the Master Implementation Plan, and the Emergency Management organization chart and ask if it was prepared under your direction and supervision?

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT __ (SSP-3)

Q. What was the level of O&M spending for Emergency Management in the historic test year?

A. Spending in the historic year, 2008, was $2.48 million.

Q. What are the projected expenditures for the rate year ending March 31, 2011?

A. The Company is seeking an incremental increase in funding of $1.32 million over the historic year's expenditures, for a total of approximately $3.8 million. This is identified in Exhibit __ (SSP-3, p. 1).

Q. Please describe Exhibit ___ (SSP-3, p. 1).

A. This Exhibit summarizes Con Edison's estimated O&M requirements for the Emergency Management organization for RY1 through RY3. The funding requirements include the historical spending level for the organization during its inception in May 2008, as well as the increased funding requirements associated with the staffing increases and implementation of the Company's enhanced and expanded Emergency Management programs in response to Case 06-M-1078.

Q. Please explain the increased O&M Company Labor request for the rate year.

A. Incremental labor costs for the rate year are $700,000, which is related to the personnel recently added to the Emergency Management organization. Since not all sixteen positions were filled as of the end of the historic year, our spending in the rate year will be greater. Based on our plan, during the historic year,

only nine of the sixteen employees had been hired. As of April 2009, all of the remaining seven employees were hired. These seven employees filled the following positions: two Project Specialists in the Plans, Policy and Procedures group; two Project Specialists in the Risk Management, Weather Analysis and Benchmarking group, one Project Specialist in the Strategic Planning group; one Project Specialist in Operation Emergency Management - Gas; and one Project Specialist in Electric Operations Emergency Management - Underground. The current Emergency Management organization is identified on the organizational chart in Exhibit __ (SSP-3, p. 117).

Q. Please discuss the program changes associated with the projected increase in accounts payable resulting from the enhanced Emergency Management organizations.

A. This program change will facilitate the successful implementation of the MIP and development of the Emergency Management organization through the continuation of several technology applications. As identified on Exhibit __ (SSP-3, page 1), the program changes will require increased funding of $469,000 in RY1. The program was partially approved at 45% of the requested funding based upon the historic hiring practices adjustment adopted in Case 08-E-0539.

Risk Assessment Strategy Program

Q. Please address the Emergency Management Risk Assessment strategy program change.

A. The Company's businesses are influenced by many factors that are difficult to predict, and that involve uncertainties that may materially affect its performance and ability to provide safe and reliable service to its customers. To this end, Con Edison's Emergency Management Operational Risk Assessment strategy is based on the existing business Enterprise Risk Management ("ERM") process. The Operational Risk Assessment strategy continues to identify and minimize the consequences of high risk events based on weather and other physical risks. The process/strategy identifies prevention and mitigation opportunities. The formal risk assessment model and process requires significant effort involving benchmarking, internal reviews, consulting services as well as training and integration into existing operational and financial processes. The cost of continuing this program, results in Account Payable costs of $200,000 in RY1, $50,000 in RY2, and $50,000 in RY3. The on-going accounts payable costs represent anticipated consultant usage and studies that will be performed to analyze and develop prevention and mitigation strategies for

identified risks. The program was partially approved at 45% of the requested funding based upon the historic hiring practices adjustment adopted in Case 08-E-0539.

Benchmarking & Best Practices Program

Q. Please address the Benchmarking & Best Practices program change.

A. Con Edison participates in industry benchmarking. In line with the Corporate Emergency Management Strategy ("CEMS"), the Company recognizes that there are opportunities to better incorporate best practices within organizations. Con Edison's emergency management "Benchmarking and Best Practices program" is aligned with the emergency management principles established in the CEMS. As a result, Emergency Management is responsible for coordinating with internal departments, identifying industry best practices, implementing lessons learned, and aligning emergency management benchmarking efforts with its strategy. This includes attending conferences, benchmarking with other utilities and industries, and membership fees for formal benchmarking programs, such as Corporate Executive Board. This facilitates a more formal information capture and dissemination process for communicating information as well as utilizing it to identify and implement best practices.

The cost of maintaining this program anticipates Account Payable costs of $175,000 in RY1, $125,000 in RY2 and $125,000 RY3, for benchmarking with other utilities and industries, attending conferences, membership fees for formal benchmarking programs and initiating benchmarking initiatives. The program was partially approved at 45% of the requested funding based upon the historic hiring practices adjustment adopted in Case 08-E-0539.

Weather Technology

Q. Please address the weather technology component.

A. As noted in Case 08-E-0539, the Company initiated a R&D project with IBM to apply IBM's Deep Thunder technology to the problem of forecasting weather-caused damage at a micro-geographic level. The goal of this project was to develop and integrate the applicability of more precise weather forecasting capability into our emergency response efforts by utilizing finer resolution forecasting models. With this new tool, the Company is better able to mobilize resources appropriately to respond to storms in its service territory, concentrating first on the overhead system in Westchester County and north Bronx. With better mobilization, the Company will be able to reduce restoration time and communicate more accurately with

customers and stakeholders while saving money by better utilizing resources. The ongoing costs as well as anticipated enhancements for RYs 1-3 represent system maintenance fees, licensing fees and additional enhancements to include validation and testing regarding long range damage prediction. The anticipated annual costs are $200,000 for RYs 1-3. The program was partially approved at 45% of the requested funding based upon the historic hiring practices adjustment adopted in Case 08-E-0539.

Q. I show the Panel a document which is a white paper that summarizes the status of the Emergency Management Master Implementation Plan and ask if it was prepared under your direction and supervision?

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT __ (SSP-4)

Q. Please describe the current status of the Company's efforts to implement the MIP pursuant to the Commission's January 17, 2008 Order in Case 06-M-1078, related to the October 24, 2007 Audit Report under the same proceeding.

A. Con Edison has made significant changes to its emergency management program, including developing the MIP. The Company first filed its MIP with the Commission on March 3, 2008 and, pursuant to the

Commission's order, has provided Staff with quarterly updates since then. Exhibit __ (SSP-3) pages 3 - 116 reflects the latest quarterly update to the MIP the Company has provided to Staff. The MIP serves to facilitate the development and implementation of the Company's overall strategic goals for emergency management. The MIP organizes and prioritizes the Company's efforts into a multi-year plan. As of the March 3, 2009 update filing with Staff, Con Edison has completed 72 of the 82 items within the MIP. The remaining 10 items are on track to be completed on schedule. The latest submittal of the MIP is identified in Exhibit __ (SSP-3, pages 3-116).

CENTRAL FIELD SERVICES

Q. Please explain the services CFS provides.

A. CFS is a support organization made up of three major groups: 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, Transportation Operations, which provides maintenance and repairs to the corporate fleet and manages the fleet vehicle replacement program, and Astoria Operations, which provides crane and rigging services, tanker support 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. In 2007, the Company expended $10.3 million for 3.8 million gallons of vehicle fuel used to run the Company's fleet of 4,300 vehicles. In 2008, the Company expended $14.7 million for 4 million gallons of fuel for a similar level of vehicles. The price per gallon of gasoline experienced dramatic shifts during 2008 alone, ranging from a low of $2.07 to a high of $4.35. Similarly, biodiesel fuel ranged from a low of $3.19 to a high of $5.40.

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

A. There was a lot of volatility in 2008 that doesn't seem to be backed by fundamentals, however, we do see an overall trend upwards over the last couple of decades, almost without exception. The Company has seen price-per-gallon increases of 16 percent annually from 2003 through 2007. In 2003, the Company paid $1.62 per gallon. In 2004, the Company paid $1.88 per gallon. In 2005, the Company paid $2.37 per gallon. In 2006,

the price was $2.78 per gallon, and in 2007, it was $2.90 per gallon. In 2008, despite significantly lower prices in the last quarter, the Company paid an average of $3.63 per gallon.

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

A. There are various drivers - world events and economics drive crude-oil prices. To a lesser extent, mandated reformulation of fuels for certain markets has also caused increased prices. The U.S. EPA enacted requirements in 2006 that effectively required all new on-highway diesel vehicles to dramatically reduce harmful emissions. This was accomplished, in part, by requiring a reduction in sulfur content of on-highway diesel fuel. The new formulation (referred to as ultra-low sulfur diesel or ULSD) requires some differences in the refining process that increased the cost. Additionally, the Department of Energy regulates the fleets of "fuel providers." 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 Department of Energy regulations. This fuel comes at an additional premium.

Q. What is the situation with vehicle fuel prices now?

A. While the existing economic situation may have precipitated the decline in oil and petroleum distillate prices in the last six months of 2008, all indications are that markets hit bottom at the beginning of 2009 and that prices will rise throughout 2009, 2010 and the RYE 2011.

Q. Please explain the Company's philosophy for estimating vehicle fuel costs for the purpose of reflecting an appropriate forecasted amount in rates.

A. Based on the foregoing, the rate request reflects the amount in the historic year. Due to the rapid and volatile changes in this market, the Company proposes that it update these 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 2011 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 in the current rate year.

Q. Is the Company suggesting it requires additional funding for vehicle fuel? If so, can you explain why?

A. The Company is not necessarily suggesting it needs additional funding. The Company is only seeking to develop a viable methodology to describe expectations

and revenue requirements associated with the expected cost of fuel. This method may produce an increase or a decrease in revenue requirements. However, ultimately, the Company seeks to recover the actual expenses for fuel.

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-5)

Q. What is your estimate of rate year vehicle fuel costs based on?

A. We have developed a formula to account for the Company's cost of vehicle fuel based on the Department of Energy, Energy Information Administration's - Short-Term Energy Outlook (DOE EIA-STEO) report. As we explained in Case 08-E-0539, we believe the STEO report provides the most useful independent reference for future fuel prices. Our formula considers the net effect of our bulk purchase agreements, effect of local taxes and fees and in the case of biodiesel, the bio

additive. The method expressed as formulas are shown below for gas and diesel.

Gasoline:

[(Con Edison Historic Year (2008) Average $/gallon) / (DOE Historic Year (2008) 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.

Using this formula for the rate year, we would have the following calculation -- ($3.482/$3.248) * ($1.90) = $2.037; then $2.037 * 2,000,000 gallons = $4,073,768 expected gasoline expenditures for RYE 2011

Diesel (B20 Biodiesel):

[(Con Edison Historic Year (2008) Average $/gallon) / (DOE Historic Year (2008) National Average $/gallon)] * (DOE Future National Average) = CECONY Future $/gallon. The product is again multiplied times the gallons.

So, for diesel, we would have ($4.028/$3.80) * ($2.69) = $2.851; and then $2.851 * 1,950,000 gallons = $5,560,230 expected B20 biodiesel expenditures for RYE 2011.

Q. Please explain the basis for this formula.

A. This formula basically develops a relationship between Con Edison's cost for fuel and the federal government's actual and projected price for fuel. By comparing the two, a relationship is drawn between the average cost as projected in the STEO, and the local prices that the Company expects to pay for fuel. It also accounts for any discounts the Company receives for its bulk purchases.

Q. Is this methodology displayed anywhere?

A. Yes. Exhibits __ (SSP-5, at B-1 and B-2) demonstrates how actual historical gasoline and biodiesel expenditures track against the DOE references. The company has described this relationship as a formula and used that formula to project fuel expenditures.

Q. Do you suggest using the information directly from the EIA STEO report to develop prices?

A. No. This is simply because the EIA STEO report does not project prices on a regional basis. While the DOE/EIA reports local information retrospectively, its forecasts are regional in nature at-best. DOE data points can be used as a basis for future projections, but they must be corrected for New York State, the terms of our bulk fuel contracts and the use of biodiesel using historical data available from the company and through organizations like the DOE, Oil

Price Information Service ("OPIS") and American Automobile Association ("AAA").

Q. Are there any ways you mitigate cost?

A. We mitigate cost by operating private fueling stations and through our bulk purchase agreements. For instance, those purchase agreements reduced the cost of vehicle fuel by approximately $472,000, or $0.24/gallon in 2008 compared to what would have been seen in the retail market.

Q. Are there any ways you can mitigate consumption?

A. Behavioral management plays a role in conserving fuel. Employees who operate Company-owned vehicles are reminded periodically about ways to improve their fuel economy. Some newer vehicles automatically shut off the vehicle if it idles too long and we are examining other technologies to provide a better use of petroleum resources, however even if a product is found to meet all our requirements, it will take some time to implement throughout the fleet and to an extent sufficient to impact consumption in any meaningful way.

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

A. We continue to examine the possible benefits of using Compressed Natural-Gas ("CNG"), hybrid vehicles and other technologies to reduce the amount of fuel used by

mobile equipment as we construct and maintain our T&D system. We have purchased some hybrid vehicles to be used by employees, but there are no commercially available and cost-justified hybrid offerings for the biggest consumers of fuel - trucks and other heavy equipment. We are working with R&D to develop technologies to facilitate our crews working with electrically powered equipment on job-sites, but that is also a few years at best from a production technology.

CFS - Capital projects

Q. Please identify the capital projects CFS is requesting.

A. CFS is requesting three IR systems as part of this case. One system is an upgrade to the existing Warehouse Management System ("WMS"), another one provides additional operating modules to the existing Logistics Emergency Management System ("LEMS") and the last one is a new system to track scrap cable and reels ("SCART").

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

A. The SCART system is estimated to cost $500,000 and is projected to be in service by year end 2010. The LEMS project is estimated to cost $1.8 million and the estimated completion date is during 2013. The upgrade

to the WMS system is estimated to cost approximately $525,000 and be completed in 2012. The $750,000 in 2013 is earmarked for the development of a work management system for Stores Operations.

Q. Have you prepared an exhibit 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-6)

Q. Can you please explain WMS?

A. The WMS, installed in 2004, is a vendor-based product used by Astoria Stores personnel to assist in managing the materials received, inventoried and picked at the warehouse. It is a wireless system that uses portable devices for the recording of material received, and removed from the warehouse. The material removed from the Astoria warehouse is then transported from Astoria to the Company's satellite storeroom facilities for disbursement to ultimate user organizations.

Q. How does this system assist stores personnel in the daily operation of the warehouse?

A. Smartinfo is the system's main reporting tool. The reporting function produces shipping manifests, vendor performance reports and a significant number of reports

related to the management and movement of material. The system is a valuable tool for managing material flow in and out of the Astoria Warehouse.

Q. Why do you need to upgrade the WMS?

A. Like most computer systems produced by vendors, the life expectancy of the product is limited. New versions are produced that incorporate updates that impact the performance of the system. Support for the older version from the vendor will end in 2011 and the only alternative is to upgrade to the current release (new version).

Q. Do you have an exhibit that provides additional details associated with WMS?

A. Yes. The details are shown in Exhibit ___ (SSP-6), on the page entitled "Warehouse Management System Upgrade."

Q. Please discuss the LEMS.

A. LEMS is an application that will source, track, and monitor Company-owned or rented equipment or services for emergency or non-emergency conditions, planned or unplanned outages, system support, or system enhancements.

Q. Have you provided additional details associated with LEMS?

A. Yes. The details are shown in Exhibit __ (SSP-6), on the page entitled "Emergency Operations - Logistics Emergency Management System."

Q. Please continue.

A. LEMS will provide improved management and real time tracking of resources such as mobile electric generators ("MEGS"), tankers, command vehicles, cranes, etc., and the ability for upper management, requesting organizations (Control Center Shift Managers, General Managers, Chief Engineer - Distribution Engineering, Energy Services, and Incident Commander) and external regulatory agencies to monitor this information. The application will also be able to provide financial reporting for projected requirements and actual utilization.

Q. What will this system do for the operating organizations within the Company?

A. The system will provide operating organizations the ability to request logistical support in a more efficient manner by entering the request directly into a web-based application without having to call the CFS Operations Control Center. This system also allows the operating organization to view the status of the request and resource activity in real time. This will enhance the operating organization's ability to plan

work and manage resources more effectively. Without LEMS, the ordering, tracking and overall management of logistical resources required by operating organizations is handled via phone calls from the requesting organization to the CFS Control Center. This sometimes leads to delays in ordering material as well as time lags in the obtaining information, which can negatively impact planning and work management. LEMS will significantly improve on the current practice primarily by providing more complete, accurate and timely information.

Q. What benefit does the Company receive from this system?

A. Currently, the Company uses various manual processes to manage the deployment and tracking of resources such as MEGS, tankers, cranes, etc. These processes require numerous interactions and hand-offs, with the potential of creating delays and duplicative efforts. Furthermore, a significant amount of effort is spent documenting and reporting this information with the possibility of reporting inaccurate data. While performing post-event reconciliation, the manpower required is extensive to respond to inquiries as well as for financial reporting purposes. The need for this type of system is evident during large scale emergencies as well as other smaller events and drills

the Company periodically conducts to test its ability to respond to incidents. The development of this system will provide Con Edison with a significantly more efficient and effective means of managing resources and communicating the status of these resources with operational areas, which is an important component of the Incident Command System. This is particularly critical during emergencies when time is of the essence and the failure to deliver the correct resources in a timely manner could have serious adverse consequences.

Q. Can you provide additional information on cost savings associated with LEMS?

A. Anticipated cost savings associated with LEMS fall into two primary areas as follows: reduction in overtime and direct vendor O&M costs. LEMS will result in reduced overtime because it will allow the Company to more efficiently respond to external agency inquiries, perform data compilation and analysis, and approve invoices. In the past, overtime may have been required to perform these tasks. Currently, during the high activity period for generators, i.e., May thru September, overtime is sometimes needed to complete documentation required for environmental reporting, performance metrics reporting, maintenance of

historical archives, as well as to provide complete and accurate information for payment of invoices.

A second area of anticipated savings includes a reduction in vendor related costs. This is because LEMS will provide improved data compilation and reporting functions, which in turn will allow for better management of vendor related costs. This is because having this information will allow for optimizing vendor selection and the utilizing of in-house versus vendor resources. In recent years, the Company has spent approximately $2 million per year in vendor costs for the rental, operation, maintenance and transportation of mobile electric generators. Even a small improvement in the overall management of vendor costs through the use of LEMS would result in significant savings.

Q. What progress has been made on the development of the system?

A. The initial module of the system has already been completed and is being utilized for the sourcing, mobilizing and tracking of Company-owned and leased MEGS. Rate relief is being requested to continue the development of LEMS to include other modules for tankers, cranes, command vehicles and other logistics equipment, such as light towers, arrow boards, etc. By

adding these additional modules to LEMS, CFS will be able to manage all of the resources cited with a single automated system. If we do not add in the other modules, there will be different systems used for each resource, e.g., LEMS for generators, a spreadsheet for tankers and command vehicles, and other handwritten or ad hoc spreadsheets for the other resources. By having LEMS manage all resources we expect to be able to service the operating departments better, which will ultimately benefit the customer through improved operations. Limiting LEMS to generators alone will also result in the sub-optimal use of the LEMS platform.

Q. Please explain the SCART system.

A. The SCART system will generate the scrap cable manifest and allow for the automated tracking of empty reels through the scrap process.

Q. How are scrap cable and reels tracked currently?

A. The current process is largely manual, involving both paper forms and excel spreadsheets. These activities, which are performed at Astoria and regional storerooms, require manual paperwork, numerous interactions and hand-offs which create delays and duplication of efforts. A significant amount of effort is dedicated to documenting and reporting this information and to

ensure data accuracy, extensive manual reconciliation efforts are also required.

Q. How will the new system be implemented?

A. Four separate modules will be developed.

Q. Can you briefly describe the modules?

A. The modules will consist of an Accounts Receivable process which will transmit data to CECONY Accounts Receivable and Material Management Systems, a Vendor Access module that will provide "real-time" access for vendors to electronically update empty reel status, and the use of Wireless Devices to scan reel information. And finally, in the last module, paper forms will be replaced with computerized forms or electronic records.

Q. What other benefits will be derived from this system?

A. The elimination of the various manual tracking methods will result in productivity gains through the reduction of manual data inputting. This savings is derived from the aggregate of each of our seven cable yard operations. In addition, better coordination of scrap cable reels between the cable yards can be expected.

Q. Have you provided additional details for SCART?

A. Yes. The details are shown in Exhibit __ (SSP-6), on the page entitled "Scrap Cable and Reel Tracking."

CFS 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. During 2008, the following initiatives achieved cost savings/avoidances in either capital or O&M.

- Direct Deliveries - Instituted a direct delivery system where deliveries from supply vendors of large quantities of job-specific materials are delivered directly to designated job site locations. The use of direct deliveries avoids double handling of the material, and saves on transportation costs associated with hauling material from Astoria to designated delivery locations. The estimated productivity savings from this activity is $250,000.
- Scrap Cable Reels - Developed a new process that eliminated the multiple handling and internal deliveries of scrap cable reels. The new process allows for vendors to pick up scrap cable reels directly from cable yards, reducing the handling of scrap cable reels, improving productivity and eliminating internal transportation costs

associated with the hauling of the scrap reels to Astoria. The total productivity savings is estimated to be $200,000 per year.

- Consolidation of Supply Rooms in Van Nest - the Electric Operations supply room in Van Nest was consolidated with the Regional Storeroom in Van Nest. This has improved the supply chain process, eliminated double handling of materials and gained better control of inventory. It has resulted in the elimination of one full time stores position.
- Fleet Vehicles - Roughly 75 hybrid vehicles have been integrated into the fleet in 2008. Transportation has re-entered the CNG market with the purchase of 15 CNG cars in 2008 and more purchases are scheduled for 2009. These fuel efficient vehicles are expected to lower fuel costs slightly over the life of the vehicle. More such vehicles are required to make a significant impact. Transportation is using its relationship with several suppliers and manufacturers to obtain skills training for our staff of mechanics. Improved skills have allowed Transportation to address a larger and more demanding fleet with no staffing increases.

- Waste Stream Processing - As explained in the Facilities portion of this testimony, Environmental Operations received a renewed and expanded Part 373 Hazardous Waste Storage Permit from the New York State Department of Environmental Conservation ("DEC"). Astoria is now authorized to accept additional waste streams such as lead, cadmium, chromium, benzene, and other federal ("RCRA") hazardous waste streams. The new process consolidates and bulks waste at Astoria before sending it directly to final disposal or recycling facilities and will reduce costs through economies and efficiencies of scale and shared service. When this process is fully implemented, CFS expects to realize a cost avoidance of approximately $350,000/year.

Q. Does CFS have any cost minimization plans for 2009?

A. Yes, we plan to expand the consolidation of Storerooms to include the Eastview Service Center. In addition, Transportation plans to continue buying fuel efficient vehicles, including hybrid vehicles and CNG powered units.

INFORMATION RESOURCES

Q. What is the organizational structure of Information Resources?

A. Information Resources provides all the computer support for the Company. The group is divided into five sections. They are the Application Services section, 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 Human Resources' Payroll System, Customer Bill Redesign effort, and the System Trouble Analysis and Response ("STAR") project.

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.

The Quality Assurance/Contract Administration group assures quality for Information Resources processes in areas of EH&S, operational security and audit management. They provide administrative services for corporate computing and telecom contracts, and managing the telecommunications clearing budget. The group also satisfies various requests for communications hardware including pagers, cellular phones and blackberries.

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

Q. Please name the program changes requested in this testimony.

A. We address three new IT related programs: SCADA Net, ICON Radio Wireless System and the Computer Cost Program. THE SCADA Net program will also include an O&M request for three additional network resources. We will also provide the status of three previously approved Capital programs from Case 08-E-0539 as well as one O&M program from the same case. The previous Capital programs include the Network Operations Center, Data Warehousing and Business Intelligence, and Other Business. The previous O&M program is the Mainframe Operating and Maintenance Cost program.

In total, we are asking for $13.0 Million in capital for IT programs in 2010, $11.2 Million in 2011 and $9.2 Million in 2012. On the O&M side, the program changes equate to an incremental $300,000 in RY1, $300,000 in RY2 and $300,000 in RY3 over the historic year expenditures.

Q. Do you have exhibits detailing these programs?

A. Yes.

Q. Were they prepared under your direction and supervision?

A. Yes, they were.

MARK FOR IDENTIFICATION AS EXHIBITS __ (SSP-7, SSP-8)

Q. Please explain SCADA and the SCADA Net Program included in your request?

A. Supervisory Control and Data Acquisition ("SCADA") is an application that provides remote control and monitoring of a class of assets, in this case electric utility assets (e.g., feeders, sensors), which are used to deliver energy reliably, efficiently and safely. As is also described and explained in the testimony of the Company's Infrastructure Investment Panel, the SCADA Network program is a program to design and build a single secure electronic network to support SCADA applications for Electric, Gas and Steam operations. The network will link control centers and substations using a private Company network and provide secure ingress points to access field assets using secure wireless communications to control assets in the field and collect critical data to support the operation.

Q. Have you prepared exhibits that provide further information on SCADA and the SCADA Net Program?

A. Yes. Additional information is shown in Exhibits __ (SSP-7 and SSP-8) on the pages entitled "SCADANET."

Q. Why is the SCADA Network required now?

A. Con Edison currently maintains multiple SCADA networks to provide reliable energy delivery systems for electric, gas and steam. Currently, these systems can be maintained individually because they use serial point to point connections (phone lines, mechanical

field assets) and limited amounts of data is available for analysis. However, today, new technology has a feature called enabled microprocessors, both in the field and throughout the Company's environment, that have new capabilities to improve control and access real-time operational data not previously available. This new technology introduces the need for a holistic cyber security approach on a single network infrastructure. As these new technologies are deployed, a single secure SCADA Network is required to securely operate the Company's systems.

Q. This request is also included in the Infrastructure Investment Panel's testimony. Please explain why there is no duplication of costs?

A. The Infrastructure Investment Panel is explaining the need for various SCADA programs. The request that this Panel is making is for the communications costs associated with these new SCADA systems.

Q. Has the Company already started working on Smart Grid applications?

A. Yes. In fact, proof of concept field installations began appearing during the latter part of the past year.

Q. Will this network include requirements for future AMI and Smart Grid initiatives?

A. Yes, the network is designed to scale for capacity over time and provide layers of cyber security components to address Smart Grid initiatives and to securely incorporate AMI requirements and maintain performance needed for control applications. The Company is currently implementing a pilot in Long Island City to introduce AMI and smart grid initiatives for secondary monitoring, distribution network segmentation and feeder switching, transformer monitoring and controlling high tension assets. The network can be scaled to support any future AMI initiatives that result as part of the Company's AMI filing in Case 09-M-0074.

Q. Please provide a description of the proposed network design.

A. The proposed network will link transmission and distribution control centers in a ring topology via private fiber that is already available. Each control center will have firewall and Intrusion Detection Systems at the ingress/egress points. Substations will be connected to the core ring at two points for redundancy and diversity. Less secure connections entering the network from non-Company locations (carrier services or field assets) will require additional security scrutiny before entering the core.

Q. Is this a multi-year program and if so, what additional costs are associated with this request?

A. Yes, we are projecting capital expenditures for the years 2010 - 2012 totaling $4.9 million. The amounts are broken out in 2010 for $1.9 million, in 2011 for $1.63 million, in 2012 for $1.37 million. No work has been initiated on the SCADA Network to date, only on Smart Grid Proof of Concept applications. The plan was developed during the second half of 2008 after meetings with electric, R&D and other utilities. This will provide a more reliable and secure infrastructure.

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

A. Yes, we are requesting three additional network resources beginning in 2011 at a cost of $330,000. This amount represents the full salary of the employees. These analysts are requested during the implementation and for operational support as the network grows in function and criticality. We expect to begin hiring in the beginning of 2011. They will perform day to day provisioning of new circuits, maintain power, cooling and cabling for network components and design and monitor connections to field assets.

Q. Have you prepared an exhibit that provides further information on these additional resources?

A. Yes. Additional information is shown in Exhibit __ (SSP-8) on the pages entitled "SCADANet - Additional Network Analysts."

Q. Please describe the Company's existing radio systems.

A. This is a multi-year program to improve and expand the Company's two private radio systems. The first is an 800 MHZ iDEN radio system that is used for communication between field crews and control centers, and for emergency communications. The radio system consists of 23 cell sites dispersed throughout the service territory and one master site which are located at 4 Irving Place. The second is a 450 MHZ radio system used to communicate in substation yards and control rooms. The system also supports "Man Down" emergency calls. Use of this radio system continues to grow as more substations are placed onto this system.

Q. Please summarize the costs and expected savings for the radio system programs.

A. The Company is proposing 7 projects at a total cost of $4.1 million. The programs described below are intended to improve reliability of critical voice communications, improve radio coverage to field crews, and enable expansion for the five recently constructed substations and four that are proposed in the next two years. The proposed programs will result in decreased

costs to support the existing radio systems of $319,741, annually, however the total costs for future maintenance are expected to remain flat as a result of increased use and expanded coverage and capacity. The expectation is that these savings will offset other increases needed to improve coverage, increase capacity and for additional radios. As such, there are effectively no savings.

Q. Could these radio systems be combined to improve performance and achieve possible savings?

A. No. A custom third party technology was investigated and evaluated in 2007 to combine the systems, but, unfortunately, the solution proved unsuccessful. We have not found any potential solutions to link the radio systems since then. Development of third party tools for this purpose is not actively being undertaken in the industry or is considered likely in the near future based on the technology in use by these two radio systems.

The two systems are used in two different environments and are not interoperable. The two radio systems are used to provide specific voice communication solutions for the operating areas for different uses. The use of each system is dictated by the operating needs, its environment and the functionality provided. The 450

MHZ system provides high power local communications which is a strong solution for in-building local communications in substations and control rooms, but the radio signal does not propagate over long distances. The 800 MHZ system is excellent for communicating across distances and provides Electric, Gas and Steam field crews with extended coverage of the service territory from vehicles and emergency communications feature, but is less effective in providing coverage in building or in substation environments.

Q. Have you prepared an exhibit that provides further information on Radio Systems?

A. Yes. Additional information is shown in Exhibit __ (SSP-7) on the pages entitled "ICON Radio Wireless System (iCON, UHF& Microwave) Improvements."

Q. Please describe the improvement projects associated with the 800 MHZ system.

A. Over the upcoming three year period, five projects have been identified to improve performance and extend coverage:

- **Mount Vernon Site:** A new iCON omni-directional radio site is proposed to provide reliable coverage and improved quality of service for voice

communications in the Mount Vernon area. This will add additional benefits to the Distribution Automation System ("DAS") which controls the overhead distribution network.

- **Replacement of 800 MHZ Portable Radios:** In total, the existing iCON user radio population consists of 3,500 Motorola radios, either mobile (in vehicles) or portable (handheld). There are 2,500 portable radios, and 1,000 mobile, desk base and dispatch radios. The 2,500 portable radios were purchased and deployed when the radio system was installed in 2002. Replacement will result in an estimated annual savings of $70,000 in repair costs. The cost of repairing the radios has increased over the years and the cumulative costs will soon approach that of a new portable radio for the majority of the radios. In fact, for those that are used in the most demanding operating environments, the costs for repair already exceeds replacement. A program to replace the 2,500 portable radios is proposed to provide continued reliable communications, improved voice quality and to avoid the increasing costs associated with maintaining the aging population.

A single portable device will also simplify the maintenance and support processes. The expectation is that maintenance will stay flat based on increasing number of radios and newer units. Costs for additional radio units required for future years have been incorporated into the Five Year Capital Budget.

- **Replacing United Hospital with iCON at Rye Service Center:** The existing United Hospital Residence (assisted living) building located at United Hospital is scheduled for demolition. The hospital is closed and the property has been sold. The scope of work includes construction of a 180' tower, installation of local power, direct connection to CCTN at Rye, and relocation of a fully operational shelter, including an integrated back-up generator. Secondary benefits of relocation to Rye include the elimination of rental fees for a commercial property, discussed below, and the savings of utilizing existing Bedford iCON shelter and equipment, which is scheduled for decommissioning. This includes an additional savings of rental fees.

Consolidating Empire State Building ("ESB") & Buchanan Substation: Consolidation and upgrades for these two sites are essential to replacing obsolete and near obsolete infrastructure, improve radio reliability, reduce rent costs, and increase safety of sites.

At ESB, the plan is to: reduce the overall room footprint; replace inadequate HVAC systems; modernize electrical distribution; decrease energy usage; rebuild grounding system; and improve, fortify, and upgrade lightning protection for personnel safety and reliability of network systems.

At the Buchanan Substation, the plan is to retire and relocate all communication facilities located at Buchanan Service Center to a prefabricated communications shelter at Buchanan Substation, which will support all telecommunications and radio systems in the area.

Implementing Microwave Backhaul Links: iCON Radio and DAS remote sites require backhaul circuits to link voice and data to back end systems and users. The majority of our sites must rely on a single public carrier circuit for this function.

Microwave backhauls at these locations would provide a redundant and diverse communications link needed for reliability of these systems. By adding additional private links, availability and reliability is increased through carrier diversity.

Q. Please describe the project for the 450 MHZ system.

A. **Upgrading UHF Radio System:** UHF 450 MHZ Radio System, also know as "Central," SS Man-Down, and CIG Radio. The system uses licensed frequencies to communicate emergency situations to the Control Room. The equipment supporting the 450 MHZ system is located on ESB, and four receiver "Satellite" stations, (located on towers and buildings). Multiple links and ancillary lines connect this system to the Control Room. Based on manufacturer's product roadmap, most components are at or reaching the end of their lifespan. Replacement and spare parts are difficult, or becoming impossible, to obtain, even through third party suppliers. Failure to upgrade this system will result in degrading reliability. The aging equipment will fail more often and take longer to repair. This will impact the availability and reliability of the system.

Q. Is this a multi-year program and if so what additional costs were associated with this request?

A. Yes, we are projecting capital spending for the years 2010 - 2012 of $4.1 million for the radio systems projects. The amounts are broken out in 2010 for $2.37 million, in 2011 for $1.19 million, and $500,000 in 2012.

Q. Please describe any mitigation efforts that could defer the cost of the proposed programs and any offsetting costs that may be incurred as a result of deferral.

A. The following efforts were identified but these will only defer costs in the short term and may result in increased offsetting costs. Our plan is to complete the proposed programs as identified above.

iCON radios - Implement radio inspection refurbishing program and battery replacement program. The cost of this program will be $500 per radio compared with the $1,000 to replace each of the estimated 2,500 radios in service on the iCON system. This could defer replacement for two years, at which time the radios would need replacement. Additionally, replacement at this time will result in an estimated annual savings of $70,000 in repair costs.

- RYE-SC iCON site - Supplement with Sprint/Nextel service. The annual savings will be the avoided annual rent for United Hospital ($59,216) and Bedford

($40,524) for a total annual savings of $99,741 over the lease term.

- ESB Consolidation - Replace HVAC & DC plant. The cost to implement the interim solution is $120,000 compared with the $250,000 estimated to consolidate the existing equipment in a smaller footprint and remove the three large microwave dishes. The consolidation will result in reduction in the annual rent cost from $578,319 to $428,319, for an annual savings of $150,000 over the 10 year lease term.
- BUC Consolidation - Implement grounding remediation plan. The cost to implement an interim grounding solution is $100,000 compared to the $300,000 estimated to consolidate all telecommunications assets in a new self-contained enclosure. There is no cost savings associated with this portion of the project which is recommended for improvements in reliability and operations management.
- UHF Radio Upgrade - Replace single channel central repeater only. The cost to implement an interim solution will be $100,000 compared to the $250,000 estimated to replace the UHF equipment with a modern multi-frequency and frequency agile repeater system.

There is no cost savings associated with the latter solution.

Q. What is the Computer Program?

A. The Computer Program is the mechanism via which computer hardware and software maintenance costs are budgeted and charged to the user organizations.

Q. What are the costs associated with this program?

A. Costs for this program include expenses for maintenance on desktop, laptop, and server computers and license related maintenance for applications on the computers. The costs annually are estimated to be $7.5 million in 2010, comprising an increase of $900,000 compared to the projected 2009 budget and an increase of $2.0 million compared to the 2008 actual spend for this category.

Q. What are the reasons for this increase?

A. The increase reflects a growth in the number of computers - mostly in field and vehicle laptop units ($1 million), software licenses for new applications ($0.5M), and network equipment and software licenses coming off of warranty and requiring maintenance agreements ($500,000). There has been an increase of 2,435 (19%) computers between the years of 2006 and 2008, which is projected to continue. The increase in the number of computers would thus require the need for

additional software licenses. Each additional computer requires an additional license purchase. A portion of this increase (or $500,000) is the necessary software licenses and maintenance costs associated with these licenses. Additionally, Cisco hardware equipment is coming out of warranty and necessary maintenance support has been included. Licenses, such as Cisco, are capitalized upon initial purchase. When these licenses come up for renewal, the costs cannot be capitalized and are thus adding to the increase in this program. These types of licenses contribute $500,000 to this program change.

Q. Have you prepared an exhibit that provides further information on computer costs?

A. Yes. Additional information is shown in Exhibit __ (SSP-8) on the pages entitled "Computer costs."

Q. What Capital Programs were introduced in Case 08-E-0539 that are still on-going?

A. The on-going Capital programs that were introduced Case 08-E-0539 include the Network Operations Center ("NOC"), Data Warehousing and Business Intelligence, and Other Business.

Q. What is the status of the NOC project?

A. Planning and functional scoping of the project are complete and we are on track to expend the projected

$2.7 million allocated for this project in 2009. The IT monitoring tool has been purchased and configuration, testing, and implementation of the tool are scheduled to be completed in 2009. Facilities design and engineering for the physical location of the NOC are in progress. Construction of the physical location is scheduled to begin and be completed in 2011. $909,000 was projected for 2010 in Case 08-E-0539. However, the project timeframe has been extended until 2011 so that construction would coincide with the Facilities 4 Irving Place Master Restacking Project. Accordingly, $909,000 has been moved from 2010 to 2011 in the Five Year Capital forecast.

Q. Have you prepared an exhibit that provides further information on the NOC project?

A. Yes. Additional information is shown in Exhibit __ (SSP-7) on the pages entitled "Data Center Renovation / Network Operations Center."

Q. What is the status of the Data Warehousing & Business Intelligence Project (DWBI)("Business Project")?

A. The DWBI Project is currently in its second year. The requirements for a highly available DWBI Enterprise Environment was defined, designed, and purchased. The DWBI Enterprise Environment includes Web application and database servers for development, test and

production platforms. The physical environment includes multi terabytes of SAN storage to satisfy the Company's large data warehousing storage needs. The storage and servers are spread across multiple physical locations to ensure high availability and disaster recovery. The licensing for all operating and database management systems was also purchased. To ensure that all DWBI Enterprise Environment solutions are defined and developed to meet industry standards and satisfy customer needs, a rigorous DWBI methodology was put in place. This methodology is based on Cognos best practices and other industry standards and encompasses the full project life cycle from requirements gathered through deployment and support. The time table for this project is 2010 - 2013.

Q. Was this a multi-year program that was presented in Case 08-E-0539?

A. Yes, and we are still projecting capital spending for the years 2010 - 2013 of amounts identical to what was projected in Case 08-E-0539. This is broken-out in 2010 for $2.3 million, in 2011 for $2.1 million, and $1.8 million in 2012.

Q. Have you prepared an exhibit that provides further information on the Data warehousing and business intelligence project?

A. Yes. Additional information is shown in Exhibit __ (SSP-7) on the pages entitled "Data Warehousing & Business Intelligence."

Q. What is the status of the Other Business program?

A. The Other Business Blanket request was made for multiple IT projects over the next four years to introduce new technologies, communications networks, and server farm enhancements. These projects are critical to providing the business areas with IT tools and systems to operate. The projects include cyber security technology and other initiatives to improve reliability and availability of critical IT assets. The Company is continuing to make purchases under this "blanket" as it normally does.

Q. Was this a multi-year program that was presented in Case 08-E-0539?

A. Yes and we are projecting capital spending for the years 2010 - 2013. The total estimate is identical to what was presented in Case 08-E-0539, although changes in projected expenditures among the years were made to address our priority of work. The amounts are broken out in 2010 for $6.4 million, in 2011 for $5.4 million, in 2012 for $5.6 million and 2013 for $13.9 million.

Q. Have you prepared an exhibit that provides further information on Other Business projects?

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

Q. What is the status of the Mainframe Operating and Maintenance Costs Program that was introduced in Case 08-E-0539?

A. Costs for this program include the annual expenses for maintenance on the IBM z/OS operating system platform. This platform serves three mainframe IBM database management systems -- IMS, CICS, and DB2, which manage the Company's critical data, as well as non-IBM Independent Software Vendor ("ISV") monitoring tools and system utilities, which are utilized to manage and support the mainframe environment and data. The costs paid annually will be $4.0 million in 2010, $4.4 million in 2011 and $4.8 million in 2012. The mainframe costs have increased in the current year and are projected to increase on an annual basis. The increased cost is attributed to the increased utilization measured by MIPS (Millions of Instructions per second) and the annual increases in mainframe software. The MIPS have increased from 801 MIPS in 2008 to 927 in 2009. We expect this trend to continue in the next several years.

Q. Have you prepared an exhibit that provides further information on mainframe costs?

A. Yes. Additional information is shown in Exhibit __ (SSP-8) on the pages entitled "Mainframe Operating & Maintenance Costs."

Q. Please describe other cost minimization efforts under way.

A. Information Resources has established an internal team to improve energy efficiency for IT assets. Some of the programs are listed below with estimated percentage savings.

- Evaluate software to control PC power settings to reduce electric costs for Company PCs by 20%. This technology allows PCs to be powered down and up from a central console. The software will provide additional operational benefits by enabling security patches to be delivered to PCs immediately after business hours.
- Introduce default duplex printing on network printers reducing paper costs by 10%. New model printers provide duplex capability without user intervention. We are planning on setting these printers to default duplex to reduce paper usage. Duplex printing can be overridden if necessary by the user.

- Introduce "Green" Font to reduce ink and toner costs by 5%. This font is intended to be used for day to day printing needs. Official documents can still be printed by using a different font.
- Perform data center air flow analysis to reduce cooling and energy costs. This analysis will provide a more efficient use of limited HVAC facilities in our large data centers. The analysis will result in modifications to air flow and reductions in HVAC equipment to reduce energy costs.

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, partnership with schools, and Con Edison-only career fairs, the latest of which attracted over 1,600 applicants. 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 increased 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. Nearly 13,000 Con Edison employees attended skills, compliance, information technology, and leadership training programs at TLC in 2008. The online training exceeded 78,000 eLearning sessions, which is a 13% increase in the number of eLearning sessions completed over the previous year. During 2008, HR also negotiated a new contract with Local 1-2 to continue our labor agreement with our largest union workforce and has started negotiating with Local 3 for our Staten Island union workforce this year.

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

Q. Please describe the current training program.

A. There are two categories of new employees - union (weekly) or management. For the most part, new weekly employees are hired in at 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 5 to 10 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 Company's training needs. Located in Long Island City, Queens, TLC was built in 1993 as a state-of-the-art training center. Nearly 13,000 Con Edison employees attended skills, compliance, information technology, and leadership training programs at TLC during 2008. This represents approximately 90 percent of Con Edison's workforce.

Q. Where does the employee go after the 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. We are proposing (1) increased training for Customer Operations employees, (2) technical training for new supervisors, and (3) tri-annual first aid refresher training. These programs are shown in an exhibit entitled "2010 O&M HUMAN RESOURCES CAREER PATH TRAINING PROGRAM."

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

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT __ (SSP-9)

Q. Please discuss the Customer Operations training.

A. In 2008, we had a 23 percent increase in Customer Operations training. Basically, customer operations training is for CSRs, who are, in many instances, the Company's only point of contact with our customers. We have been focusing on improving our responsiveness to customer concerns and our training attempts to improve our responsiveness.

Q. Why was there such an increase in the amount of training?

A. This increase is based on two reasons: (1) a greater number of customer operations employees hired and (2), during 2009, we are increasing the training content in each class which results an increase in the number of training days in the initial training they attend.

These two factors created a need to increase the number of Instructors who conduct this training by two. In working with the operating organization, we are improving the training by adding content that requires 16 weeks of training, both in the classroom and on-the-job, as opposed to 9 weeks. Most of the increase in training days will result in more time spent in the organization, taking part in on-the-job training. This includes answering more customer calls to evaluate their performance. As part of the additional training time for CSRs, we will add 11 in-class training days to each class. These additional training days will provide CSRs with more accounting and billing training than what was in the prior program. We are now conducting 24 classes on an annual basis. By adding 11 additional in-class training days to each group of trainees, we would add a total of 264 additional days of instruction. This is an increase of 25% over the total current class length. This increase in additional days of in class instruction creates the need for two additional instructors.

Q. Please describe the resources needed for training Customer Operations personnel.

A. as noted above, two additional instructors are required for Customer Operations to meet the anticipated

training needs for CSRs. Customer Operations will be hiring and training 240 Customer Service Representatives and without instructors these new employees will not have the necessary training to perform their normal job functions. We would note that both of these instructors have already been hired (in February and March 2009). These positions were presented in the 2008 rate case and approved to the extent of the labor adjustment the ALJ recommended in Case 08-E-0539.

Q. Please explain the need for Supervisor Technical Training.

A. It has been acknowledged that the work force at Con Edison is changing from one of experienced manpower moving up through the internal promotion system to one of newly hired less experienced men and women. It is projected that many supervisory positions will be filled with candidates coming directly from positions held outside the Company. This shift in personnel characteristics comes with its own set of challenges. The Company is committed to responding more aggressively to meet these challenges. One major challenge will be to equip the newly hired supervisor with the technical knowledge and skills comparable to those supervisors who historically have been promoted

into the position. To successfully confront this challenge, Con Edison is implementing a formal program to ensure its future workforce of technical supervisors is able to work safely and competently to the degree necessary for the Company not only to remain competitive but also to satisfy its many stakeholders. One additional instructor is required to address the technical training needs of the new supervisory population. This position was filled in March 2009 and was approved as part of the decision in Case 08-E-0539 to the extent of the labor adjustment the ALJ recommended.

Q. Please explain the need for tri-annual refresher training.

A. Since at least 2001, the Company is required by OSHA to provide all field employees with First Aid and CPR Training. The incumbent population of field employees at that time was approximately 6,000. Initially, all field employees receive First Aid and CPR training certifications in an eight hour class. Subsequent to the initial class, annual CPR refresher training is required and First Aid Training is refreshed every three years. Beginning January 2010, the three year requirement for First Aid refresher training will be due for approximately 6,000 Company employees. Every

three years since 2001, this incumbent population comes due for the First Aid refresher training. This incumbent population remains very steady due to the fact that when employees leave from the original population they are replaced at that time and then they take up the same position in the training requirement for First Aid training. In 2010, this doubles the number of classes needed for this training. As per the American Red Cross Standards the ratio of students to instructors is 1 to 10 students.

Q. Please describe the resources needed for required tri-annual refresher training.

A. For the past two years when only a four hour class was required, co-instructors conducted two classes in one training day, 20 students each for a total of 40 student completions. For 2010, two instructors will need a full day for every 20 students. The additional funding will be used to supplement the instructors with contractors to meet this additional training need. This refresher training occurs once every three years. The bulk of employees who needed to be trained were not due last year.

Q. What are the projected costs for the training programs for RY1?

A. As can be seen from Exhibit __ (SSP-9), we project the O&M expenses for training programs to be approximately $722,000 in RY1 above the $876,000 the Company incurred in the historic year for these programs. The higher level of funding of $722,000 is necessary to meet increased customer service training ($174,000), supervisory technical training ($207,000) and tri-annual refresher training ($341,000).

HR Workforce Strategy

Q. Please discuss the Company's Human Resource Strategy and its associated expenses.

A. An element of the corporate strategy and mission statement is to strengthen human resources in the Company. A steering committee of senior officers was established and this steering committee, in turn, selected a Human Resource Strategy team of leaders from both line organizations and the Human Resource department. This team, working with the steering committee, reviewed existing Company policies and programs, and designed additional programs to enhance our strategy related to Human Resources.

The goal of the Human Resource Strategy is to achieve superior business performance through talented employees, engaging work and continuous learning. The strategy consists of four key imperatives: Attraction,

Development, Retention, and the Way We Work Environment. To help meet the objectives of our HR Workforce Strategy Program, we require one additional position.

Q. Please describe the functions associated with this one additional position.

A. An additional specialist will work in the Compensation section on various activities such as developing the capabilities associated with the new application, Authoria, used in salary decisions. This additional resource will assist organizations in the implementation of salary decisions that maintain a fair and equitable treatment across all employees. Addressing this activity will ensure that decisions are addressed in a timely manner with minimal disruptions to operations. This position was filled in January 2009.

Q. Have you provided additional detail for the costs associated with the Workforce Strategy program?

A. Yes. The costs are shown in Exhibit __ (SSP-9), on the page entitled "2010 O&M HUMAN RESOURCES WORKFORCE STRATEGY SUMMARY."

Strike Contingency

Q. Please discuss the Company's strike contingency expenses.

A. The Company and its two local unions, IBEW Local 3 UWUA and Local 1-2, have collective bargaining agreements that expire on June 27, 2009, and anticipated to expire on June 30, 2012, 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. During 2008, the Company settled with Local 1-2 and actual spending was $1.301 million.

Q. What is the estimated cost of the next round of negotiations?

A. The estimated cost of the next round of union contract negotiations is $1.3 million for Local 1-2 and $0.2 million for Local 3, or a total of $1.5 million. The Local 1-2 and Local 3 Contingency Programs are ongoing initiatives that occur once every four (4) years. As a result, for rate case filings, the cost for these initiatives is priced out at one-fourth of the estimated cost. One-fourth, or $375,000, will be included in the rate filing. This produces a negative program change of $926,000. The Accounting Panel advises that 81.14 percent of these costs are allocable to electric operations and are shown in our exhibit, entitled "2010 O&M HUMAN RESOURCES 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 to ensure 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, improving TLC and upgrading the TLC registration system.

Q. Please continue.

A. As to the first program, the use of eLearning helps to avoid additional training costs. Secondly, we have an ongoing program to improve our training facility. This program will enable the Learning Center to upgrade its facilities by modernizing classroom space and by increasing space utilization with modern designs. Finally, our capital plan allows us to complete the upgrade of the Learning Center Registration system that began in 2009. We have provided additional details on each of these capital programs in the exhibit introduced below. Each of these capital programs were approved in the previous rate case.

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

A. Additional detail can be found in the Exhibit entitled "2010 CAPITAL - HUMAN RESOURCES" __ (SSP-10).

Q. Was this prepared under your direction and supervision?

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT __ (SSP-10)

FACILITIES PROGRAMS

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 CECONY 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 to assure 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 an exhibit entitled "CONSOLIDATED EDISON COMPANY OF NEW YORK, INC., FACILITIES CAPITAL BUDGET PLAN," detailing your projected capital expenditures?

A. Yes, we have.

Q. Was this exhibit prepared under the Panel's direction and supervision?

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT __ (SSP-11)

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

A. The Company plans to spend approximately $54.8 million in 2010, $54.3 million in 2011, $44.8 million in 2012, $42.7 million in 2013 and a forecasted $42.0 million in 2014. In 2008, Facilities spent approximately $34 million on such capital projects and in 2009, Facilities plans to spend approximately $47.8 million.

Q. Have you prepared other exhibits detailing the Facilities O&M programs you are describing in this testimony entitled "Irving Place and Regions?"

A. Yes, we have.

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

A. Yes, they were.

MARK FOR IDENTIFICATION AS EXHIBITS __ (SSP-12, SSP-13)

We will discuss below why capital spending is increasing as compared to 2008 and how these forecasts relate to the forecasts presented in the last case.

Q. Please discuss O&M spending for Facilities.

A. As for O&M, the Company's Regions Facilities groups plan to spend approximately $15.4 million in 2010, $12 million in 2011 and $11.9 million in 2012. The historic year O&M spending level was $9.8 million for the Regional Facilities' buildings. The rate year increase is primarily attributable to the Waterside Dock Repair of $3.8 million and increases in the Structural Inspection and Repair program of $677,000, contractual rent increases of $470,000, with the balance being comprised of various maintenance programs.

For the Company's Irving Place facility, Facilities projects to spend approximately $12.7 million in RY 2010, $5.8 million in RY 2011 and $5.3 million in RY 2012, as compared to the historic year O&M spending level of $2.4 million. The increase from the historic year is $10.3 million, which is primarily attributable to LL11 Façade repairs of $2.5 million and rental of alternate locations for personnel so that the Company can continue renovating in order to be in compliance with Local Law 26 ("LL26") in 2019, including the cost to prepare the alternate location of $7.5 million. The total O&M funding requested for both the Regional Facilities' buildings and Irving Place for RY 2010 is

$28.2 million, for RY 2011 $17.8 million, and for RY 2012, $17.2 million.

Q. Please discuss the projected Facilities capital spending level as compared to Case 08-E-0539.

A. In Case 08-E-0539, the Company projected to spend $60.8 million in Facilities capital expenditures in 2010. We are forecasting approximately $6.0 million less in this rate case for 2010. This difference is attributed primarily to a change in expected yearly expenditures caused by a variation in the mix of projects, construction and/or engineering design slippage and actual cost information obtained from recently completed projects. For example, in 2008, we projected to spend $8.0 million for Flatbush Ave 6th and 7th floor Renovation project and now we project to spend $5.8 million and $3.2 million in 2009 and 2010, respectively. For the Irving Place Local Law 26 Fire Protection Sprinkler Storage tank project, we projected to spend $3.0 million in 2009 and now we project to spend $4.0 million and $1.2 million in 2009 and 2010, respectively. For Irving Place LL26 compliance, we had originally planned to renovate the 3rd and 4th floors in 2010 for $18.1 million. The Restacking Plan has determined that instead we should renovate the 5th and 11th floors in 2010. The cost for these two floors is

$22.0 million, which reflects the actual $11.0 million cost/floor estimate for the recently completed 6th floor renovation. The 11th floor will then become the location of the Company's 4th and 17th floor data centers, 3rd floor Medical Department and print operations, thus freeing up those spaces for moves subsequently sequenced in the Restacking Plan.

Q. Have there been any other changes in the projects proposed in Case 08-E-0539?

A. In order to make the best use of resources and funding, while addressing the changing needs of Facilities and emerging issues not foreseen at the time the last Rate Case was submitted, projects have been reprioritized and shifted among years. One example is the Flush Improvement project, which was originally scheduled to be completed in 2010 for $11.3 million, but has been delayed into 2010 and 2011 for $5.0 and $6.3 million, respectively. In order to account for the 2008 project carryover into 2009 and increased expenditures on "compliance projects" in 2009 and 2010, "programmatic site improvements" type projects, such as office and bathroom/locker room renovation-type work, have been deferred from 2010 and 2011 to 2012.

Q. What is the O&M forecasted spending from the last Rate Case?

A. In Case 08-E-0539, the Company projected an O&M budget of $31.2 million for the Rate Year ending 2010. Currently, for the same period, the rate year ending March 2011, the Company is projecting $28.2 million in total for Irving Place and the Regional Facilities' Buildings, which is $3.0 million below the amount forecasted in the previous rate case.

Q. Can you explain the decrease?

A. Yes. For the most part, the O&M projects remain the same although, as noted there may be a shifting of completion dates. The decrease is attributable to the Commission's Order in Case 08-E-0539, whereby the Company is deferring any relocation costs at West 28th Street pending reimbursement from the Port Authority of NY and NJ ("PANYNJ") and New Jersey Transit ("NJT") with any remainder deferred for collection from customers.

Q. Does the need to reprioritize these projects exist within the different facilities categories?

A. For the reasons just explained, yes. We would again emphasize that the Commission considered and approved many of these projects twice in the past two years. Except for shifting of when a project will be completed, the projects are generally the same as they were in the Case 08-E-0539 for Facilities. It should

be noted that Facilities has completed several significant projects as planned and indicated in previous rate cases. These include the Irving Place 6th Floor Renovation, The Learning Center Chiller and West End Avenue Control Room Renovation projects. Other projects, such as the Van Nest Building 1 Mezzanine and Building 1601 Renovation, have begun slightly later than anticipated due to engineering and logistical reasons, but are still on track to be completed as required.

Q. Why is it necessary to modernize, upgrade, and improve the Company's facilities?

A. Most of these 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. These projects 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, equipment 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 is, in many cases, close to 20 years old and needs to be gradually replaced with more efficient systems that utilize more environmentally friendly refrigerants. Similarly, 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.

Q. Please explain measures that Facilities is taking to minimize costs associated with their programs.

A. Facilities identifies its projects via programmatic assessments, such as the Facilities Roof Inspection, Steel/Concrete/Façade Inspection, Emergency Diesel Generator, 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 appropriately by applying one of the "compliance," "critical infrastructure projects," "programmatic site

improvements," or "user requests" definitions. 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 programmatic and user request projects being deferred until later years.

Compliance Projects

Q. Please explain the first category of 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 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.

Local Law 26

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

A. Yes. And the Commission has approved the Company's proposed compliance plans with LL26 in the Company's recent electric, steam and gas cases.

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 these new requirements?

A. At the present time, 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 a few floors at 4 Irving Place have already undergone full renovations and have been sprinklered, except for various mechanical/electrical rooms on those completed floors. However, in order to meet LL26's 2019 deadline, the Company needs to accelerate its plans. This acceleration, which is described below in light of those floors completed and those remaining, in turn, creates the need for additional space for temporary relocation of employees during the renovation.

Q. Please explain.

A. Currently, when the Company renovates a floor, it temporarily relocates the affected employees to another part of 4 Irving Place. 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 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. This project basically requires renovations on the floors. 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 tenants 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 tenants 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. No. At the current rate of floor renovations (i.e., one floor per year, which is an acceleration from that indicated in Case 08-E-0539, which said a pace of "less than one every two years") which has been dictated, in part by available temporary space, the Company would not 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 LL26's 2019 deadline, the Company needs to accelerate its Restacking plan. In order to

meet the needs of this accelerated program, some of the affected personnel would 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 seven floors (i.e., the 2nd, 6th, 9th, 10th, 17th, 20th and 21st floors.) Twenty un-renovated/partially renovated floors and eight tower stages currently remain but projects associated with the basement, 15th, 23rd, 25th and 27th floors and the stages are scheduled to be completed in 2009/2010. Yet, if the Company does not accelerate its rate of completion schedule of one floor per year (i.e., in 2008, only the 6th floor was partially completed, with carryover into 2009), it would fall short of compliance by six to eight floors.

Q. How does the Company plan to accelerate this schedule in order to comply with LL26?

A. We are planning to accelerate the program (i.e., double the current rate of one renovation annually) by performing "gut renovations" of two floors every year. The 5th & 11th floor renovations are planned for 2010, the 3rd in 2012 & 4th floor in 2011.

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

A. In order to meet the needs of this accelerated 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 relocations of personnel are projected to be approximately $2.3 million in annual off-site office space rental costs and $5.1 million in the rate year to build out and outfit the temporary space. This estimated cost includes preparing 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 Company is also negotiating a lease for approximately 37,529 square feet at 1 Pierrepont Plaza in Brooklyn. This combined temporary space will cost between $2.1 million and $2.3 million in annual rents. The rent prices consist of a base

lease and infrastructure rents which include fiber leases, cooling surcharges and building management charges. Current lease prices range from $40 to $45 a square foot. The leased Manhattan property should be occupied in the 2nd quarter of 2009 and pending execution of a lease agreement, the Brooklyn location is targeted for occupancy in the 4th Quarter of 2009.

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

A. Yes. The Company will renovate the 6th and 7th floors at its Flatbush Avenue location, making 28,000 square feet (from the 6th floor) available for temporary space by mid 2010. This reduces the total amount of temporary space required outside of the Company from 80,000 square feet to 52,000 square feet and the total cost to rent and fit-up the space by approximately $1 million. We would also note that the Company is responsible for all costs at Flatbush Avenue.

Q. Please explain the capital costs associated with LL26.

A. We project Company-wide common capital costs of approximately $26.4 million in 2010 and $22 million annually in the years 2011, 2012 and 2013 and forecast $33 million in 2014. These numbers are different from Case 08-E-0539. As discussed above, we had planned to renovate one and one half floors in 2010 for $18.1

million (i.e., approximately $10 million/floor for the actual floor renovation or $15.0 million, plus other capital costs, such as work stations and Irving Place restacking moves, associated with the creation of temporary space). Now, the Company projects to renovate the 5th and 11th floors in 2010 at a cost of $22 million, which reflects the actual cost for the recently completed 6th floor renovation (i.e., $11 million).

Q. Please explain the difference in estimated costs for the 2010 renovations.

A. The estimate for the 3rd and 4th floor renovations was based in part on the 2nd floor renovation project completed in 2007. The 2nd floor project did not include the replacement of the perimeter HVAC units, which later proved necessary for environmental and indoor air quality reasons on the 6th floor, and will be included as part of all future renovation projects. Again, as noted above, the actual cost for the 6th floor renovation project was $11 million.

Q. What benefits are associated with accelerating these renovations now?

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 projects at 4 Irving Place necessary to meet LL26 requirements?

A. Yes. There is one other project concerning the creation of an additional 10,000 gallon Fire Protection Water storage capacity at Irving Place at a cost of $5.2 million to be spent in 2009 and 2010. In Case 08-E-0539, this project was estimated for $4.0 million and it was scheduled for construction in 2008 and 2009 with $1.0 million and $3.0 million being spent respectively in each year. That $4.0 million was a budgetary estimate based on preliminary design drawings while the revised $5.2 million project estimate was based on the complete detailed engineering package, reflecting details not foreseeable at the preliminary estimate stage. In the detailed design phase of this project, it was determined during a required tank inspection that the salvage water side of the 20th floor East Penthouse tank was extensively corroded and required rehabilitation. It was also discovered that the stage area steam based freeze protection system was inoperable and needed to be restored for the areas

serviced by the new water-based sprinkler piping. Tank overfill protection (i.e., shut-off valves, tank level sensing devices and computer based controllers) were also added to the project as it became apparent that existing devices were obsolete and inadequate. The work has shifted into 2009 and 2010 as a result of the complexity of the project, which resulted in slippage in completion of the engineering design package that was approved in February 2009. The project is to begin in 2009 and will be completed in early 2010.

Q. Please explain the Fire Protection Water storage tank project required under LL26.

A. The project involves the 25th, 27th floor & all Stages Sprinklering, along with the 20th floor East Penthouse Tank and 22nd floor Salvage Water Tank Refurbishment and is needed to meet the 15,000-gallon Fire Protection water storage requirement necessary for New York City Department of Buildings to meet the sprinklering system. This NYC building code requires that there be 30 minutes of available sprinkler water flow. Because the 15th floor is being decompartmentized with the open floor-type renovation, this fire protection water storage upgrade project must be completed prior to occupation of that floor (i.e., 2010). Presently, the existing Stage G storage tank (which feeds the 15th

floor) is 5,000 gallons which equates to approximately 10 minutes of water flow. To achieve the 15,000 gallon/30 minute water flow requirement, the existing Fire Protection and Salvage Water tanks that comprise the 20th Floor East Penthouse tank, will be tied together. New booster pumps will then be needed to supply adequate water pressure to the various floors immediately below the building storage tanks and also to the floors, tower and stages above the East Penthouse Tank. As part of this project, the un-renovated 25th, 27th floors, and all stages of the Irving Place tower will be provided with the LL26 sprinklers and required heating/heat tracing. The 22nd floor Salvage Water Tank and portions of the East Penthouse tank will be refurbished/restored to service. The 22nd floor Salvage Water Tank will take the place of the salvage water function now provided by the 20th Floor East Penthouse Tank.

Q. Was this project discussed in the Company's previous electric filing?

A. Yes. As indicated above, this project was estimated at $4.0 million in Case 08-E-0539. When first conceptualized and as discussed in the case prior to Case 08-E-0539, this project was originally estimated at $650,000; that work scope and estimate only included

one new tank, booster pumps and minimal piping. Subsequently, we determined that the 10,000 gallon tank was extremely difficult to install in one piece in the building stage F area and would need to be fabricated in place, requiring multiple field welds and significantly increasing the project's cost. This construction-related issue, determined during the design stage of the project caused Facilities to reconsider the original method for undertaking the project and take mitigation measures to reduce the project cost, which eliminated the need for a new tank. Despite these attempts, the project cost did increase primarily due to the additional pipe runs needed from the booster pumps to the tower and stage floors and the normal/emergency electric feeds required for these special service fire pumps; and the cost to refurbish the 20th floor East Penthouse and 22nd floor Salvage Water Tanks. The cost to sprinkler the un-renovated 25th, 27th floors and all stages of the Irving Place tower was originally included in the building's 6th floor renovation project but was deferred due to delays in preparation of the engineering design package and is now included in this project. Based on the cost of the 6th floor, $11 million continues to be the estimated cost of one full floor renovation project, including

all LL26 compliance related sprinklering items. This transfer in scope allowed Facilities to separate the "architectural" 6th floor renovation project from the "mechanical" tank/piping project and simplify the logistical construction planning of each.

Local Laws 10-11

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

A. Yes. There are projects needed to remain in compliance with Local Laws 10-11. Local Law 10-11 projects were also discussed in recent cases and projected expenditures for these projects were similarly approved by the Commission.

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 New York City Department of Buildings ("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. Has the Company recently completed a LL11 review cycle?

A. In 2006, the Company's engineering department (through an outside consultant it hired) completed its report to the DOB on the LL11 Cycle 6 inspections. This report identified façade repairs that must be completed within five years and prior to the Cycle 7 inspection which is scheduled for 2011.

Q. What façade repairs are necessary under the Cycle 6 inspection?

A. No unsafe conditions were reported during this inspection; however, several items identified as "safe with a repair and maintenance program" ("SWARMP") were discovered. These items include cracked stone, replacing old masonry sealant, and sealing open masonry joints. In addition to normal façade and/or parapet repairs, the report recommended replacing the caulking on all the building windows, with the intent of eliminating water infiltration into the building, which can create an issue of public safety.

Q. Please explain further.

A. Window caulking that has either deteriorated or eroded creates areas that 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, creating a public safety concern.

Q. Please continue.

A. Recognizing the public safety concern and other potential water infiltration issues, Facilities Engineering performed a comprehensive assessment in July 2008 and evaluated almost all the window assemblies at 4 Irving Place in order to identify window deficiencies beyond caulking. Note that in May 2008, the Company only had the Cycle 6 LL11 report and this document generically mentioned deficient window caulking as one cause of water possible infiltration into the building. The original $4.0 million estimate discussed in previous cases included replacement of this caulking throughout the building. Facilities engineering hired a civil engineer with expertise in architectural façades and this person, recognizing that deficient window caulking was but one possible means of the water infiltration, performed a comprehensive study of all window assemblies to identify other sources.

The plan was to then coordinate the 6th Cycle Local Law Report recommendations with those in this engineering study.

Q. Please explain the results of the comprehensive assessment.

A. The comprehensive assessment revealed the following additional categories of defects:

- Defective/corroded metal window lintels
- Some defective caulking around the window perimeters both inside and outside. This included necessary Asbestos Containing Material ("ACM") abatement
- Cracked stone window sills
- Defective metal cladding due to water ingress
- Missing window weather-stripping causing drafts and heat loss
- Broken window panes allowing air/water infiltration and heat loss

We propose that this work be accomplished in stages over a three year period (RYE 2010, RYE 2011 & early RYE 2012) and that it be completed prior to the Cycle 7 inspections, which will be scheduled in mid 2011, so that the required inspection report can be filed by February 2012. Note that if the "SWARMP" repairs identified in the Cycle 6 inspection are not addressed

by 2012, 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 the 2009 and should be completed in 2011. Anticipated costs are $1 million in RYE 2010, $2.5 million in RYE 2011 and approximately $500,000 in RYE 2012. The Company originally requested rate relief for this project in Case 07-E-0523.

Q. Please explain why there are no expenditures for this project in the historic year.

A. This project was originally scheduled to start in 2008 with approximately $4 million being spent per year for the next four years. The engineering package was not approved until March 2009, because of Irving Place's new Landmark status and resulting complexities added to this projects planning and design efforts. Thus the work has been moved into 2009, 2010 and 2011. When the exterior of a building is considered a Landmark, no changes to the outside of the building can be made without permission from the appropriate City agencies.

Q. When does Cycle 7 occur?

A. In accordance with Local Law 11 regulations, the Cycle 7 Inspection will begin after completion of the façade

repairs identified in the previous Cycle 6 engineering inspection/report. This will not result in any reduction in funding request during the next several years. It is also highly possible that additional work will need to be performed after the Cycle 7 inspections are completed.

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:

- Flatbush Ave - 6th & 7th Floor Renovation (LL26 Temporary Space) for a capital cost of $5.8 million in 2009 and $3.2 million in 2010. This project calls for renovation of the two floors at the Brooklyn/Queens Headquarters building to provide for temporary personnel space associated with the LL26 office renovation projects at Irving Place.
- Installation of various Backflow Preventor Devices at a capital cost of $375,000/year in 2009 and 2010. In accordance with the NYC Plumbing Codes, New York Department of Health Regulations and DEP Regulations, domestic water service installations must be provided with backflow prevention devices.

The type of device, whether a double check valve or reduced pressure zone device, depends on the degree of hazard at the particular facility. Each facility has been analyzed and the type of device identified will be installed to comply with the above regulations and codes.

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 $34.6 million in 2009, $26.8 million in 2010, $22.0 million in 2011, $22.1 million in 2012, $22.0 million in 2013 and $33.0 million in 2014. The 2010 costs are primarily for LL26 projects and other compliance related work discussed above while the 2011, 2012, and 2013 costs are almost exclusively for the continued need to address LL26 compliance.

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

A. The Company plans to undertake projects for the purpose of improving air quality at all of the Company's facilities.

Q. Please describe your plans for improving air quality at the Company's facilities.

A. The Company intends to inspect, clean and remove sensitive materials associated with air and water

distribution equipment and systems in the buildings to mitigate the spread of potential infectious diseases and/or health dangers. This program involves several various sub-programs that systematically address the quality of indoor air by removing sensitive materials from building systems and improving the operation of any associated equipment. Programs include, but are not limited to, cleaning HVAC duct and units; inspecting and repairing roof and piping systems to remove mold; and abating and replacing ACM insulation throughout the buildings. We are continuing to implement the indoor air quality program previously approved in the prior rate case at Irving Place and the Regional Facilities' buildings at an annual cost of approximately $1.1 million for rate years ending 2011, 2012 and $1.2 million 2013. In 2009, the Company estimates the program will be $0.9 million for Irving Place and $0.2 million for the Regional Facilities. Facilities spent a total of $686,000 in this Program category in 2008, resulting in a program change of approximately $500,000 for the rate year.

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., failed roof, whereby bubbling is evident underneath the membrane, indicating that water has infiltrated the system and saturated the associated insulation/decking; corroded/thin-walled chilled water piping, as indicated during ultrasonic testing ("UT"), high maintenance HVAC systems; LAN Room AC Installations). The projects in this category are projected to be undertaken primarily in 2010 but other projects are anticipated 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 $10.7 million in 2009, $4.7 million in 2010 and then $200,000 annually in the years 2011-2014. Exhibit __ (SSP-11) identifies the projects currently remaining for this category, most of which were recently approved by the Commission in Case 08-E-0539.

Some of the largest critical infrastructure jobs, completed in 2007 and 2008, include the Van Nest Air Compressor Upgrade project, the WEA East and West Control Room Renovation projects, The Learning Center 315 and 500 ton Chiller Replacement projects, the Eastview Platform Rebuild project, the Astoria EDG Power Feed Supply project, the Foster Avenue and Jamaica Customer Service Center Renovation projects and the Flatbush Ave 7th floor and Davis Ave Roof Replacement projects.

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 - HVAC Piping Replacement Program - $200,000/year for years 2011 through 2013. This project provides for the programmatic replacement of HVAC piping throughout Irving Place. The existing chilled and secondary cooling water systems are approximately forty years old. A 2007 metallurgical study of a failed pipe section indicated 80 percent exterior corrosion and 20 percent interior corrosion. Representative samples of the building's piping system have been examined in 2008 and 2009 via UT in order to determine the full extent of the system's deterioration

throughout Irving Place and which piping should be replaced accordingly. Thus far, the UT program has only shown three relatively small areas of significant pipe deterioration and these systems have been replaced. The Company continues to assess the piping system throughout the building and anticipate potential problem areas as the systems were installed in the 1960's.

- TLC - Critical LAN & Uninterrupted Power Supplies ("UPS") AC & Back-Up Power - $2.4 million in 2010. Not all critical Information Resources' equipment located at TLC is connected to the site's Emergency Diesel Generator ("EDG") or has cooling sufficient to dissipate its heat loads. This project installs new Air Conditioning equipment in critical LAN & UPS rooms and connects these critical loads to the EDG.
- 3rd Ave Yard - Paving/Parking/Building 2, 3 & 4 Demolition/Wall Preservation - $1.0 million in 2009 and $1.0 million in 2010.
- Flatbush Ave. - UPS consolidation in Room 312 - $300,000 in 2010. Information Resources will install a new 40KW UPS to backup the switching network system. The UPS will require a main

distribution panel feeding several sub panels and will be fed from the main emergency distribution panel located on the 1st floor. This project installs the UPS along with the associated power feeds, power outlets and HVAC upgrades needed to dissipate the additional heat loads in the rooms. As part of this project, LAN Room 312 will require the installation of two new 3-ton AC units.

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

A. The Company plans to undertake projects to upgrade existing floors and address building infrastructure restorations for all Company facilities. We will expend approximately $1.1 million for floor replacement and building infrastructure renovation on a system-wide basis as was approved in Case 08-E-0539.

Q. Please explain the floor replacement program.

A. The Company intends to replace carpeting and resurface floors during the next several years. Normal wear and stretching of floor carpeting and severely worn tile or floor surfaces result in tripping hazards. In many cases, carpeting has worn beyond any economical or reasonable cleaning method resulting in extremely dirty carpets that contributes to unhealthy air quality. In addition, resealing certain floor surfaces, such as fan room floors, eliminates any water seepage or leakage to

lower elevations during equipment failures. In 2009, we plan to continue this program with $687,000 for 4 Irving Place and $417,000 in the Regions. Facilities spent $736,000 in this Program category in 2008. The main corridors have been completed on Floors 3, 4, 8, 11, 14 and 18; the entire carpet has been replaced on Floors 9 and 10. We will continue this program in RY1 - RY3 at an estimated cost of approximately $687,000 for Irving Place and $417,000 for the Regional Facilities in RY1 and $425,000 in RY2 and RY3.

Q. Please explain the Building Infrastructure Restoration project.

A. The Building Infrastructure Restoration project involves programs and sub-programs for the restoration of offices, roadways, equipment and systems that are approaching the generally accepted life expectancies and require upgrading to maintain continual operation. These various sub-programs include, but are not limited to, restoration of wall, ceiling and floor systems in areas of extreme traffic, such as main lobbies, entrances and corridors; repainting of office areas and related rooms due to deterioration; restoration of Cooling Towers; replacing steam, water and chill water valves for the buildings' HVAC and water systems; and, due to excessive deterioration of pavement in our

facilities, increased repair of paved surfaces. For example, we are currently engaged in a Piping Inspection and Replacement Program at 4 Irving Place. Pipes are identified for replacement after undergoing UT in which the pipe is scanned to determine its current wall thickness as compared to minimum allowable standards. Cooling Tower Outer Casing Replacement has been completed on Towers 1, 2 and 3; Towers 4 and 5 are scheduled for replacement this year. Further work that has been completed is replacement of the Cooling Coils for air handling units and related isolation valves and strainers; restoration of the marble in the Lobby of 4 Irving Place and the roof window canopy. We will continue to implement this program at an annual cost of approximately $0.7 million in 2010, $0.7 million in 2011 and $0.7 million in 2012 in the Regions. The Irving Place program is $1.0 million in 2010, $0.8 million in 2011 and $0.8 million in 2012.

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 normally useful life, general office renovations for buildings other than 4 Irving Place, elevator upgrades, etc.

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, security systems, emergency diesel generator, etc. 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 were presented to the Commission in Case 07-E-0523 and Case 08-E-0539. Examples of such projects are:

- College Point Boulevard (CPB) - 2nd Floor Renovation - $4 million over 2011 and 2012.
- Various Site Security Improvements (16th Street Service Center, TLC, 110th Street Service Center, Irving Place MECC, TLC, Neptune Avenue, CPB S/C, Davis Avenue, etc.) - $7.8 million in years 2010 through 2013 and $1.5 million in 2014.
- Irving Place - Window Replacement ~ $3 million in 2011 and approximately $6 million in 2012 and an additional $3 million in 2013.

- TLC - Redesign training areas 123 - 125a - $3 million over 2011-2012 period.
- Van Nest S/C Bldg 1 - 1st floor Mezzanine Bathrooms/Locker rooms renovation - $500,000 in 2011 and $300,000 in 2012.
- Flatbush Avenue - Emergency Diesel Generator Upgrade - $500,000 in 2011.
- Cleveland Street S/C - Yazaki Absorption Unit Replacement - $400,000 in 2010.
- Bruckner Boulevard - Yazaki HVAC Replacement - $300,000 in 2010.
- Davis Avenue - Window & Lintel Replacements ~ $300,000 in 2011 and $460,000 in 2012.
- Irving Place - G Stairwell Washroom renovations ~ $600,000 in 2011.
- College Point Boulevard - Paving/Resurfacing Program Phase 2 ~ $250,000 in 2011.
- Astoria - Paving/Resurfacing Program ~ $600,000 in 2012
- Regional Storerooms, Bronx - Lighting Improvements ~ $100,000 in 2011.

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

A. The estimated capital costs for this category are $0.3 million in 2009 for one ladies locker room renovation at 110th Street Service Center, $9.2 million in 2010, $18.3 million in 2011, $19.0 million in 2012, $10.8 million in 2013 and $7.0 million in 2014.

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 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 thirty projects identified in the User Request category, similarly discussed in Case 08-E-0539. They are forecasted for 2013 at a cost of $7.7 million and a forecasted $2.0 million in 2014. We do not expect to incur costs for this category from 2009 to 2012 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 Points for Alarm Panel in Control Room
- Irving Place - Additional Pressure Switches for Chilled & Secondary Water Pumps.

Facilities' Hurricane Hardening

Q. Please turn to facilities hardening and explain what you mean by "hardening."

A. Hardening are the steps that the Company is taking to strengthen and reinforce certain facilities in the event of a hurricane to increase the likelihood that critical facilities will be able to operate, and that the Company can continue its business as best as possible, during such an event.

Q. Please explain what steps have been undertaken in this area.

A. After the 2005 hurricanes in the Gulf region, the Company began studying the potential effects of various category hurricanes on its facilities. To date,

several studies have been conducted in this effort and the Company has developed and is in the process of implementing a plan to harden certain facilities.

Q. What facilities have been studied and what was involved in the assessment?

A. Concerning the hardening of the Company's West End Avenue ("WEA") facility, the Company hired Thornton-Tomasetti ("TT") in 2006 to perform a detailed structural evaluation of this building based on drawing research/field observations; computer modeling/analysis of the building's steel frame structure; manual calculations for the masonry walls, roof mounted equipment anchorage, and roof deck, including debris impact; and qualitative evaluation of windows, doors, louvers, roofing systems, and transformer bay enclosures. The building was evaluated for current code requirements for wind loading associated with hurricane categories 1, 2, 3 and 4. In addition, exploratory holes were also drilled into several of the Concrete Masonry Units ("CMU") walls to confirm that they are un-grouted and un-reinforced. Based on this exploratory information and the TT study, it was determined that in order to withstand the effects of a Category 3 hurricane, the WEA building should be hardened.

Concerning the hardening of other critical regional facility locations, the Company hired Altran Solutions in 2006 to perform a screening evaluation of several other Company facilities, including 4 Irving Place, Buildings 21 and 21A at Van Nest, 1 Davis Avenue, 30 Flatbush Avenue and Rye Headquarters. This effort involved assessing the buildings as a hurricane shelters (structural and flooding standpoint only) and assigning them a numeric rating to score the buildings hurricane resistant and shelter suitability features. The screening criteria come from FEMA 361, the American Red Cross and additional information obtained from the state of Florida. The screening addressed the following: flooding due to storm surge, building age and type of construction; categorizing and rating the building elements (main load resisting system, roof, floors, walls, cladding, windows, and doors); debris hazards; and other similar types of items. The evaluation did not involve any formal analysis but resulted in the identification of building components that would need hardening and developed related "order of magnitude" costs. The screening relied on past performance of various buildings during historical hurricanes of all categories. As such, there was no distinction made of the hurricane category number in

determining the rating. The Altran Solutions report that assessed the capability of the critical Con Edison buildings to resist major hurricanes concluded that all buildings were rated below acceptable for use as shelters. Thus, the Altran study determined that all of the buildings analyzed above should be hardened.

Q. Please continue.

A. These two studies indicate that all of the above-mentioned buildings should be hardened to some extent in order for the Company to utilize them as shelters. Using the recommendations provided in the Altran study and information currently known, the estimated costs to harden all the facilities discussed - 4 Irving Place, Buildings 21 and 21A at Van Nest, 1 Davis Avenue, 30 Flatbush Avenue and Rye Headquarters was approximately $39 million. This includes measures such as replacing existing "unshuttered" windows with a hurricane resistant version; reinforcing windows with an anchored film; reinforcing exterior masonry walls; and replacing existing ballasted or lightweight metal decked roofs, anchoring poorly attached roof mounted equipment.

Q. Has the Company taken any steps to minimize the cost of this effort?

A. Yes. The Company refined the parameters utilized in the two studies in order to possibly limit the extent

of hardening required and therefore, limit the cost of the project. TT subsequently evaluated methods for hardening not all of the locations but only selected locations, such as 4 Irving Place, WEA and Buildings 21 and 21A at Van Nest under Category 3 and Category 1 conditions. In the cases of Irving Place and WEA, these buildings were analyzed so that certain floors/areas, as opposed to the entire buildings, could be utilized as shelters. Buildings 21 and 21A at Van Nest were analyzed as shelters and also to remain as operational facilities during a hurricane.

Q. Recognizing the effort of these evaluation studies, what is the Company's current action plan for the hardening of facilities and creation of the safe areas?

A. In July 2008, the Company reviewed the various plans and selected the work scope for the hardening of its facilities. To minimize costs, in July 2008, the Company decided to evaluate and design shelters for operating personnel at the WEA and Irving Place. We are working towards accomplishing that plan. A Request for Proposal ("RFP") was issued on January 29, 2009 to have an architectural engineering contractor prepare the necessary detailed design package and associated construction estimates and in April 2009, the engineering contracts were awarded. The engineering is

scheduled to be completed in the fourth quarter of 2009.

Q. What is the scope of the work that the Company will undertake at these two buildings?

A. The scope of work is based on the TT hardening studies. The Irving Place project will provide for a shelter on one of the floors at a cost currently estimated at approximately $5 million, which is based on the TT study. 350 "Storm Riders" comprised of personnel from various organizations, who will support Company Operations in preparation for an anticipated storm, will have a safe location during the hurricane. The conceptual scope of work includes hardened interior walls around the shelter perimeter, impact resistant window/doors, dedicated HVAC and EDG systems, emergency lighting/exit signs, and potable water and sanitation storage systems. This project is expected to start in 2010 and be completed in 2011.

The WEA project will provide for a shelter for 15 key employees and critical facilities at a cost currently estimated at approximately $4.5 million. This shelter will be similar to that at Irving Place and will be designed for personnel who plan to operate the electrical system leading up to the hurricane event and then require a safe location during the actual event.

The conceptual scope of work consists of the installation of hardened interior walls around the shelter perimeter, exterior/interior wall hardening measures to minimize damage to Bulk Power and DO Control Rooms and supporting IR Rooms.

Q. Please explain the scope of work for the WEA project.

A. We will create a shelter for the control room operators, including exterior/interior wall hardening measures needed to minimize damage to Bulk Power and District Operator Control Rooms and supporting Information Resources Rooms. This work includes most of the perimeter of the building's third floor.

Q. What is the current schedule for the WEA Hurricane project and the cost?

A. The work is scheduled to start in 2010 and be completed in 2011. Projected spending is $6.1 million in 2010 and $3.4 million in 2011.

Q. Have you provided additional detail for Hurricane Hardening projects?

A. Yes. This information is shown in Exhibit __ (SSP-11), on the page entitled "Various Hurricane Building Hardening Projects."

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 recommends an over-sheeting bulkhead repair method for A-11 Dock Area A and replacement of pump house intake grating for Area B Repairs costing approximately $3.0 million. The OCC report recommends 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), estimated to cost approximately $4.8 million. For the A-12 Luyster Creek Bulkhead, a Rip Rap Revetment repair method estimated at approximately $3.0 million is recommended. The work is scheduled for expenditures of $2.5 million in 2010, $3.5 million in 2011, $3.5 million in 2012 and 2.0 million in 2013.

Q. Was this project requested in Case 08-E-0539 with an earlier starting date?

A. Yes. This work was deferred one year due to anticipated delays in obtaining regulatory permits,

which the Company will seek to obtain once the design drawings are complete in late Spring 2009.

Q. Have you provided additional detail for the Astoria dock repairs?

A. Yes. This information is shown in Exhibit __ (SSP-11), on the page entitled "Astoria Site: A-11 Dock and A-12 Luyster Creek Bulkhead." Note that the 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 corrected "with urgency."

Waterside Dock Repairs

Q. Please explain the Waterside dock repair program.

A. The Waterside Dock is a high-level relieving platform structure adjacent to former Con Edison Waterside generating station and bordered by FDR Drive, E38th and E41st Street with East River on the eastern edge of the dock. The structure was inspected as a part of five year waterfront inspection program in November 2008 by Mclaren Engineering, an outside consultant for the Company. The structure can be characterized into two sections: the "south portion" is approximately 473 feet long and is in overall "Fair" condition. The "north

portion" is approximately 362 feet long and is in overall "Critical" condition. The inspection findings revealed the loss of support at the concrete platform/deck "drop beams" in the northern portion of the dock due to severe damage of timber pile caps by marine borers; loss of support at the dock's south-east and north-east corners due to damaged or missing timber piles and pile cap beams; various damage to exterior and interior timber piles; missing support at most of the dock structure's east edge due to missing/deteriorated north-south timber cap beams; deteriorated dock's fender timber members which are loose and could fall into the river (note that this represents a hazard to river navigation and is also environmental concern); concrete deck damages (e.g., spalling at concrete deck soffit surfaces and exposed and corroded concrete reinforcement). The inspection report recommends various repairs to critical members of the dock to ensure structural stability and the removal of loose and deteriorated portions of the timber fender system. The Order of Magnitude cost estimate is approximately $3.8 million and the repairs recommended in the outside engineering report is planned to be undertaken in RYE 2011. The site after repairs completed will be turned back to the City. The

American Society of Civil Engineers recommends that these critical conditions be corrected "with urgency."

Q. Have you provided additional detail for the Waterside dock repairs?

A. Yes. This information is shown in Exhibit __ (SSP-13), on the page entitled "Waterside Dock Repair."

Manhattan Work Out Location (Service Center)

Q. Please discuss the West 28th Street project.

A. In Case 08-E-0539, the Company discussed the NJT Access to the Region's Core ("ARC") a major mass transit project. The Company will likely be required to relocate several of the functions and facilities currently housed at the Company's West 28th Street Work-Out Service Center.

Q. What is the status of the ARC Project?

A. The Record of Decision was issued by the Federal Transit Administration in January 2009. PANYNJ and NJT are proceeding with the project design, procuring contractors, and seeking to lease or acquire necessary properties for the project. The Company has been informed that tunnel construction will start in 2009 and the Company may need to vacate a significant part of the site in 2009 to make room for the tunnel and its associated systems (e.g., main construction access shaft) and construction staging area.

Q. What has the Company been doing regarding this relocation?

A. The Company has been meeting with PANYNJ and NJT, and will continue to do so, to find an acceptable relocation solution that does not adversely impact Con Edison's operations and customers. The Company has been negotiating with PANYNJ and NJT to lease a site in close proximity to the current yard as the most cost effective alternative. We have been negotiating with the PANYNJ and NJT on our needs during relocation and for after the construction is done. To date, we still do not have an agreement in place.

Q. What was the resolution of this matter in Case 08-E-0539?

A. The Commission advised (at pp. 74-75) that the "Company may defer for future recovery those costs that it can show it reasonably incurred to accommodate the project and used its best efforts to have reimbursed, without success."

Q. Is the Company requesting any reimbursement in this case?

A. No. The Company continues to work with the PANYNJ and NJT on this project. We will defer any unreimbursed costs incurred, whether in the current rate year or in future rate years (RY1-RY3) and make the request

showing all costs and efforts to recover the deferral at the appropriate time.

It is important to note that we do not have an estimate for any potential reimbursements at this time.

Q. Please continue.

A. The Company will require consultant expertise on NYC zoning and Department of Transportation issues on any move to an alternate site.

Q. Have you provided additional detail for this project?

A. Yes. This information is shown in Exhibit __ (SSP-13), on the page entitled "Replacement Workout location for West 28th Street."

West 125th Street

Q. Please discuss the West 125th Street relocation.

A. The Company will be moving certain operations from W. 125th Street to a proposed leased property at E. 124th Street. This move is necessary as a result of the pending sale of 32-42 West 125th Street, which the Commission approved on October 28, 2008 in Case 08-M-0930. The average annual operating costs of the 125th Street location over the last three years (2006 to 2008) have been $315,000. The Company projects the same level of operating costs at the new location for the rate year. In addition, the Company will incur incremental costs for the rent of East 124th Street,

which is projected to be $330,000 per year from 2010 through 2013. The capital cost to renovate the new location, as well as the avoided costs of the planned renovations of the West 125th Street property, will be reconciled and reflected in the net sales proceeds of West 125th Street property.

Flush Facilities

Q. What are Flush Facilities and why are they important?

A. Cleaning underground electrical distribution structures to remove accumulated debris is a critical-path element in the vast majority of our work activities. Solid debris and sediment regularly deposit in Con Edison's underground electric distribution structures through street run-off, and in-leakage from other sources such as water and sewer mains. These accumulated materials can impede access to distribution system components during routine as well as emergency conditions, create hazardous walking/working surfaces for our employees, and adversely impact work quality overall. Work quality can be impacted because dirt and debris, even very small amounts that enter a joint during splicing activities, can lead to premature failures. Also, accumulated solids on and around secondary components can obscure defects during inspections. Structure cleaning must be accomplished before most work

activities, including emergency restoration, routine maintenance, and inspections, can begin.

The Company has four flush facilities, which are essential resources that serve to manage the waste generated during structure cleaning, while enabling Con Edison to maximize the vactor truck fleet's availability to perform clean structures. These facilities managed the approximately 11 million gallons of water and 14,000 tons of solids that comprised the flush waste generated by our vactor fleet during 2008. The 24/7 availability basis of these facilities, combined with their strategic location throughout the service territory, allowed for minimal vactor availability losses during unloading evolutions.

Q. Have you provided additional detail for the costs associated with Flush Facilities?

A. Yes. The costs are shown in Exhibit __ (SSP-11), on the page entitled "Flush Facilities Functionality and Reliability."

Q. What is the work scope planned for these facilities?

A. In an effort to provide continuous facility availability and operation, and to address the increasing waste stream throughputs that are presently stressing facility capacities, Con Edison is planning to upgrade the unloading areas at all four flush

facilities, and replace the three wastewater treatment systems.

Three of the facilities are equipped with water treatment systems that filter water from the flush operation for discharge to the NYC DEP sewer system. Water for discharge is generated primarily via the following mechanisms: 1) drainage/drying of the wet material moved from underground electric distribution structures, 2) rinsing of vehicles at the facilities in accordance with requirements after unloading, 3) rinsing of unloading areas in accordance with requirements, and 4) precipitation from weather events that impact the facilities. The remaining facility does not have a treatment system and does not discharge to the sewer (a regulatory restriction was the original driver of this difference). It accumulates water in a large sub-surface retention basin that is emptied periodically for bulk transportation to a disposal facility. Permanent structures will be erected to shelter the unloading areas and wastewater treatment systems, which are presently located outdoors. Sheltering the unloading areas will improve employee safety by preventing freezing of walking/working surfaces, and will also serve to reduce disposal costs by minimizing the amount of rainwater that would

otherwise be captured at the facilities during run-off. Sheltering the three wastewater treatment systems from harsh environmental conditions will help to improve component service life and may ultimately reduce maintenance costs by reducing the potential for weather-associated failures. This upgrade process will begin with the Farrington Street facility in Queens, and a project team is presently working to facilitate design development by outside resources. The engineering phase underway in 2009 is estimated at $1.2 million and the construction phase is estimated to cost $11.3 million over 2010 and 2011. Upgrades at the remaining facilities will be targeted in future years, thereby minimizing operational impacts while distributing total funding needs to mitigate rate payer impact. This reduced the capital request in RY1 by $6.45 million.

Astoria Hazardous Waste Storage Facility Upgrades

Q. Please explain the function of the Astoria Hazardous Waste Storage Facility upgrades.

A. During the maintenance, repair and upgrade of its energy systems, Con Edison generates different types of hazardous waste. Examples of the waste generated by the Company includes PCBs, lead, cadmium, chromium, and benzene. In 1994, the New York State Department of

Environmental Conservation ("NYSDEC") issued Con Edison a permit to store only PCB-contaminated waste at the Astoria Hazardous Waste Facility, which is used to store this waste before transporting it to an approved landfill.

Q. Please describe the upgrades to the facility and why they are needed.

A. In July 2008, the NYSDEC revised the permit to allow the Astoria Hazardous Waste Facility to accept all the hazardous waste streams that the Company generates, not just PCBs. As a result, several modifications to the facility are needed in order to improve the processes involved with managing these additional hazardous waste streams. Modifications include expanding the existing shed canopy and installing a new pad and secondary containment area to prevent rainwater from entering the proposed secondary containment area and impacting stored materials. Also included is the installation of insulation with improved lighting and heating to facilitate the storage of drums containing liquid.

Q. Can you provide information on the costs of the upgrades and the cost savings associated with the upgrades?

A. Yes. The estimated cost of the upgrades to the facility is $450,000 in 2010 and $650,000 in 2011.

Once the new processes are fully implemented, the facility will accept an additional 2,000 to 3,000 drums/year which will result in $350,000 in estimated waste management cost avoidance.

Q. Have you provided additional detail for the costs associated with the Astoria Hazardous Waste Storage Facility?

A. Yes. The costs are shown in Exhibit __ (SSP-11), on the page entitled "Astoria's Hazardous Waste Storage Facility Upgrades."

Held for Future Use Sub-Station Properties

Q. Is there another program you would like to address?

A. Yes. The O&M costs associated with properties the Company has purchased in advance for as a site for a future Transmission or Area Substation.

Q. Please explain the program.

A. Advance purchases of properties are required to meet the anticipated load growth on the Con Edison System. In some cases, we have purchased tenanted locations and have to maintain the lease obligations until the lease expires. The purchase of property for future use has been put on hold at the present since the Company has deferred the need for substations as discussed in the testimony of the Infrastructure Investment Panel. The cost for maintenance of the existing properties being

held for future use is $235,000 in RY1, $235,000 in RY2 and $235,000 in RY3.

Q. What are the costs of maintaining these sites?

A. The costs to maintain include repairs, permits, test and inspection (i.e., standpipes and sprinkler systems), janitorial and landscaping expenses and Company labor for repairs and inspections.

Q. Have you prepared an exhibit detailing these costs?

A. Yes, we have.

Q. Was this exhibit prepared under the Panel's direction and supervision?

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT __ (SSP-14)

Facilities Human Resources

Q. Please explain your current resources and any need to supplement them.

A. We will first discuss Facilities Engineering requirements. Facilities engineering prepares design packages in support of the various Facilities Department Budgets. This has been supported primarily with outside engineering consultants but the Facilities Engineering staff must still oversee their work. The NYC DOB Local Law 26 mandates that Irving Place be sprinklered by 2019 and this has created the need to hire additional. In 2008, the Company hired a 4th

Architect and 2nd structural engineer in Facilities. Facilities engineering now plans to hire one additional engineer with a salary of $101,000. We would note that Facilities Engineering has minimal drafting capabilities (we are down to three designers due to a retirement) and almost all engineering design packages are prepared by outside consulting firms. However, the in-house Facilities Engineering staff is needed to oversee the work of the engineering consulting firms. For example, Facilities Engineering identifies the scope of work for the project, writes the request for proposal/evaluates and awards the bid to hire an outside firm and work with the Permitting Section to obtain proper project construction and use permits, works with Purchasing during the contract bidding stage and works with Construction Management ("C/M") during the project's construction stage. Engineering also tests and commissions all new projects/systems. Thus, the consulting firms only generate the engineering packages while Facilities Engineering does all the other tasks mentioned above (i.e., the outside firms supplement our drafting/design effort but do not take the place of the entire engineering/project process.)

Q. Have you provided additional detail for the Human Resources request?

A. Yes. This information is shown in Exhibit __ (SSP-12), on the page entitled "Engineering Hires - Mechanical, System or Electrical Engineer and Estimator".

Q. Please continue with the resource requirements for the operations and maintenance section.

A. Facilities Irving Place Operations & Maintenance section plans, directs and controls the maintenance of all building systems and the day-to-day building operations at the CECONY Corporate Headquarters. The Facilities O&M section ensures that all Fire and Life safety equipment are operational and that all emergency procedures are communicated to tenant organizations. The NYC DOB Local Law 26 mandates that Irving Place be sprinklered by 2019. It also mandated that Irving Place develop an Emergency Action Plan ("EAP") separate from the Fire Departments' Fire Safety Plan. The increasing maintenance needs of the aging facility, the need to support the renovation of the floors, progressively increasing compliance inspections, additional Fire/EAP drills and managing the associated training of wardens and searchers has created a need for an additional operating supervisor with a salary of $85,000.

PURCHASING

Q. Please describe the Single Entry Point Ordering System?

A. The single entry point ordering system will streamline the process of ordering materials and services.

Q. Is the project running on time?

A. Yes, it is scheduled to be completed in 2009.

Q. Then why is there still some projected spending in 2010-2011?

A. We expect to spend approximately $1.6 million to upgrade the software package to a release level that the vendor will support. The vendor claims that it will discontinue support on the release of the product currently in use at Con Edison in 2010. We began implementation of the system at the end of 2005 and the new version was released in 2008.

Q. Is there a way to avoid the software upgrade?

A. Running a software product that is not technically supported carries a risk for having a product that may fail as a result of an operating system patch or other environmental change.

Q. Have you prepared an exhibit detailing costs for the Single Entry Point Ordering System?

A. Yes, we have.

Q. Was this exhibit prepared under the Panel's direction and supervision?

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT __ (SSP-15).

Purchasing Cost Mitigation

Q. Please describe the Company's attempts to minimize costs through its Purchasing programs.

A. On an on-going basis, there are a number of practices that we engage in to reduce operating and capital costs across the enterprise. We consistently try to leverage the amount of spending associated with purchasing by consolidating specifications and contracts and buying jointly for Con Edison and O&R, wherever possible. Examples include procurements for computer hardware and telephone equipment.

As part of a focused initiative to accelerate these efforts, a Purchasing-led team was assembled in 2008 to examine the possibility of consolidating Con Edison and O&R term contracts. To date, the team has been successful in facilitating the consolidation of specifications for nine contracts associated with the overhead line electrical distribution system for both companies. Bid solicitations have been issued and purchase orders are expected to be awarded in 2009. In addition, janitorial and vegetation management specifications for both companies were consolidated as a result of the team's efforts. The consolidation of

specifications for uniforms, wood pole inspections, furniture, traffic cones and barricades, and paving are also in process and are expected to be completed during 2009.

We also actively search for more competition and work with our users to qualify a greater number of suppliers. During 2008, we qualified approximately 200 new vendors.

Con Edison's policy is to procure equipment, materials, and services necessary for the conduct of its business through the solicitation of competitive bids or proposals from vendors who have been previously qualified by the Company. The Company decides which vendors are solicited for bids/proposals based on a variety of factors including the vendor's capability, prior job performance, dollar value of the procurement, and other work being performed. An example of where this practice benefited the Company is in the revenue the Company receives under its contract with a disposal vendor for the disposal of its scrap paper insulated lead covered (PILC) cable containing less than 50 parts per million of PCBs. The sale of scrap cable is credited to a retirement order, which increases the reserve for depreciation and decreases rate base.

We introduced two new qualified vendors to the bid list, which increased competitive tension and may potentially increase revenue by approximately 38% to the Company based on the projected volume of cable that will be scrapped by the Company and purchased by the vendor.

We constantly seek opportunities for lowering costs. Negotiations with suppliers are conducted when it is determined that negotiations between the vendor and the Company will more effectively achieve an acceptable contract in an effort to further reduce costs. Negotiations with Verizon Wireless, which resulted in an 18.4% overall reduction in pricing for broadband and air card usage and Blackberry service, is an example of this.

In addition, Con Edison's Bid Check Estimating ("BCE") section provides data for comparison award purposes for construction contracts. The BCE provides accurate, competitive construction costs estimates, analysis and advice to Purchasing. BCE provides a check of the competitive bidding process and pursues cost savings through bid negotiations. Should the initial bid price exceed ten percent of the Company estimate, negotiations will commence to try and achieve bid

prices that are within ten percent of the Company estimate.

Q. What monitoring and oversight of contracts is performed?

A. We monitor contractor performance through our Contractor Oversight System ("COS") where Contractor performance, good or poor or any level in between, can be reported, documented and addressed. We monitor contractor performance because it can affect employee and public safety, the cost to provide service and the Company's bottom line.

This is a three-step progressive process. It begins with a Contractor Field Observation Report, progresses to an Infraction Report and then to an Action Line, in each case addressing repetitive contractor infractions. Contractor Evaluation Reports are also generated by using groups to document other performance criteria such as environment and safety, quality of work, timeliness, administration, and conduct of work. Based on the performance information, the COS produces a bid multiplier, which is used in the commercial evaluation of bids/proposals. The bid multiplier is then applied to a contractor's price, and can either reward or penalize a contractor by as much as ten percent.

Q. What, if anything, is the Company doing to address changes in commodities prices relating to metals and resins?

A. The Company has developed a multi-faceted approach to deal with changing market prices for commodities such as metals and resins. Purchasing monitors prices of key commodities to develop different courses of action as it plans contract strategies. Some new or renewal contracts are created for shorter durations to allow market conditions to stabilize and to avoid locking in pricing at higher rates. In some cases, existing contracts have also been extended when a supplier was willing to hold pricing and commodity forecasts indicated a major increase in the near future. Lastly, some term contracts for commodity driven products such as cable and cable connectors contain pricing adjustments linked to published indices such as COMEX for copper and the Bureau of Labor Statistics index for resins used to manufacture cable connectors.

Q. What other steps are being taken to mitigate prices?

A. In terms of capital projects, the single entry point ordering system will streamline the process of ordering materials and services. The system allows Purchasing greater spend visibility to facilitate the consolidation of orders which is expected to result in

obtaining better pricing from vendors, and automate the payment process to take advantage of early payment discounts from vendors. This project was discussed in the Accounting Panel testimony of Case 07-E-0523 and in the Shared Service Panel testimony of Case 08-E-0539.

ENERGY MANAGEMENT

Q. Is the Company making any changes to their NYISO Transmission Owner Load ("ISO RECON") and Load Forecast Tag ("ICAP") reporting programs?

A. Yes. The Company is planning to develop a new NYISO Transmission Owner Data Reporting System ("TODRS"). The TODRS will replace the two legacy programs, ICAP and ISO RECON. The NYISO Market Services Tariff assigns Con Edison the responsibility for allocating a proportional share of the wholesale load to each Load Serving Entity ("LSE") supplying customers in the Con Edison NYISO subzones. This information is currently submitted to the NYISO in the form of a TOL report using the ISO RECON system. The NYISO Market Services Tariff also requires the Company to allocate a share of the New York Control Area ("NYCA") forecasted peak hour to each account in the Transmission District on an annual basis. Currently, this requirement is met using the ICAP system. The account data is aggregated by LSE

and submitted monthly to the NYISO as a load forecast for each LSE. This load forecast is the basis for each LSE's Unforced Capacity ("UCAP") requirement in the NYISO market. The new system will combine the ICAP and ISO RECON programs, increasing the overall efficiency of both reporting requirements. The new reporting system will use a modern programming language, reduce manual efforts, and revise the current methodology for allocating distribution system losses and unaccounted for energy to LSEs within the transmission district. These improvements are expected to increase both the accuracy of the NYISO data and the quality of the Company's responses to LSE inquiries.

Q. I show you a one-page document entitled, "NYISO TRANSMISSION OWNER DATA REPORTING SYSTEM - O&M EXPENSES" and ask whether it was prepared under your supervision and direction?

A. Yes.

MARK FOR IDENTIFICATION AS EXHIBIT __ (SSP-16)

Q. Please explain Exhibit __ (SSP-16).

A. This Exhibit describes the new NYISO Transmission Owner Data Reporting System and shows the associated increase in labor-related O&M expenses that will be incurred

during the rate year. The labor expenses relate to the hiring of one analyst at an estimated salary of $90,000 per annum. This expense forecast excludes general labor escalation for future salary increases. The new analyst will be responsible for tracking and monitoring the increased volume of transactions related to the NYISO Data Reporting process.

Q. I show you a four-page document entitled, "NYISO TRANSMISSION OWNER DATA REPORTING SYSTEM - CAPITAL COSTS" and ask whether it was prepared under your supervision and direction?

A. Yes.

MARK FOR IDENTIFICATION AS EXHIBIT __ (SSP-17)

Q. Please explain Exhibit __ (SSP-17).

A. This Exhibit describes the new NYISO Transmission Owner Data Reporting System and shows the associated increase in both hardware and software-related capital costs that will be incurred from years 2010 to 2012. The capital costs relate to hardware and software modifications, including consultant fees, for the redesigned NYISO Transmission Owner Data Reporting System. Capital costs are forecasted at $1 million for year 2010, $1.040 million for year 2011, and $525,000

for year 2012 for a total of $2.565 million. This additional capital investment is expected to reduce the systems support required from in-house personnel; thereby, partially offsetting the cost of the new hire.

Q. Does this conclude the Panel's initial testimony?

A. Yes, it does.

2010 ELECTRIC RATE CASE

SHARED SERVICES PANEL

CAPITAL, GENERAL EQUIPMENT AND O&M

EXHIBITS

SHARED SERVICES PANEL **EXHIBIT #**

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conEdison

Corporate Instruction

SUBJECT

CAPITAL GENERAL EQUIPMENT BUDGETING, ORDERING, AND CONTROL

1.0 **PURPOSE** -- To establish procedures for ordering, receiving, and controlling capital general equipment.

2.0 **APPLICATION** -- This Instruction applies to all organizations and individuals of the Company who use or have a requirement for capital general equipment.

3.0 **DEFINITIONS** --

3.1 **User Organization** is the section or group that will ultimately use the general equipment items.

3.2 **Control Agency** is that department or organization responsible for managing the specific general equipment line item in the Capital Budget. (EXHIBIT A identifies the organization acting as control agent by XM.)

3.3 **Capital General Equipment** represents specific categories of equipment that are classified under the Uniform System of Accounts as General Plant (EXHIBIT A indicates the applicable account codes, account code descriptions, and company plant account) and are generally those items having a purchase cost of $500 or more and a usage (life) expectancy of more than one year. The XM Budget represents that portion of the Capital Budget devoted to the purchase of general equipment. Control Agencies will purchase furniture and communication and computer equipment costing less than $500 (consumable items) even though they are not capital items. This ensures that Corporate standards for quality and compatibility are met and provides for economies of scale.

4.0 **PROCEDURES** --

4.1 **User Organizations** -

a. All organizations on an annual basis will develop their capital general equipment requirements for the next budget year. They will forward their requests to their respective Budget Coordinator who will coordinate the assignment of priorities and prepare one consolidated XM Budget encompassing the entire organization that is submitted with the organization's Capital Budget request.

b. When capital general equipment approved in the budget is required, the organization requiring the equipment will request the item from the Control Agency. In the case of computer equipment (XM-10) the request must be processed via the organization's Computer Resource

Coordinator (CRC). (Reference Corporate Instruction CI-310-5, "Computer Resource Coordinator.") Computer equipment available via e-procurement can be ordered directly by authorized CRCs in accordance with Corporate Instruction CI-320-13, "E-Procurement System." Upon written approval from the Computer Equipment Control Agency a CRC can order capital equipment using a Corporate Procurement Card (P-Card), as covered in Corporate Instruction CI-320-11, "Corporate Procurement Card." Substitute items may be requested within the limitations of the organization's funds and the availability of the equipment within the budget year.

c. If a user organization requires additional equipment beyond its budget allotment, it will provide for the transfer of capital funds to cover the additional requested items via a transfer submitted to Financial Forecasting and Corporate Budgeting, Corporate Accounting.

d. EXHIBIT B sets forth by XM budget which categories of equipment require inventories, the frequency of inventories, and the methodology for conducting inventories. EXHIBIT B details which XM items require Company-issued tracking numbers and systems available to track equipment.

e. All general equipment items identified as "missing" should be reported via a *Security Incident Report* form (Outlook/Tools/Forms), with a copy to the Control Agency for appropriate action.

f. The user organization is responsible for attempting to resolve problems pertaining to general equipment purchase and should call the appropriate XM Control Agent for advice and counsel. If the user organization reports the problem to the Action Line (Corporate Instruction CI-240-2, "The Action Line"), they should also copy the Control Agency.

g. Where an organization has been assigned responsibility for a specific capital budget line item (other than as Control Agency), it will assume the duties and functions of a Control Agency for that equipment for its department.

4.2 <u>Control Agency</u> -

a. The Control Agency will prepare a monthly status report of each budget line item. Additionally, each April, September, and November it will assemble a document showing by organization, funds used, items ordered, and uncommitted funds, to be used in managing available funds for the remainder of the year.

b. Upon approval of the Capital Budget, the Control Agency will verify XM budget by organization with Financial Forecasting and Corporate Budgeting.

c. Each Control Agency will issue Purchase Requisitions for general equipment. Purchasing will not honor requisitions for general equipment that do not have the approval of the responsible Control Agency or its designee. Control Agencies, if approved in accordance with Corporate Instruction CI-320-11, may use the P-Card for the purchase of general equipment.

d. The Control Agency will monitor commitments and expenditures to avoid exceeding the authorization levels established in the approved XM Budgets. It will facilitate any transfer of funds between Capital Budget line items when initiated by a user organization to support its requirements.

4.3 Corporate Accounting -

a. Property Record, Corporate Accounting, will provide written accounting rulings and advice and counsel to the Control Agencies and user organizations to resolve questions of accounting related to general equipment.

b. Property Record will prepare and process Transfer and Correction Memorandums and/or journal entries as requested by the Control Agency via written requests.

c. Property Record will periodically review the capitalization dollar level for XM items (refer to paragraph 2.2).

d. Financial Forecasting and Corporate Budgeting will submit the Control Agency's budget requirements to the Board of Trustees for approval as part of the annual Capital Budget process.

5.0 EXHIBITS --

5.1 EXHIBIT A - Summary of General Equipment for Capital Accounts and Control Agency by XM.

5.2 EXHIBIT B - Matrix of XM Inventory Controls Required

6.0 ADVICE AND COUNSEL -- The Vice President and Controller, Corporate Accounting, will provide advice and counsel on this instruction.

SUBJECT

CAPITAL GENERAL EQUIPMENT BUDGETING, ORDERING, AND CONTROL

EXHIBIT A

SUMMARY OF GENERAL EQUIPMENT FOR CAPITAL ACCOUNTS

CAPITAL BUDGET ITEM	ACCOUNT CODE	ACCOUNT CODE DESCRIPTION	COMPANY PLANT ACCOUNT	EXAMPLES	CONTROL AGENCY
XM1	3719 3720	OFFICE FURNITURE BUSINESS MACHINES, MODULAR OFFICE PARTITIIONS, CARPETING, SAFES	9816	DESKS, CHAIRS, TABLES, COPYING MACHINES, CABINETS, BOOK CASES, DRAFTING ROOM EQUIPMENT, SAFES, WINDOW TYPE AIR CONDITIONERS, SAFES AND SECUIRTY CONTAINERS, ETC.	FACILITIES
XM2	3731	TRANSPORTATION EQUIPMENT	9820	VEHICLES, CARS, TRUCKS, HEAVY TRAILERS (FLATBED, DROP DECK, BOX, VAN TYPE, ETC.), BOATS (INBOARD TYPES), BARGES, ETC., STOREROOM FORKLIFTS & REACH TRUCKS AND VEHICLE MOUNTED EQUIPMENT THAT IS PERMANENTLY ATTACHED.	CENTRAL FIELD SERVICES
XM3	3740	STORES EQUIPMENT	9824	INCLUDES THE COST OF PORTABLE AND INSTALLED EQUIPMENT USED FOR THE RECEIVING, SHIPPING, HANDLING, AND STORAGE OF M&S AND CAPITAL ITEMS: STORAGE BINS, ELEVATING AND STACKING EQUIPMENT, COUNTER, CHAIN FALLS, HOISTS, WHEEL BARROWS, STENCIL MACHINES, BATTERY CHARGERS, ETC.	CENTRAL FIELD SERVICES
XM4	3750	SHOP EQUIPMENT	9830	EQUIPMENT USED SOLELY IN GENERAL SHOPS (GENERATING STATION SHOPS EXCLUDED): FLOOR GRINDERS, LATHES, MILLING MACHINES, SCRIBERS, BRAZING AND WELDING EQUIPMENT, DRILL PRESSES, SHAPERS, JIB CRANES, HOISTS, VISE BAND SAWS, AIR COMPRESSORS, PORTABLE TOOLS, ETC.	CONSTRUCTION
XM5	3760	LABORATORY EQUIPMENT (TESTING)	9828	PORTABLE ELECTRIC, CHEMICAL AND MECHANICAL INSTRUMENTS AND LABORATORY EQUIPMENT USED FOR SYSTEM-WIDE TESTING PURPOSES SUCH AS VOLTMETERS, AMMETERS, WATTMETERS, GAS AND VAPOR TESTERS, ANALYZERS, AMPLIFIERS, RECORDERS, VIBROMETERS, TACHOMETERS, PRESSURE GAUGES, ANAMOMETERS, LABORATORY BENCHES, ETC.	CENTRAL FIELD SERVICES

SUBJECT

CAPITAL GENERAL EQUIPMENT BUDGETING, ORDERING, AND CONTROL

EXHIBIT A (Cont'd)

CAPITAL BUDGET ITEM	ACCOUNT CODE	ACCOUNT CODE DESCRIPTION	COMPANY PLANT ACCOUNT	EXAMPLES	CONTROL DEPARTMENT
XM6	3770	TOOLS & WORK EQUIPMENT	9830	TOOLS USED IN GENERAL CONSTRUCTION OR REPAIR WORK: PNEUMATIC HAMMERS, DRILLS, TOOL CARTS, SUBMERSIBLE & PORTABLE PUMPS, CHAIN SAWS, LAWN MOWERS, GRAVELY TRACTORS, CONCRETE MIXERS, SMALL TRENCHERS, SURVEYING EQUIPMENT, HEAVY DUTY FLOOR CLEANING EQUIPMENT, ROWBOATS, HDRAULIC JACKS, BATTERY CHARGER, STEAM CLEANERS, PARTS WASHERS, WORK BENCHES, VISES, ENGINE STANDS, POWER PAK, TIRE REPAIR EQUIPMENT, BODY SHOP TOOLS AND PAINTING EQUIPMENT, GRINDERS, DRILLS, LATHES, PRESSES, GREASING AND LUBE EQUIPMENT, GASOLINE PUMPS AND STORAGE TANKS, DYNOMETERS, ETC.	CENTRAL FIELD SERVICES
XM7	3790	MISCELLANEOUS EQUIPMENT	9834	RECREATIONAL, CAFETERIA, AND KITCHEN EQUIPMENT, MEDICAL (INCLUDING HOSPITAL AND INFIRMARY), WATCHMANS CLOCKS, SAFETY EQUIPMENT, TRAINING EQUIPMENT, INHALATORS, RESUSCITATORS, SIGN AND ADVERTISING DISPLAYS, FIRE PROTECTION EQUIPMENT, AUDIO VISUAL EQUIPMENT, PHOTOGRAPHIC EQUIPMENT, ETC.	FACILITIES
XM8	3780	COMMUNICATION EQUIPMENT	9832	ALL COMMUNICATIONS EQUIPMENT USED ANYWHERE IN GENERAL COMPANY OPERATIONS: TRANSMITTERS, RECEIVERS, AMPLIFIERS, REFLECTORS, TOWERS, RADIO TELEPHONES, VEHICLE MOUNTED RADIOS, WALKIE TALKIES, MICROWAVE EQUIPMENT INCLUDING SWITCHING EQUIPMENT, FIBER OPTIC EQUIPMENT, ETC.	INFORMATION RESOURCES
XM10	3721	COMPUTER EQUIPMENT	9815	ALL ELECTRONIC DATA PROCESSING EQUIPMENT AND RELATED COMPUTER EQUIPMENT	INFORMATION RESOURCES

SUBJECT

CAPITAL GENERAL EQUIPMENT BUDGETING, ORDERING, AND CONTROL

EXHIBIT A (Cont'd)

CAPITAL BUDGET ITEM	ACCOUNT CODE	ACCOUNT CODE DESCRIPTION	COMPANY PLANT ACCOUNT	EXAMPLES	CONTROL DEPARTMENT
XM13	3771	POWER OPERATED EQUIPMENT	9829	SELF PROPELLED UNITS OF A MAJOR NATURE (WITH UNIT COSTS IN EXCESS OF $5,000): FORK LIFTS, PORTABLE COMPRESSORS, BULLDOZERS, CRANES, TRACTORS, LARGE STREET SWEEPERS, PAYLOADERS, BACKHOES, HUGHES AND THE "TERMITE" EARTH BORING MACHINES, LARGE TRENCHERS, ETC.	CENTRAL FIELD SERVICES
XM15	3761	LABORATORY EQUIPMENT (CHEMICAL)	9828	EQUIPMENT PURCHASED SOLELY FOR USE BY THE CHEMICAL LABORATORY: GAS, STEAM, AND ELECTRIC TESTING EQUIPMENT, VOLTMETERS, ANALYZERS, LAB BENCHES, MICROSCOPES, ETC.	CENTRAL FIELD SERVICES

SUBJECT

CAPITAL GENERAL EQUIPMENT BUDGETING, ORDERING, AND CONTROL

EXHIBIT B

Matrix Equipment By XM	Inventory Tag Required	Inventory Required	Inventory Method Cycle for Inventory	Tracking System	Monitored for Maintenance
XM-1 Office Furniture	No	No	Not applicable	Not applicable	No
XM-2 Transportation Equipment	Vehicle # Assigned	Yes	Annual State Inspection	VMS	Yes
XM-3 Stores Equipment	No	No	Not applicable	Not applicable	No
XM-4 Shop Equipment	No	No	Not applicable	Not applicable (1)	No
XM-5 Lab Equipment (Testing)	Yes	Yes	Every Two Years (2)	Metrack	Yes
XM-6 Tools & Work Equipment	No	No	Not Applicable	Not Applicable	No
XM-7 Safety & Miscellaneous Equipment	No	No	Not Applicable	Not Applicable	No
XM-8 Communication Equipment					
Portable (Faxes, Radios)	No	Yes	Every Three Years	ET/TEMS (3)	Yes
Stationary (Hubs, Switches)	No	No	N/A	Not applicable	Yes
XM-10 Computer Equipment – Mainframes, Servers, Desktop & portable PCs, and printers	No	Yes	Every Year via SMS for PC's	SMS/ET (4)	Yes
XM-13 Power Operated Equipment	Vehicle # Assigned	Yes	Annual State Inspection	VMS	Yes
XM-15 Lab Equipment (Chemical)	Yes	Yes	Every Two Years (2)	Metrack	Yes

1. Applicable to Construction for less than 100 pieces of equipment used at Van Nest Shops.

2. Equipment calibrated by Tech Services will be inventoried as part of the calibration process, which represents 80% of inventory. All other remaining equipment not calibrated will not be inventoried during the two-year cycle.

3. See Corporate Instruction CI-330-10, "Security and Use of Mobile and Portable Communications Equipment," which calls for full inventory of radios every three years. Inventory of telephone lines covered in Corporate Instruction CI-310-11, "Inventory of Telecommunication Lines" calls for inventory of telephone lines every three years when the FAX Machine should be verified with the line.

4. Information Resources daily inventories servers and personal computers on the network for software patches deployment. Portable personal computers will be inventoried by System Management Server (SMS) when they attach to the network to receive the software patches.

2010 Capital – Shared Services – General Equipment - Overview

Project/Program Title	General Equipment – XM
Status	Ongoing
Estimated Service Date	N/A
Work Plan Category	N/A

Work Description:

Capital General Equipment represents specific categories of equipment that are classified under 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 of $500 or more with a life expectancy of more than one year. General Equipment consists of nine main categories (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)

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. The Control Agencies are:

- Transportation (XM-2), Stores (XM-3), Laboratory (XM-5), and Tools & Work (XM6) Equipment - Central Field Services.
- Communication (XM-8) and Computer (XM-10) Equipment - Information Resources.
- Office Furniture (XM-1) and Safety & Miscellaneous (XM-7) Equipment – Facilities Management.
- Shop (XM-4) Equipment - Maintenance and Construction - Van Nest Shops.

General Equipment is fundamental to our ability to deliver safe and efficient energy to our customers and provide for the safety of our employees. It represents the tools and work equipment needed to keep the Company functioning. It ranges from desks in the office, bucket trucks for overhead operations, stores shelving, electrical test equipment, jack hammer sand safety hoists to microwave communication equipment and even the computer used to write this testimony. These "work" tools are 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 best tools for the employees to complete their tasks in a safe and efficient manner.

2010 Capital – Shared Services – General Equipment - Overview

On an annual basis, each user organization develops their capital General Equipment requirements for the next year. Because of changing priorities in the requirements of the user organization, a final request is provided to the Control Agency after the Capital Budget has been approved. This finalized list is fluid because of missing, broken or changing equipment needs from the field. The Control Agencies review the submissions and compile all the requests. Each Control Agency will issue Purchase Requisitions for General Equipment. Purchasing will not honor requisitions for General Equipment that do not have the approval of the responsible Control Agency or its designee. The Control Agency function is to standardize the equipment purchased to ensure quality, reliability and the safety of the employees using the equipment. This also allows the aggregation of all General Equipment purchases to allow for the most competitive pricing. The Control Agency will monitor commitments and expenditures to avoid exceeding the authorization levels established in the approved XM Budgets.

Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008	Approved 2009	Request 2010	Request 2011	Request 2012	Request 2013	Request/Approved 2009-2013 Total
$36,741	$76,634	$86,649	$62,470	$98,935	$75,380	$75,547	$75,559	$74,059	$84,802	$385,347

2010 Capital – Shared Services – General Equipment – XM -1

Project/Program Title	XM - 1 (Furniture)
Status	On-going
Estimated Service Date	N/A
Work Plan Category	N/A

Work Description:

The XM-1 budget represents the portion of the Capital Budget devoted to the purchase of general office furniture, business machines, modular office partitions, floor carpeting, drafting room equipment, safes, security containers, book cases & cabinets, and window air conditioners.

An organization requiring purchase of capital General Equipment classified as XM-1 must submit a written request to Facilities Management as the Control Agency responsible for purchasing of such equipment. The Facilities XM-1 budget coordinator reviews each request and notifies the requesting organization of any items that may be available on our recycle inventory. Additionally, the request is reviewed to ensure that its total cost is within the requesting organization's budget allotment and then initiates the procurement process via our existing purchasing tools available.

Justification:

- Alternatives:

There are no alternatives, per se, but the Company does employ various mitigation efforts. Facilities as a general practice recycle desks, chairs and office partitions, whenever possible. Furniture and office equipment are evaluated before being totally replaced; items found to be in good operating conditions are stored away onsite and become part of our recycled inventory to be re-used in temporary work assignments, remote office trailers, shops, etc. Only those items that are deemed un-repairable are replaced.

In addition, there are several contracts available to purchase new furniture; these contracts were competitively bid and, whenever possible, new orders are consolidated to take advantage of volume discounts.

It should also be noted that at any given time organizational priorities are shifted to meet organization's requirements. Each organization anticipates their budget needs by identifying their future furniture requirements. This would include forecasting temporary deployment of extra crews in the field that would require office furniture. They submit corresponding appropriation requests for next year's General Equipment in their capital budget request.

2010 Capital – Shared Services – General Equipment – XM -1

- Risk of No Action:

  Our work forces would be prevented from meeting their objectives in an efficient and safe manner. It would also create personnel issues with those employees who, due to their medical conditions, require ergonomic furniture to be able to perform their duties. As the Control Agency for XM-1 Budget, Facilities Management is committed to continue providing each user organization with adequate office furniture required to perform their daily job functions by replacing broken, damaged, and obsolete furniture or by replacing items that are no longer useful due to normal wear and tear.

Status:

On-going

Current Working Estimate (if applicable):

Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008	Approved 2009	Request 2010	Request 2011	Request 2012	Request 2013	Request/Approved 2009-2013 Total
579	1,190	2,207	2,247	1,267	2,258	2,176	2,077	2,042	1,925	10,478

2010 Capital – Shared Services – General Equipment – XM-2

Project/Program Title	XM-2 (Vehicles)
Status	On-going
Estimated Service Date	N/A
Work Plan Category	N/A

Work Description:

The XM2 category provides for the purchase of mobile equipment such as trucks, cars, cranes, construction equipment and forklifts used throughout our operations. The Control Agent for this equipment is Central Field Services' Fleet Administration group. For example, the Company owns approximately 4,300 over the road self propelled vehicles. Factoring in other pieces of mobile and mounted equipment, like backhoes, forklifts and trailers used to move equipment and materials, the Company owns close to 5,500 pieces.

Class	Inventory count (April 15, 2009)
Cars	756
Mini-Vans	1,189
Pickups/Vans	824
Small Trucks	861
Medium Trucks	268
Large Trucks	435
Trailers	696
Construction Equipment	418
Grand Total	5,447

Justification:

- Alternatives:

  There are no alternatives, per se, but the Company does employ various mitigation efforts. The Company's Transportation department periodically evaluates the life-cycle model described below. In some cases they've been able to engineer-out high maintenance designs and common causes of failures. This reduces the maintenance cost stream over the life of the asset, increases the age at which it should economically be replaced, and therefore reduces long-term capital expenditures associated with replacement. The department strategically designs purchase agreements to best leverage its buying power, reducing the up-front cost of the equipment. The department also employs highly-skilled mechanics, supervisors and managers, armed with the appropriate systems and technology to effectively diagnose and repair equipment. These three 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. These offsets in capital requirements have allowed the Company to compensate for items such as new diesel-

2010 Capital – Shared Services – General Equipment – XM-2

emissions control equipment required in 2004 and 2007 that added incremental cost to many of its purchases and to begin funding the incremental cost of new energy-efficient vehicles such as hybrids.

- Risk of No Action:

  The cost to operate mobile equipment beyond its economic life quickly compounds. The cost to maintain this equipment can rise substantially in a short period of time, if the replacement of equipment is deferred. These costs would be flowed through to the operations responsible for maintaining the T&D systems. Reduced spending on replacement equipment would mean older and less reliable equipment would be kept in service. Vehicle availability would fall by several percentage points and in some cases equipment would age beyond our ability to purchase replacement parts, the consequence of which would be the introduction of an adverse effect on T&D personnel's ability to respond to emergencies and efficiently effect construction of needed T&D projects. Extrapolated out, if vehicles are not available to respond to emergencies, it is possible that this could adversely affect many, if not all, of our ability to achieve RPM targets. It would also be conceivable that continuing to operate aged equipment could put the public at risk were a piece of equipment to fail catastrophically. Some equipment, were it to fail could also put the employee operating it at risk.

- Technical Evaluation/Analysis:

  The XM2 expenditures are historical and projected spending related to the replacement of existing equipment. The Company has a pre-determined methodology for selecting mobile equipment based on age, maintenance, reliability, etc., for replacement. The Company's Transportation department maintains a database of these assets and their associated operating costs. It reviews the information annually to determine which assets to replace.

  The Company uses a method referred to as "LC", "life-cycle" or "the model." The method is essentially a EUAC (equivalent, uniform, annual cost) analysis. The Company uses historical, actual and expected maintenance data as well as cost-of-money considerations to determine a point at which it is most economical to replace an asset rather than face increasing maintenance costs and reduced reliability that would impact our ability to respond to the maintenance of the T&D system. It looks at the change in maintenance costs as the asset ages and more specifically, it looks at the rate-of-change. This optimizes the Company's overall cost to own and maintain these assets.

  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

2010 Capital – Shared Services – General Equipment – XM-2

decide to retain an asset that has performed better than its peer group or accelerate the replacement of an asset that is performing poorly.

Status:
On-going

Current Working Estimate (if applicable):

Transportation projects the equipment requiring replacement and the associated capital spending over a 5-year horizon. For planning purposes, it shares this information along with suggested allocation between various operating areas for budgeting purposes. However, the specific assets that will be replaced and their ultimate invoice price are not known that far in the future. The Company typically knows more specifically what units should be replaced in the current year and perhaps the next year.

Below is a list of how many vehicles, by category, that we are planning to purchase in 2010.

Class	2010 Replacements	Total Estimated Cost
Cars	150	$ 3,359,600
Mini-Vans	139	$ 3,789,400
Pickups/Vans	102	$ 3,939,200
Small Trucks	91	$ 10,357,600
Medium Trucks	22	$ 3,378,700
Large Trucks	37	$ 8,839,600
Trailers	18	$ 469,800
Construction Equipment	28	$ 1,661,900
Grand Total	587	$ 35,795,800

Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008	Approved 2009	Request 2010	Request 2011	Request 2012	Request 2013	Request/Approved 2009-2013 Total
$13,701	$34,194	$33,388	$32,409	$52,165	$32,075	$35,796	$34,417	33,286	$43,386	$178,960

2010 Capital – Shared Services – General Equipment – XM-3

Project/Program Title	XM-3 (Stores Equipment)
Status	Ongoing
Estimated Service Date	N/A
Work Plan Category	N/A

Work Description:

Central Field Services' Capital Equipment Group is the Control Agency for XM-3.

The XM-3 Budget is designated for the replacement of Stores equipment including storage bins, pallet racks, pipe racks, shelving, and strapping/wrapping equipment. This equipment is used for store room operations.

Items covered under the XM-3 category are typically replaced when they are deemed beyond economical repair or if a procedure or specification is changed. In 2008, Stores purchased 67 units that were either replacement for or upgrades of existing equipment. Some examples of this are the Remstar parts system, Cousins wrapping and banding machines, and prime movers.

Justification:

- Alternatives:

  Maintain the existing equipment

- Risk of No Action:

  The tools and equipment purchased through the XM-3 budget would need to be maintained beyond their useful life. This would result in increased maintenance and repair costs and potential delays to the operating organizations. In addition, without these funds our ability to take advantage of new equipment technologies, such as advanced shelving systems would limit our ergonomic and operational efficiencies, potentially having an adverse affect on employee productivity.

- Technical Evaluation/Analysis:

  Equipment is evaluated before being replaced and only those that are deemed un-repairable are replaced. However, there are occasions when equipment is purchased due to operating or work practice changes requiring a new type of device that addresses the new requirement. In addition, the majority of contracts utilized to purchase new equipment are competitively bid and where possible, orders are consolidated to take advantage of volume discounts.

2010 Capital – Shared Services – General Equipment – XM-3

Status:

On-going

Current Working Estimate (if applicable):

Specific stores equipment that will be replaced and their ultimate invoice price are not known for future years. The Company typically knows more specifically what units should be replaced in the current year and perhaps the next year.

Below is a list of how many devices, by major category, that we are projecting to purchase in 2010.

Major Category	Projected Quantity - 2010	Estimated Cost
Hoppers	10	$22,000
Storage Racks and Shelving	36	$271,000
Wrapping/Strapping Machines	9	$129,000
Scissor Lifts	12	$7,800
Scale/Weighing Equipment	4	$13,900
Pallet Trucks	8	$66,000
Reach Trucks	2	$44,000
Label/Marking Equipment	20	$5,500
Misc. Items	12	$38,800
Total	**113**	**$598,000**

Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008	Approved 2009	Request 2010	Request 2011	Request 2012	Request 2013	Request/Approved 2009-2013 Total
$279	$116	$502	$444	$491	$672	$598	$598	$598	$850	$3,316

2010 Capital – Shared Services – General Equipment – XM - 4

Project/Program Title	XM – 4 (Shop Equipment)
Status	On-going
Estimated Service Date	N/A
Work Plan Category	N/A

Work Description:

Construction Service's Shop Operations is the Control Agency for XM4 Shop Equipment. The XM4 Budget is designated for the purchase of new or replacement of shop equipment utilized at the Van Nest Shop Operations' facility. The equipment includes floor grinders, lathes, milling machines, scribers, brazing and welding equipment, CNC machinery, jib cranes and hoists. The purchase and use of the equipment is based upon the work load, which includes emergency fabrication of specialized parts. The Van Nest Shop supports the steam generating stations, electric and gas distribution operations, sub-station and transmission operations. The impact of not having equipment funding to support this work would have a severe impact on steam production, electric and gas distribution and well as substation and transmission operations.

Justification:

- Alternatives:

  An economic and time base comparison is made between contracting the work out vs. performing the work in house. In most cases, on an emergency basis, contracting out is not cost effective. This is due to the premiums applied because of such short notice. Another factor is the time lag involved with getting a contractor and equipment on-site within the specified time frame needed to perform the work on the emergency basis.

- Risk of No Action:

  No action would have an adverse effect to the electric, gas and steam system reliability. The risk of not restoring equipment in a timely and cost effective fashion during an emergency will likely occur.

Status:

On-going

2010 Capital – Shared Services – General Equipment – XM - 4

Current Working Estimate (if applicable):

Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008	Approved 2009	Request 2010	Request 2011	Request 2012	Request 2013	Request/Approved 2009-2013 Total
$235	$20	$226	$(26)	$645	$314	$173	$198	$198	$203	$1,086

2010 Capital – Shared Services – General Equipment –XM-5

Project/Program Title	XM-5 (Lab & Test equipment)
Status	Ongoing
Estimated Service Date	N/A
Work Plan Category	N/A

Work Description:

Central Field Services' Capital Equipment Group is the Control Agency for XM-5.

The XM-5 Budget is designated for the replacement of laboratory testing instrumentation and equipment which includes volt meters, gas testers, recorders, pressure gauges, etc. These devices are used to manage and operate the gas, electric and steam systems.

Items covered under the XM-5 category are typically replaced when they are deemed beyond economical repair or if a procedure or specification is changed. An example of this is the normal replacement of items such as Doble test sets, hi-pot test sets and the technological advances in gas detectors covered under XM-5. The gas detector devices are used by field mechanics in many organizations throughout the company to monitor the atmospheric conditions that they work in. When the electro-chemical sensors in the older detectors would fail, they did not provide an indicator to the operator which could result in personnel operating in dangerous environments. 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 one fails, they also have the ability to test additional types of gases. The units will also deny access to use of the instrument when its calibration interval has expired. Since 2004, we have purchased 2,519 new detectors to date as part of the XM-5 budget. A listing by serial number is attached.

Justification:

- Alternatives:

  Maintain the existing equipment

- Risk of No Action:

  The instrument and equipment purchased through the XM-5 budget would need to be maintained beyond their useful life. This would result in increased maintenance and repair costs and potential delays to the operating organizations. In addition, without these funds our ability to take advantage of new instrument and equipment technologies, such as noise reduction, ergonomics, and operational efficiencies would be limited, potentially having an adverse affect on employee and public safety.

- Technical Evaluation/Analysis:

  Instruments and equipment are evaluated before being replaced and only those that are deemed un-repairable are replaced. However, there are occasions when equipment is

2010 Capital – Shared Services – General Equipment –XM-5

purchased due to operating or work practice changes requiring a new type of device that addresses the new requirement. 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.

Status:

On-going

Current Working Estimate (if applicable):

Specific lab and test equipment that will be replaced and their ultimate invoice price are not known for future years. The Company typically knows more specifically what units should be replaced in the current year and perhaps the next year.

Below is a list of how many devices, by major category, that we are projecting to purchase in 2010.

Major Category	Projected Quantity – 2010	Estimated Cost
Calibration Equipment	35	$105,000
Cameras (Infrared, Imaging)	35	$350,875
Voltage Detectors	65	$65,000
Atmospheric Gas Analyzers	150	$675,000
Gauges (Pressure, Thickness)	40	$41,200
Hi-Pot Test Sets	40	$332,000
Load Units	20	$53,800
Locators (Cable, Fault, Pipe)	100	$290,000
Meters (Ohm, Multi, Current)	300	$1,080,000
Power Supply	5	$10,700
Power System Integrity (PSI) Units	15	$249,000
Data Recorders	4	$23,600
Test Sets (Dielectric, Network, Relay)	150	$1,455,000
Testers (Pressure, Breakers, Impedance)	100	$540,000
Misc. Equipment	65	$208,000
Total	**1124**	**$5,479,175**

Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008	Approved 2009	Request 2010	Request 2011	Request 2012	Request 2013	Request/Approved 2009-2013 Total
$4,666	$7,731	$10,229	$4,437	$7,524	$5,392	$5,479	$5,444	$5,304	$5,634	$27,253

2010 Capital – Shared Services – General Equipment – XM-6

Project/Program Title	XM-6 (Tools)
Status	Ongoing
Estimated Service Date	N/A
Work Plan Category	N/A

Work Description:

Central Field Services' Capital Equipment Group is the Control Agency for XM-6.

The XM-6 Budget is designated for the replacement of tools and equipment including portable pumps, chain saws, hydraulic jacks, pneumatic hammers, parts washers, tire repair equipment, etc. These devices are used to manage and operate the gas, electric and steam systems.

Items covered under the XM-6 category are typically replaced when they are deemed beyond economical repair or if a procedure or specification is changed. An example of this is the new retrieval gantry covered under XM-6. This gantry device was developed as a follow up to the concerns that were raised at union management safety committee meetings about the equipment used to retrieve our employees that may become incapacitated after entering an enclosed space. As a result of these concerns, a development project was initiated by Distribution Engineering and EH&S to survey the industry to indentify available products that could fit the needs of the operating groups. After an extensive search, prototypes of retrieval devices from several manufacturers were evaluated, and field trials the device which was approved was manufactured by DBI Sala. These devices were then purchased under the XM-6 budget with an initial order of 454 units. Currently there are 544 retrieval gantries utilized within our company. Other purchases that have increased dramatically in recent years are the hydraulic cutting and crimping tools used by electric operations. The Burndy Y46 crimping head is one such tool that has increased in number as a result of a change in engineering specifications to utilize this tool for crimping of specific size cable. Additionally, there has been an increase in the purchase of battery operated crimping and cutting tools utilized by the Electric Overhead organizations for better ergonomics and efficiencies. Cable spear purchases have also increased mainly due to changes in operating procedures, which now require splicing vehicles to be equipped with their own cable spears.

Justification:

- Alternatives:

  Maintain the existing equipment

- Risk of No Action:

  The tools and equipment purchased through the XM-6 budgets would need to be maintained beyond their useful life. This would result in increased maintenance and

2010 Capital – Shared Services – General Equipment – XM-6

repair costs and potential delays to the operating organizations. Without these funds, the ability to take advantage of new tool and equipment technologies, such as noise reduction and ergonomics and operational efficiencies would be limited, potentially having an adverse affect on employee and public safety.

- Technical Evaluation/Analysis:

  Tools and equipment are evaluated before being replaced and only those that are deemed un-repairable are replaced. However, there are occasions when equipment is purchased due to operating or work practice changes requiring a new type of device that addresses the new requirement. 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.

Status:

On-going

Current Working Estimate (if applicable):

Specific work tools and equipment that will be replaced and their ultimate invoice price are not known for future years. The Company typically knows more specifically what units should be replaced in the current year and perhaps the next year.

2010 Capital – Shared Services – General Equipment – XM-6

Below is a list of how many devices, by major category, that we are projecting to purchase in 2010.

Major Category	Projected Quantity - 2010	Estimated Cost
Blowers/Ventilators/AC units	125	$175,000
Breakers/Demolition Drills	400	$380,000
Cable Cutting/Crimping Equipment	850	$1,997,500
Pipe Fusion Equipment	125	$381,500
Generators	75	$110,000
Hoists	30	$55,500
Hydraulic Pumps/Presses	100	$218,000
Lifts	20	$198,500
Maintenance/Storage Equipment	325	$680,000
Pipe Bending/Fabricating Equipment	150	$385,500
Pumps – De-Watering	220	$284,900
Retriever Devices	100	$175,000
Saws	150	$230,250
Tool Carts	45	$757,125
Vacuums	25	$33,750
Welding Equipment	50	$132,500
Impact/Torque Wrenches	45	$131,850
Misc. Items	85	$431,000
Total	**2,920**	**$6,757,875**

Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008	Approved 2009	Request 2010	Request 2011	Request 2012	Request 2013	Request/Approved 2009-2013 Total
$2,265	$5,061	$6,719	$5,274	$7,211	$7,259	$6,758	$6,724	$6,758	$6,703	$34,202

2010 Capital – Shared Services – General Equipment – XM - 7

Project/Program Title	XM – 7 (Miscellaneous Equipment)
Status	On-going
Estimated Service Date	N/A
Work Plan Category	N/A

Work Description:

The XM-7 budget is devoted to the purchase of miscellaneous equipment such as cafeteria and kitchen equipment, medical, defibrillator, safety and training equipment, fire protection, audio visual and photographic equipment as well as sign and advertising displays.

An organization requiring purchase of capital General Equipment classified as XM-7 must submit a written request to Facilities Management as the Control Agency responsible for purchasing of such equipment. The Facilities XM budget coordinator reviews each request to ensure that its total cost is within the requesting organization's budget allotment and then initiates the procurement process via our existing purchasing tools available.

Justification:

- Alternatives:

There are no alternatives, per se, but the Company does employ various mitigation efforts. All miscellaneous equipment are evaluated before being replaced and only those that are deemed un-repairable are replaced. Facilities as a general practice recycle this equipment whenever possible. In addition, the majority of contracts utilized to purchase new equipment are competitively bid and where possible orders are consolidated to take advantage of volume discounts.

It should also be noted that at any given time organizational priorities are shifted to meet organization's requirements. Each organization anticipates their budget needs by identifying their future requirements. This would include forecasting deployment of extra crews in the field that would require additional safety equipment, such as emergency lifting devices. They submit corresponding appropriation requests for next year's General Equipment in their capital budget request.

2010 Capital – Shared Services – General Equipment – XM - 7

- Risk of No Action:

  Our work forces would be prevented from meeting their objectives in an efficient and safe manner. It would also create personnel issues with those employees who, due to their daily work conditions, require safety, audio visual and training equipment to be able to perform their duties. For example, the safety lifting devices are used for employee protection in the event that a mechanic is overcome in a confined space to allow lifting out by fellow employees from above. As the Control Agency for XM-7 Budget, Facilities Management is committed to continue providing each user organization with the work tools required to perform their daily job functions by replacing broken, damaged, and obsolete equipment or by replacing items that are no longer useful due to normal wear and tear.

Status:

On-going

Current Working Estimate (if applicable):

Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008	Approved 2009	Request 2010	Request 2011	Request 2012	Request 2013	Request/Approved 2009-2013 Total
546	658	999	1,440	2,572	1,622	1,959	1,992	1,892	1,860	9,325

2010 Capital – Shared Services – General Equipment – XM–8

Project/Program Title	XM-8 (Telecommunications equipment)
Status	On-going
Estimated Service Date	N/A
Work Plan Category	N/A

Work Description:

The equipment categorized in XM8 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, HR and legal systems. Information Resources' Operations Support Group is the Control Agency for XM8. The equipment in XM8 is all capital communication equipment including fiber optic cables, SONET and DWDM communications components, transmitters, receivers, amplifiers, reflectors, towers, radio telephones, vehicle mounted radios, walkie-talkies, telephone switches, microwave equipment.

Justification:

- Alternatives:

  There are no alternatives, per se, but the Company does employ various mitigation efforts. Telecommunication equipment is purchased in bulk and competitively bid to take advantage of volume discounts. Information Resources has initiated programs to optimize its costs. Equipment standardization is one of these programs. Using the same manufacturer (i.e. Motorola, Nextel) has given leverage to obtain larger discounts. Information Resources has been utilizing contract negotiation best practices for price and duration of contracts. A third party provider, Gartner Group, has also been retained to formulate more strategic negotiation tactics.

- Risk of No Action:

  Support for communications systems could not be provided. 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 provided 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

2010 Capital – Shared Services – General Equipment – XM–8

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, as well as, employee safety

- Technical Evaluation/Analysis:

  XM8 equipment has an extended life and replaced at 10-15 year increments. This equipment is mostly carrier grade communications equipment to support voice and other communication requirements.

Status:

On-going

Current Working Estimate (if applicable):

N/A

Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008	Approved 2009	Request 2010	Request 2011	Request 2012	Request 2013	Request/Approved 2009-2013 Total
2,113	6,314	6,129	3,297	5,608	4,719	2,774	3,751	3,665	3,780	18,689

As of March 31, 2009:

- Number of Networks: 1 Logical IP network that supports all of CECONY, O&R, and subsidiaries.

- Number of Cell Phones: 7,309
- Number of Blackberries: 1,620
- Number of Pagers: 1,754

Forecast for 2010

- Number of Cell Phones: 8,161
- Number of Blackberries: 1,873
- Number of Pagers: 1,987

2010 Capital – Shared Services – General Equipment – XM–8

In addition to the corporate network, there are control networks that are separated by firewalls. The control networks are located in our energy control centers, electric control centers, and substations – there are approximately 15 and use a combination of Company owned and public carrier communications circuits to operate. The circuits are used for SCADA applications, voice services and critical feeder protection

2010 Capital – Shared Services – General Equipment – XM-10

Project/Program Title	XM-10 (Computers)
Status	On-going
Estimated Service Date	N/A
Work Plan Category	N/A

Work Description:

The equipment categorized in XM10 provides 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, HR and legal systems. Information Resources' Operations Support Group is the Control Agency for XM10. The equipment in XM10 would be all computer equipment including laptops, desktops, mobile data terminals, servers, storage, UPS devices, mainframes, printers, plotters and LAN/WAN network equipment called routers and switches.

Justification:

- Alternatives:

There are no alternatives, per se, but the Company does employ various mitigation efforts. Computer hardware is purchased in bulk and competitively bid to take advantage of volume discounts. 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 for price and duration of contracts. A third party provider, Gartner Group, has also been retained to formulate more strategic negotiation tactics. 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 adopted the use if virtual server and Storage Area Network (SAN) technology which allows more efficient use of computer hardware and reduces costs.

2010 Capital – Shared Services – General Equipment – XM-10

- Risk of No Action:

  If funds were not available for the XM-10 Budget it would impact the ability to provide reliable access to all Company computing systems. This equipment is necessary and essential to the operations, maintenance and expansion of the electric, gas, and steam transmission and distribution systems. This equipment is also an integral part of other infrastructure and business systems such as Customer Operations, Finance and Transportation. As technology changes, state of the art computer and electronic data processing equipment will increase the reliability of the system, as well as, enable expanded use of preventive maintenance programs and productivity improvements.

- Technical Evaluation/Analysis:

  Items covered under the XM10 categories are typically replaced on industry standard practice of 5 - 8 years or as business requirements dictate new technology specifications.

Status:

On-going

Current Working Estimate (if applicable):

N/A

Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008	Approved 2009	Request 2010	Request 2011	Request 2012	Request 2013	Request/Approved 2009-2013 Total
12,357	21,350	26,250	12,948	21,452	21,069	19,835	20,358	20,316	20,461	102,039

2010 Capital – Shared Services – General Equipment – XM-10

As of March 31, 2009:

- Number of Desktops: 8,700
- Number of Laptops/MDT's: 5,858
- Number of servers: 985

	Actual 2006	Actual 2007	Actual 2008	Budget 2009	Forecast 2010
Desktops	N/A	8,288	8,603	8,339	8,873
Laptops/MDT's	N/A	4,274	5,593	5,921	6,300
Servers	N/A	783	978	1,027	1,093
Total	**12,739**	**13,345**	**15,174**	**15,287**	**16,266**

General Equipment Trends ($000s)

	Historical Expenditures					Approved	Request	Request	Request	Request
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
XM1 - Furniture, Partitions	579	1,190	2,207	2,247	1,267	2,258	2,176	2,077	2,042	1,925
XM2 - Vehicles	13,701	34,194	33,388	32,409	52,165	32,075	35,796	34,417	33,286	43,386
XM3 - Stores Equipment	279	116	502	444	491	672	598	598	598	850
XM4 - Shop Equipment	235	20	226	(26)	645	314	173	198	198	203
XM5 - Lab & Test Equipment	4,666	7,731	10,229	4,437	7,524	5,392	5,479	5,444	5,304	5,634
XM6 - Tools	2,265	5,061	6,719	5,274	7,211	7,259	6,758	6,724	6,758	6,703
XM7 - Miscellaneous (AC's, VCR's, etc.)	546	658	999	1,440	2,572	1,622	1,959	1,992	1,892	1,860
XM8 - Telecommunications	2,113	6,314	6,129	3,297	5,608	4,719	2,774	3,751	3,665	3,780
XM10 - Computers	12,357	21,350	26,250	12,948	21,452	21,069	19,835	20,358	20,316	20,461
Total General Equipment	**$36,741**	**$ 76,634**	**$86,649**	**$ 62,470**	**$98,935**	**$ 75,380**	**$ 75,547**	**$ 75,559**	**$ 74,059**	**$ 84,802**

4 Year Historical Average (2005-2008)	**$81,172**
4 Year Projected Average (2010-2013)	**$77,492**

CONSOLIDATED EDISON OF NEW YORK, INC
Emergency Management Organization
O&M COST RY1 THROUGH RY3
(000s)

PROGRAM	HISTORICAL YEAR LEVEL OF SPENDING	PROGRAM CHANGES	RY1	RY2	RY3
010 – Company Labor	1,747	700	2,447	2,447	2,447
030- Materials & Supplies	11	14	25	25	25
040 – Accounts Payable	531	469	1,000	800	800
045 – Interdepartmental Charges	194	137	331	331	331
TOTAL	2,483	1,320	3,803	3,603	3,603

O&M WORKSHEET

2010 Electric Rate Case

SUBMITTING ORGANIZATION:	Emergency Management	Responsible Individual	Andy Tiao

TYPE OF CHANGE	PLEASE CHECK ONE
PROGRAM/ PROJECT:	X
VOLUME:	
NON-RECURRING: (Normalization)	

PROGRAM NAME:

PROGRAM START DATE: 2009

O&M RATE YEAR

AMOUNT (IN THOUSANDS OF DOLLARS)

THOUSANDS OF DOLLARS

MAG	PSC	ELEMENT OF EXPENSE	LENGTH OF PROGRAM	Historical 12/31/08 HISTORICAL YEAR LEVEL OF SPENDING	Incremental 2010 PROGRAM CHANGES	Budget 2010 FIRST RATE YEAR LEVEL OF SPENDING	Incremetnal 2011 PROGRAM CHANGES	Budget 2011 SECOND RATE YEAR LEVEL OF SPENDING	Incremental 2012 PROGRAM CHANGES	Budget 2012 THIRD RATE YEAR LEVEL OF SPENDING
49	92,000	010 - Company Labor	ongoing	$1,747	$700	$2,447	$0	$2,447	$0	$2,447
49	92,000	030 - Materials & Supplies	ongoing	$11	$14	$25	$0	$25	$0	$25
49	92,000	040 - Accounts Payable	ongoing	$531	$469	$1,000	($200)	$800	$0	$800
49	92,000	045 - Interdepartmental Charges	ongoing	$194	$137	$331	$0	$331	$0	$331
				$0	$0	$0	$0	$0	$0	$0
		TOTAL		$2,483	$1,320	$3,803	($200)	$3,603	$0	$3,603

UNITS OF PRODUCTION

UNITS OF PRODUCTION

MAG	PSC	WORK UNITS	LENGTH OF PROGRAM	Historical 12/31/08 HISTORICAL YEAR LEVEL OF WORK	Incremental 2010 PROGRAM CHANGES	Budget 2010 FIRST RATE YEAR LEVEL OF WORK	Incremetnal 2011 PROGRAM CHANGES	Budget 2011 SECOND RATE YEAR LEVEL OF WORK	Incremental 2012 PROGRAM CHANGES	Budget 2012 THIRD RATE YEAR LEVEL OF WORK
				0	0	0	0	0	0	0
				0	0	0	0	0	0	0
		TOTAL		0	0	0	0	0	0	0

AVERAGE HUMAN RESOURCES (MANAGEMENT & WEEKLY) (SEE NOTE BELOW)

JOB TITLE	2008 LABOR RATE	Quantity	2010 PROGRAM CHANGES	Quantity	2011 PROGRAM CHANGES	Quantity	2012 PROGRAM CHANGES	Quantity	2013 PROGRAM CHANGES
Project Specialists (The seven Project Specialists	$100	7	$700		$0		$0		$0
have been hired has of April 2009.)		0	$0		$0		$0		$0
		0	$0		$0		$0		$0
		0	$0		$0		$0		$0
		0	$0		$0		$0		$0
		0	$0		$0		$0		$0
EQUIVALENT OVERTIME		0	$0		$0		$0		$0
TOTAL		7	$700	$0	$0	$0	$0	$0	$0
		Percent Allocation	100.00%		$0		$0		$0
Clearing dollar % allocated to O&M per Authority Letter ------>					$700		$0		$0
Clearing dollars % allocated to Capital as per Authority Letter									

NOTE:

Wkly. field employee @ Man-hour rate
Field Supervisors (included in man hour rate)
Clerical (included in man hour rate)
Wkly. employee (Basic Labor)
Management (Basic Labor)
Engineering support (Basic Labor rate)
Contractor oversight (Basic Labor rate)

SERVICE IMPACTED BY PROGRAM CHANGE	PLEASE CHECK ONE
ELECTRIC	
GAS	
STEAM	
COMMON - ELECTRIC, GAS & STEAM	
COMMON - ELECTRIC & STEAM	
COMMON - GAS & STEAM	
CECONY & O&R	
CECONY, O&R & NON-UTILITY	

Master Implementation Plan of Consolidated Edison Company of New York, Inc. for the Final Report – Independent Audit of Consolidated Edison Company Electric Emergency Outage Response Program for the New York State Department of Public Service Case No. 06-M-1078

Quarterly Update
March 3, 2009

Master Implementation Plan of Consolidated Edison Company of New York, Inc.

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I Executive Summary

In 2006, Consolidated Edison Company of New York, Inc. (Con Edison or the Company) experienced four major outage events on its electric distribution system. Three events involved storms that caused extensive damage to trees in Westchester County which resulted in significant damage to the overhead distribution system. The fourth event involved an extended outage in Northwest Queens following equipment failures in the Long Island City secondary network. The lessons learned from these events called for a thorough review of the Company's emergency management strategy.

Consequently in the latter part of 2006, the Company reframed the Electric Operations emergency management strategy based on three key principles: *Impact Mitigation, Rapid Restoration and Communication Effectiveness*. The strategy focused on initiatives to *reduce* the potential *impact* of an event, *minimize* the *duration* of an event, and *communicate* with stakeholders in an *accurate and timely* manner. Accordingly the Company undertook numerous initiatives to improve its emergency management program that are in line with these fundamental principles (see attachment A).

At the same time that the Company undertook these initiatives, the New York Public Service Commission (PSC) initiated an independent audit of Con Edison's electric emergency outage response program that culminated in a report entitled "Final Report - Independent Audit of Consolidated Edison Company – Electric Emergency Outage Response Program for the New York State Department of Public Service – October 24, 2007" (Audit Report). This report focuses on six areas:

- *Emergency Response, Policy and Organization* - Strategy, Policy and Master Plan, and Organizational Issues
- *Comprehensive Emergency Response Program* - Analytical Assumptions and Planning Criteria, and Analysis and Program Improvement
- *Emergency Response Performance* - Emergency Response Preparation, Staffing, Load Reduction Programs, Restoration Performance, Effectiveness, Long Island City Network Outage, and Preventive Maintenance Practices
- *Communications* - Customer Information and Call Center Operations, Media Relations, Public Officials, and Public Service Commission
- *Reliability* - Tree Trimming Practices and Performance, O&M and Capital Spending, Reliability Analysis, and Reliability Impacts on Management Compensation
- *Best Practices* - Emergency Preparedness and Storm Restoration Best Practices, and Best Practice Assessment

While the Audit Report highlights many positive findings regarding Con Edison's emergency management practices, it also points out some areas for improvement. It calls for the Company to develop a strategic framework for analyzing and making decisions on emergency management priorities. The Audit Report also recommends that Con Edison prepare a multi-year strategic plan focusing on system reliability, emergency preparedness, and major outage prevention and restoration with executive management taking a lead role in setting the vision and priorities.

The Audit Report also suggests that alignment between the Corporate Emergency Planning and Security organization and the Electric Operations Emergency Management organization can be improved. Accordingly, the Audit Report recommends that the Company restructure the emergency organization in accordance with the strategic plan that Con Edison develops.

Audit Report Evaluation Process

Con Edison established an Emergency Management Steering Committee (Steering Committee) of senior executives to address the issues in the audit report. The Steering Committee oversees both the review of the findings and recommendations contained in the Audit Report and the development of initiatives to improve emergency preparedness, prevention, response and associated communication. The Steering Committee engaged Davies Consulting Inc. (DCI) to provide guidance on accepted emergency management processes and best practices.

To facilitate this process, the Audit Report's findings and recommendations have been grouped into fourteen thematic categories. A team of subject matter experts has been assigned to each of the 14 categories and these teams have been tasked with addressing the specific area(s) identified under each of the categories. The 14 teams report to the Vice President of Corporate Emergency Planning and he coordinates the team efforts with the Steering Committee. The fourteen categories with associated recommendations are as follows:

1. Corporate strategy and master plan (III R1-7)
2. Emergency management organizational structure (III R 8-19)
3. Incident command system refinements (III R20-22)
4. Comprehensive Emergency Response Program (CERP) effectiveness (IV R1-9)
5. Emergency drill program expansion (V R1-4)
6. Trouble assessment process (V R5-6)
7. Workforce capability review (V R7-10)
8. Reliability and technical design criteria (V R11-20)
9. Customer communication (VI R1&5)
10. Call center capability testing (VI R2)
11. Estimated Time of Restoration (ETR) methodology (VI R3-4)
12. Vegetation management program (VIII R1-2)
13. Financial and operational metrics (VII R3-4)
14. Best practice benchmarking (VIII R1-2)

With guidance from the Steering Committee, the first team listed above developed and defined the Emergency Management Vision and Policy Statements, which are designed to be consistent with the

Corporate Mission Statement and are focused on reliability, outage prevention, response and communications with our customers and other stakeholders.

Emergency Management - Vision

"The Company strives to meet our customers' needs through effective emergency risk assessment, mitigation, preparedness, response and communications. Our goal is to achieve excellence as an industry leader in emergency management performance."

Emergency Management - Policy Statement

"Aligned with our commitment to "The Way We Work[1]," the Company strives to utilize effective emergency management principles that enhance the Company's ability to provide safe and reliable energy services and its ability to communicate timely and accurate information to our customers and stakeholders by:

- *Conducting effective risk assessments for operating and business functions,*
- *Developing appropriate prevention or risk mitigation strategies,*
- *Implementing comprehensive emergency preparedness programs,*
- *Responding with appropriate resources to address the emergency,*
- *Communicating with customers and other stakeholders timely and accurate information using voice, Internet, media and other appropriate methods,*
- *Recovering from events expeditiously, and,*
- *Improving continuously."*

The Vision and Policy Statements establish the broad framework which defines the Corporate Emergency Management Strategy (CEMS) upon which each emergency management initiative will be developed, implemented, measured for effectiveness, and enhanced as needed. The CEMS establishes a consistent approach which serves to improve the effectiveness of our overall emergency management programs, resulting in enhanced service to our customers and the communities we serve. While the application of these concepts is currently being focused on Electric Operations initiatives involving electric distribution reliability, emergency preparedness, and restoration, the strategic framework was developed in a manner to allow for effective application by Emergency Management for all operating organizations within Con Edison.

In an effort to gauge the effectiveness of our initiatives, we are actively reviewing existing metrics, and developing enhanced and new emergency management performance measures. These performance measures will include metrics covering areas such as storm preparation, customer contact, estimated restoration times for service outages, and communication with municipal agencies.

Con Edison has communicated extensively with Department of Public Service (DPS) Staff during the development of the strategic framework and the evaluation of the recommendations relative to its

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[1] The six core principles of The Way We Work — plan the work and work the plan, seek and accept responsibility, communicate openly, work in teams, improve continuously and celebrate success.

emergency management strategy. Con Edison will continue to work closely with DPS Staff as the Company's strategic plan is implemented. In addition, Con Edison will develop a plan to communicate with and receive feedback from our major stakeholder groups. These enhanced communications will discuss specific improvements the Company is making to its emergency management plan, how those improvements will benefit customers and the community, and the appropriate role that customers and communities can play in the plan's success. In addition to the Public Service Commission and DPS Staff, key audiences that will be directly served by targeted and regular communications include affected state and local government agency officials, other emergency responder organizations, the media, and customers. The message will be delivered through the corporate Web site, press releases, the customer newsletter, targeted interest group meetings, and e-mail. The ultimate goal of these communications is to demonstrate to stakeholders that Con Edison is making the necessary changes to its corporate and operational priorities, planning processes, and organizational effectiveness to achieve excellence in its emergency management performance.

Key Initiatives

The following highlights the key initiatives to be undertaken as part of the Master Implementation Plan (MIP). As noted below, many of these new initiatives are underway or will be implemented prior to Summer 2008. Additional detail regarding these and other initiatives are included in the MIP.

- **Achieving Organizational Clarity**
  In order to establish organizational clarity both internally and externally, Con Edison will consolidate and centralize the emergency management functions. Accordingly, corporate responsibility for the emergency management in electric operations for Con Edison and for Orange and Rockland Utilities, Inc. (O&R) will be transferred to Con Edison's Emergency Management organization. The transfer to corporate responsibility will help define and communicate emergency management roles and responsibilities and establish organizational clarity to employees and external stakeholders.

  Furthermore, in an effort to highlight the focus on emergency management within the corporation, Con Edison has separated the responsibility for security away from Corporate Emergency Planning. The separation of these organizations is intended to enhance executive oversight for each of these important organizations.

  The reporting enhancements are tentatively scheduled to be completed by April 15, 2008.

- **Customer Communication Enhancements**
  Con Edison has been significantly expanding its customer communication efforts, both in anticipation of and during outage events. The educational communication program includes Company publications, the corporate Web site, and a substantial public education campaign on radio and in newspapers. As discussed further below, during outage events, the Con Edison Web site now provides customers with useful event-related information and receives important outage information from customers.

- **Website Enhancements**

The Company has improved its Web site to enable customers to report an electric service problem or to check on the status of a previously reported service outage. Customers are able to perform these activities by simply providing either their account number or by entering the phone number linked to their account and verifying the address of the location of the outage. The Company is in the process of improving the mapping function on its Web site to allow customers to improve access to information with respect to the scope of an event in a particular geographic area. Most recently, the Company developed and implemented Web pages to display photos of storm and other outage damage and the Company's restoration efforts. Going forward, Con Edison will research and implement those best practices and new and improved technologies that will help to provide effective web-based communications with employees, customers, the public, the media and public officials. The enhanced mapping function will be available before summer 2008.

- **Global Estimated Time of Restoration**
  Con Edison continues to enhance its processes to be able to provide customers estimated times of restoration. On a day-to-day basis, Con Edison provides customers an estimated time of restoration when a crew is dispatched to the reported outage. Con Edison is committed to provide a global estimated time of restoration not later than 12 hours after the end of a significant storm. However, for major storms where there is significant physical system damage, up to 24 hours, may be required to issue a global ETR. In addition, as the Company progresses through damage assessment, Con Edison will refine its estimated time of restoration. Historically, the availability of damage assessment information has impacted the accuracy and timeliness of the estimated time of restoration. To improve this process, an enhanced trouble analysis and damage assessment process, coupled with a new global estimated time of restoration matrix, will be in place by summer 2008 for use during major overhead storm events. It is anticipated that the improved processes and matrix will assist in providing timely and accurate global estimated times of restoration. Con Edison will also include a communication strategy as part of the matrix that will permit the Company to effectively communicate timely global estimated restoration times based upon historical information.

- **Tree Trimming**
  Trees overhanging branches falling onto electric power lines are generally the principal cause of outages during significant weather events. Con Edison recognizes that tree trimming is one of the most effective means of maintaining reliability. Therefore, in 2006 the Company implemented a three-year preventive trimming cycle with enhanced clearance requirements. These enhanced clearance requirements increase the distance that trees and branches need to be cut away from the electric power lines, thereby making the Company's trimming requirements more stringent and effective.

  Even though Con Edison places a high priority on tree trimming, many trees that hit its electric power lines cannot be trimmed. This is because these trees are outside the right of way within which Con Edison is permitted to trim. As a result, Con Edison has engaged experts to conduct a study to examine the causes of tree damage in Westchester County during weather events and identify steps to mitigate tree damage. The Company expects this study will support efforts currently being proposed to address identification and removal or other mitigation of potentially dangerous trees located outside the right-of-way on private property.

- **Municipal Task Force**
  Con Edison is working with the municipalities in Westchester County to develop more effective ways to work collaboratively to improve the overall restoration of customers, improve the response to public safety threats, and improve emergency communications. The Municipal Task Force continues to work with municipalities to identify critical infrastructure that are important to the community. Information identified by the municipalities regarding their critical facilities (i.e., sewage pumping stations, water treatment facilities) is utilized to establish priorities for restoration efforts. One result of this effort is a significant expansion of Con Edison's municipal liaison program in 2008. The municipal liaison program places Con Edison employees in municipalities during the restoration of an event to help coordinate the Company's restoration efforts with the municipality's needs. The Company has doubled the number of municipal liaisons and will complete the training by summer 2008.

- **Workforce Capability**
  Con Edison is actively hiring for key field positions and is using contractors to supplement the workforce. The Company is reviewing the process that is used to match the number of qualified employees in the Line Constructor and Underground Worker career paths to a level that is appropriate for the response to storms. Additionally, to maximize the utilization of Company personnel and resources, the Company is in the process of expanding its program that provides storm assignments to employees.

- **Establish Benchmarking / Best Practices Process**
  Following a comprehensive evaluation of the benchmarking and best practices processes utilized by Con Edison and throughout the utility industry, the Company has identified opportunities to implement an enhanced benchmarking and best practices program. The Corporate Emergency Management organization will be responsible for gathering, analyzing, and communicating benchmarking data, and establishing accountability for implementing emergency management best practices.

- **Focused Drill Program**
  The Audit Report found that Con Edison has made a major commitment to emergency drills and has used them as preparedness enhancers, refreshers, and learning experiences. To improve the current drill program, the Corporate Emergency Management organization will be responsible for establishing consistent policies, procedures, responsibilities, and methodologies for designing, conducting and assessing drills. These enhancements will result in better executed drills and follow up and improved preparedness.

- **Incident Command System (ICS)**
  Historically, Con Edison has placed significant emphasis on and maintained a solid commitment to ICS, which has placed the Company at the forefront of the industry. Furthermore, the use of ICS provides great benefits for the management of large-scale events. Con Edison is enhancing the application of ICS by expanding formal training, improving resource tracking, refining the development of plans made during major system events, and utilizing specially trained personnel to facilitate using the ICS during major events. Full implementation of ICS will include establishing

Incident Management Assist Teams (IMATs). These IMATs will be available to respond to Serious and Full Scale incidents. In addition, the IMATs will participate and assist in drill/exercise development and will facilitate the operational planning process during incidents.

- **Comprehensive Emergency Response Program (CERP)**
  The CERP provides planning and response guidance to all regions responding to electric emergency events. Utilizing an ICS structure, the CERP contains substantial emergency response information, including reference tables that link required resources to event classifications. Con Edison will improve its CERP by providing Company personnel with a greater understanding of the role of the CERP, and the processes and procedures included in the CERP and utilized during emergency outage events.

- **Enhanced Weather Modeling**
  Con Edison has initiated a Research and Development project to examine the feasibility of applying cutting-edge technology to forecast weather at a local level and the near real-time impact of weather conditions on the overhead electrical system. It is anticipated that the forecast and real-time weather data will allow Con Edison to more accurately predict and respond to damage to its electric distribution system, allowing Con Edison to better mobilize resources when responding to storms.

- **Initiation of a Collaborative**
  Con Edison will initiate a collaborative program working with DPS Staff to develop best practice emergency preparedness and major outage restoration programs. This collaborative will strive to include participation by electric, gas and telecommunication utilities in New York State.

Con Edison continually seeks to improve its emergency management program and recognizes the audit recommendations as an opportunity to enhance its overall emergency preparedness and response, thereby better serving its customers. Con Edison is firmly committed to achieving significant performance improvements. Moreover, Con Edison continues to be committed to maintaining the reliability of its systems and anticipates that the emergency management initiatives will have a positive impact on the reliability of the service provided to customers. Con Edison will continue to work collaboratively with DPS Staff and its stakeholders as it implements its CEMS.

II Master Implementation Plan (MIP)

The Emergency Management MIP will facilitate the implementation of the CEMS in a manner consistent with the overall Con Edison of New York, Inc. (CECONY) strategy. This consistency has been established and is memorialized through the alignment of the Corporate Mission Statement and Corporate Strategy with the Emergency Management Vision and Policy Statements (Attachment B). The Vice President of Corporate Emergency Management has overall responsibility for implementing the CEMS following the process outlined in the MIP. The MIP emphasizes the priority efforts of communicating the plan, achieving organizational clarity and developing performance measures. These efforts are consistent with the Policy Statement and are necessary to initiate the multi-year commitment to implementing the MIP.

Communications Plan

This section of the MIP states how Con Edison's plan will communicate its MIP to the Company's major stakeholders; employees, customers, NYS Public Service Commission/DPS Staff, local and state elected officials, municipal offices of emergency management, and the media. When fully implemented, this plan will demonstrate to stakeholders that Con Edison has made the necessary improvements to its corporate priorities, planning processes, infrastructure investment, and organizational effectiveness as they relate to improving the Company's Emergency Management Program. The communications plan will:

1. Highlight the role of senior management in communicating and implementing the overall vision and priority for the Company's approach to reliability and emergency management;
2. Clearly define and communicate Emergency Management policies that are sensitive to the unique circumstances surrounding the Company's service territory and address customer expectations; and
3. Emphasize the holistic nature of reliability and outage management to Company employees.

Addressing Key Stakeholders

There are two key sets of stakeholders that the Company needs to target regarding the CEMS and its MIP: internal and external. Internal communications will focus on effectively communicating the Company's Emergency Management Vision and Policy Statement, senior management's commitment to the successful implementation of the strategy, and roles and responsibilities of employees in this initiative. External communications will inform customers, elected officials, municipal emergency management officials, the media and other Con Edison stakeholders about how the Company will implement its MIP in communities and lay out how the Company will report on its implementation plan progress and highlight key milestones as they are reached.

1. Internal Communications

Internal communications will foster credibility for and understanding of the Emergency Management vision, policy, and CEMS among Con Edison employees. The internal communications plan is designed to inform and educate employees about the CEMS and Emergency Management – MIP, its critical importance to the Company, senior management's support of and long-term commitment to the program, and each employee/department's role in the emergency management process. Under this approach, employees understand they are part of the overall strategic plan and are kept up to date on program developments and implementation. Employees will have an opportunity to understand and discuss the CEMS and provide feedback during and after its implementation. Additionally, training will be provided so that Con Edison employees understand the importance of the CEMS and their responsibility in assuring they are knowledgeable and fit to perform in their respective position.

Employees will be notified about and provided access to; the full plan via the Company intranet, employee newsletters and emails, along with summary materials about the plan. Training programs will be developed and scheduled for all affected employees to provide a holistic message about the Emergency Management vision, policy, goals and objectives. Job-specific and department-specific materials will also be developed, as needed. Throughout the implementation of the plan, ongoing message delivery and reinforcement will facilitate continued employee awareness of the plan. Message delivery vehicles will include employee newsletters, a dedicated intranet site, emails, online videos and employee meetings. Key internal communications steps are listed below:

A. Concurrent with the Emergency Management compliance filing with the Public Service Commission, send an announcement in the form of an e-mail letter from the Vice President of Emergency Management to all employees discussing the Corporate Emergency Management Vision and Policy Statement, and a link to the full MIP.
B. Post on the Company Intranet the new CEMS, the new Emergency Management organizational structure and staff appointments, including organizational charts, position descriptions, and vision statement on the intranet.
C. Publish a headline article in the employee newsletter discussing the importance of the new plan, with links to plan, new organizational structure, upcoming employee training programs and requirements, etc.
D. Highlight Emergency Management department roles and initiatives in the employee newsletter and announce the completion of major Implementation Plan milestones.
E. Develop and deliver training programs for affected employees, both within and outside of Emergency Management, to provide a holistic message about the emergency management Vision, Policy Statement and Goals and Objectives, and to include job-specific and department-specific materials as needed.

2. External Communications

External communications will foster credibility for the Emergency Management vision, policy, CEMS and MIP among Con Edison's external stakeholders. These communications will discuss how the strategy will be implemented, how it will benefit customers and communities, and the role that customers and communities can play (where appropriate) in the MIP's success. Key audiences that

will be directly served by targeted and regular communications include the Public Service Commission, affected state and local government agency officials, other emergency responder organizations, the media, and customers. The ultimate goal of these communications is to demonstrate to stakeholders that Con Edison is making the necessary changes to its corporate and operational priorities, planning processes, and organizational effectiveness to achieve excellence in its emergency management performance

Throughout the implementation of the plan, ongoing message delivery and reinforcement will facilitate continued stakeholder awareness of and build support for the Company's emergency management efforts. Message delivery vehicles will include the corporate Web site, press releases, the customer newsletter, public meetings, targeted interest group meetings, and e-mail. Key external communications steps are listed below:

A. Make compliance filing containing the Emergency Management – MIP with Public Service Commission on March 3, 2008.
B. Promote the availability of CEMS and the MIP to customers in Customer News and explain how these will benefit customers and the community. Continue to educate customers on actions they can take to prepare for an emergency, including loss of power, and associated inconveniences.
C. Include appropriate messages in print and radio energy education campaigns. These efforts will reinforce the message that customers should contact Con Edison during emergencies, the various ways they may do so, and direct them to the Web site for additional information.
D. Provide tailored communications, including public and one-on-one meetings where appropriate, with key state and local organizations explaining the plan and its significance to them, including how any existing relationships are (or are not) affected. These groups will include the County Executive, Municipal Officials Association, Municipal Managers Association, Commissioner of Emergency Services, New York City Office of Emergency Management, Business Council of Westchester, Westchester County Association, and the Company's local not-for-profit summit held annually in Westchester.
E. Hold community meetings and targeted interest group meetings explaining the new plan, its importance to Con Edison, and how and why it will result in improved service and positive outage response results for the community.
F. Make quarterly progress reports to the Public Service Commission regarding the Company's progress implementing the MIP, highlighting key implementation milestones.
G. Post progress reports on the Web site with summary information, key talking points and messages where appropriate, and notify customers and other stakeholders about relevant program implementation milestones via the Web site, newsletters, community and stakeholder meetings.
H. Survey key state and local government agencies to assess gaps between what the Company provides today in terms of communications and information resources during or in anticipation of an emergency and what these organizations need/want from the Company.
I. Establish additional feedback mechanisms to measure target stakeholder understanding and acceptance of the Company's emergency management program, and related communications, such as a dedicated response mechanism on the Web.

J. Measure success/failure of communications and outreach efforts vs. defined communications goals and objectives at the end of the year with follow-up surveys/questionnaires of customers and other key stakeholders.
K. Make necessary adjustments to communications strategies/messages to make the corporate goals and objectives consistent with communicating the Emergency Management – Master Plan to stakeholders are met.

Performance Measures

Performance measures are ultimately designed to improve the overall performance of the CEMS, including specific measures for maintaining preparedness and the priority of emergency management. (III R5) They rely upon a well defined strategy and goals/objectives. Initially for Electric Operations, the performance measures will serve various purposes, including: evaluating, controlling, motivating, promoting, budgeting and benchmarking the CEMS and its implementation by the Company. Performance measures are consistent with good business practices. Con Edison as part of the overall strategic process will be reviewing existing emergency management metrics and developing new performance measures based on the MIP initiatives as they are completed.

As the initiatives outlined in this implementation plan are being developed, appropriate performance measures will be defined. Below are goals/tasks upon which performance measures may be based.

- **Risk Assessment** - Develop and quantify operating risks faced by the Company
  1. Reporting percentage for Remote Monitoring System units system-wide
  2. Reporting overall inspection program for network secondary mains
  3. Reporting distribution transformer inspection and testing protocols, system-wide, tabulated by network

- **Prevention and Mitigation** - Develop prevention and mitigations programs
  1. Annual tree trimming goal (Vegetation Management)
  2. Reporting effectiveness of monitoring of the secondary electric system
  3. Reduction of Paper Cable (PILC) and thermally sensitive stop joints

- **Planning and Preparedness**
  1. Conducting annual drills (heat, winter storm, and overhead storm)
  2. Annual PSC Storm Response Plan Submittal
  3. Conducting annual Corporate Emergency Response Center exercise
  4. Conducting ICS Training commensurate with position held
  5. Reporting drill or training exercise results
  6. Reporting annual Life Sustaining Equipment (LSE) customer identification program

- **Response**
  1. Global Estimated Time of Restoration matrix performance
  2. Plan vs. Actual ETR performance analysis
  3. SAIFI / CAIDI Performance Indicators
  4. Inter-regional calls in advance of and during emergencies

- **Communication**
  1. Municipal conference call conducted
  2. Customer telephone service factor
  3. Effectiveness of LSE certification and re-certification process
  4. Effectiveness of annual communication of storm event information to customers and stakeholders

5. Effectiveness of the Company's coordination with New York City Office of Emergency Management
6. Effectiveness of the Company's coordination with Westchester County Department of Emergency Services Notification coordination

- **Recovery / Reassessment**
  1. Customer Satisfaction survey
  2. Lessons learned completed and appropriate opportunities implemented

Master Implementation Plan Schedule

EMERGENCY MANAGEMENT ORGANIZATION (Team 2)	Start Date	End Date	Report Rec#	Task Owner	Status	Update and Documentation
1. Define emergency management responsibilities to be aligned with the Corporate Emergency Management Strategy (CEMS)	3/1/2008	4/1/2008	III-R7 thru R18	EM	Complete	9/3/08: Corporate Instruction (CI) 260-4 updated on June 2nd 2008 6/3/08: Corporate Instruction (CI) 260-4 was updated on May 28th 2008 and is awaiting final approval.
2. Identify required staffing resources based on Electric Operations emergency management responsibilities	4/1/2008	5/1/2008	III-R7 thru R18	EM	Complete	6/3/08: Emergency Management Staffing Plan submitted as Exhibit___(EMP-5) in Con Edison's electric rate case 08-E-0539 filed on May 5th 2008.
3. Implement Electric Operations Emergency Management organizational changes (recruit, hire, train)	3/1/2008	12/31/2009 Revised: 4/1/2009	III-R7 thru R18	EM	On-going	03/03/09: Emergency Management has hired 14 of the 16 positions. The remaining 2 positions have been made offers. 12/3/08: EOEM – The overhead Project Specialist has been filled and the underground Project Specialist is posted. OEM – The steam Project Specialist, S&TO Project Specialist and Substation Ops Project Specialist have been filled. The gas Project Specialist is posted. EMOS – The Risk Management, Weather Analysis and Benchmarking Section Manager has been filled. One Project Specialist in Plans, Policy and Procedures is filled with interviews being conducted for the remaining position. The two Project Specialists in Risk Management/Weather Analysis have been posted. Interviews are being conducted for the Project

						Specialist in Strategic Planning. The project Specialist position in preparedness and Liaison is filled. 9/3/08: The Department Manager- Gas / Central Operations position has been filled. The embedded emergency position for Steam Operations has been posted and interviews are being conducted. The Section Manager for Risk Analysis position has been posted. Position guides for the embedded positions in Electric Operations, Gas Operations, Substation Operations, and System and Transmission Operations have been developed and it is anticipated that postings for these positions will completed by October 31. Additional position guides are being developed and are strategically being posted consistent with the expansion of the organization. 6/3/08: The Director of Emergency Management - Operations Services and the position for a Business Continuity Senior Specialist have been filled. The Department Manager – Gas / Central Operations and select embedded emergency positions have been posted. Additional position guides are being developed and are being posted consistent with the expansion of the organization.
4. Merge the existing Emergency Management organizations into a new central group known as Corporate Emergency Management.	1/1/2008	4/15/2008	III-R7 thru R18	EM Regional EM	Complete	6/3/08: The merger of the emergency management organization was effective on May 1st, 2008.

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CORPORATE EMERGENCY MANAGEMENT STRATEGY (CEMS) COMMUNICATION PLAN (Team 1)	Start Date	End Date	Report Rec#	Task Owner	Status	Update and Documentation
1. Communicate With Public Service Commission	1/15/2008	On-going	III-R8 thru R19	EM Regional EM Regulatory Corp Communication	Complete	6/3/08: Updated information was provided through various meetings with DPS Staff and as part of the electric rate case 08-E-0539.
2. Communicate With Internal Stakeholders	3/3/2008	On-going	III-R8 thru R19	EM Regional EM Regulatory Corp Communication	Complete	6/3/08: Consistent with the Communication Plan, various initiatives were undertaken to communicate with internal stakeholders.
3. Communicate With External Stakeholders	3/3/2008	On-going	III-R8 thru R19	Corp Communication	Complete	6/3/08: Consistent with the Communication Plan, various initiatives were undertaken to communicate with external stakeholders.
4. Evaluate Emergency Management Communications Plan effectiveness	6/1/2008	On-going	III-R8 thru R19	Regional EM Public Affairs	Complete	03/03/09: A link to CEMS will remain available on our web site. We will continue to include CEMS in yearly Energy 101 courses. 12/3/08: Initial surveys had limited response from customers. A second survey was conducted with improved participation. The results from the second survey and recommendations are attached. The recommendations are being reviewed for the feasibility of implementation. Con Edison Survey Results.doc ... Recommendations of Web Usabili... 9/3/08 follow up: Attached is a sample of the request letter that was sent out to public officials as part of LIC recommendation #8 (Con Edison should update their contact information

						for public officials, community based organizations and critical care/large facilities) as well as the document with the list of parties that have been contacted regarding updating their information (also as part of LIC #8). Also attached are the results from the second survey we conducted as part of our Vantage/CEMS recommendations. (reference Clark email to Torphy 11/3/08) Truncated list as of Oct 2008 ... sample letter.doc (34 KB) Con Edison Survey Results.doc ... 9/3/08: Surveys were developed and distributed to elected officials, their staff, and community organizations in NYC and Westchester County. In an effort to get additional feedback, phone surveys will be conducted with offices that did not reply to the electronic survey. These surveys will be conducted in the fourth quarter of 2008. 6/3/08: Surveys are being developed and are anticipated to be sent out by June 13.

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PERFORMANCE MEASURES (Team 13)	Start Date	End Date	Report Rec#	Task Owner	Status	Update and Documentation
1. Develop Emergency Management performance measures in support of the Emergency Management Policy and Principles	1/15/2008	1/1/2009	VII-R3 & R4	EM Regional EM	Complete	03/03/09: The KPI's have been finalized. 2009 KPI's - nergency Managem 12/3/08: The KPI's are in the process of being finalized. Will provide a copy when finalized. 9/3/08: Key performance indicators are being developed and will be provided for the next update. 6/3/08: As the Emergency Management organization works through centralizing and begins to expand the breadth of scope consistent with the MIP, appropriate performance measures will be developed and included as part of the Company's 2009 Key Performance Indicators.
2. Develop Electric Operations Emergency Management performance indicator	5/1/2008	1/1/2009	VII-R3 & R4	Human Resources EM Regional EM	Complete	03/03/09: The KPI's have been finalized. See item on above for a copy. 12/3/08: The KPI's are in the process of being finalized. Will provide a copy when finalized. 9/3/08: Key performance indicators are being developed and will be provided for the next update. 6/3/08: As the Emergency Management departments develop their 2009 work plan, consistent with the MIP, appropriate performance measures will be developed and included as part of the Company's 2009 Key Performance

						Indicators.
3. Incorporate Emergency Management performance measures in 2009 Emergency Management business plan	5/1/2008	1/1/2009	VII-R3 & R4	Human Resources EM Regional EM	Complete	03/03/09: The KPI's have been finalized. See item on above for a copy. 12/3/08: The KPI's are in the process of being finalized. Will provide a copy when finalized. 9/3/08: Key performance indicators are being developed and will be provided for the next update. 6/3/08: As the Emergency Management departments develop their 2009 work plan, consistent with the MIP, appropriate performance measures will be developed and included as part of the Company's 2009 Key Performance Indicators.

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EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Teams 3-12 &14)	Start Date	End Date	Report Rec#	Task Owner(s)	Status	Update and Documentation
Team 3 -Refine Incident Command System (ICS) practices	2/1/2008	12/31/2010	III-R19 thru R22	EM Regional EM Logistics Distribution Eng Human Resources	Complete	See Team 3 Implementation Plan below.
Team 4 - Review and revise Corporate Emergency Response Program (CERP) to improve its structure, storm matrix, document access, approval process and content (including checklists)	2/1/2008	12/31/2009	IV- R1 thru R9	Regional EM	Ongoing	See Team 4 Implementation Plan below.
Team 5 - Expand and improve Emergency Management drill program	1/1/2008	5/31/2009	V-R1 thru R4	EM Regional EM Distribution Eng	Ongoing	See Team 5 Implementation Plan below.
Team 6 - Execute process, structural and training changes to increase the effectiveness of the trouble analysis unit.	1/3/2008	7/1/2008	V-R5 & R6	Regional Eng Regional EM	Complete	See Team 6 Implementation Plan below.
Team 7 - Refine and execute a hiring strategy for the field and engineering functions	6/1/2008	7/1/2011	V-R7 thru R10	Human Resources	Ongoing	See Team 7 Implementation Plan below.
Team 8 - Reliability and technical design criteria	See Team Summary		V-R11 thru V-R20	Distribution Engineering	Ongoing	See Team 8 Implementation Plan below.
Team 9 - Review and improve customer outage reporting, and web site communications	1/1/2008	1/1/2009	VI-R1 & R5	Corp Communication	Complete	See Team 9 Implementation Plan below.
Team 10 - Expand Call Center capacity and improve ability to implement lessons learned	1/1/2008	12/31/2008	VI-R2	Customer Ops	Complete	See Team 10 Implementation Plan below.
Team 11 - Design and implement an improved process to establish Global Estimated Time of Restoration (ETRs)	1/1/2008	12/1/2008	IV-R3 & R4	Regional EM Customer Ops	Complete	See Team 11 Implementation Plan below.

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EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Teams 3-12 &14)	Start Date	End Date	Report Rec#	Task Owner(s)	Status	Update and Documentation
Team 12 - Continue to expand Bronx Westchester vegetation management program to gain better understanding of the Urban Forest	1/1/2008	12/31/2011	VII-R1 & R2	Bronx Westchester Const	Ongoing	See Team 12 Implementation Plan below.
Team 14 - Establish centralized Emergency Management (EM) benchmarking and best practice program	3/1/2008	1/31/2009	VIII-R1 & R2	EM	Complete	See Team 14 Implementation Plan below.

Pre-Summer Enhancements

Category	Pre-Summer Enhancements Task	End Date	Report Rec#	Task Owner	Status	Update and Documentation
CERP (included with 4/1/2008 part 105 filing)	Update Electric Operations Corporate Emergency Response Program (CERP) to include changes to Distribution Electric Command Post (DECP) organizational structure, name and responsibility and establish procedures to more clearly align its role in the Incident Command System (ICS) process	3/31/2008	III-R20	Regional EM	Complete	6/3/08: CERP updated included as part of the 4/1/08 filing.
CERP	Conduct the annual review and revision of the CERP in accordance with part 105 for submittal by 4/1/2008	4/1/2008	N/A	Regional EM	Complete	6/3/08: CERP filed with PSC Secretary on 4/1/08.
CERP (Post 4/1/2008 part 105 filing)	Update Electric Operations Corporate Emergency Response Program (CERP) to reflect the merging of the existing Electric Operations – Emergency Management and Orange and Rockland Utilities' Emergency Planning with Corporate Emergency Planning and Security into a new central group known as Corporate Emergency Management and delineate the roles and responsibilities of the organization.	4/15/2008	III-R8 thru R19	EM Regional EM	Complete	6/3/08: The June 1 filing of the CERP with the Secretary of the PSC reflects the centralization of the emergency management function.
CERP (Post 4/1/2008 part 105 filing)	Update Electric Operations Corporate Emergency Response Program (CERP) to reflect the process changes to trouble analysis unit including • Developing learning objectives and course materials for "Analysis to Action" training for Trouble Analysis Unit [TAU] staff members. • Identify Trouble Analysis Unit [TAU] trainer resources, venue and schedule • Complete cross-function System Trouble Analysis and Response (STAR) training	6/1/2008	V-R5 & V-R6	Regional Eng Regional EM	Complete	6/3/08: The updated CERP document was filed and reflects the TAU co-location with Damage Assessment for overhead storms. The work flow was modified to include the new process changes.

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Category	Pre-Summer Enhancements Task	End Date	Report Rec#	Task Owner	Status	Update and Documentation
CERP (Post 4/1/2008 part 105 filing)	Update Electric Operations Corporate Emergency Response Program (CERP) to reflect revised process for estimating Global ETR for overhead distribution system power outages taking into consideration weather, number of customers affected, storm job counts and storm severity.	6/1/2008	IV-R4	Regional EM	Complete	6/3/08: The revised process and training for estimating a Global ETR has been added to the Bronx/Westchester section of the CERP.
CERP	Revise the CERP to include pre summer tasks in accordance with part 105 for submittal by 6/1/2008	6/1/2008	N/A	Regional EM	Complete	6/3/08: CERP filed with PSC Secretary on 6/2/08.
Communication	Update the existing communication mechanisms to emphasize the customer outage reporting, and web site communications message in summer prep materials sent to elected officials, community organizations, strategic partners, and the media.	6/1/2008	VI-R1	Corp Communicatio n	Complete	9/3/08: Efforts through print and radio started running in July 2008. Also included on all press releases issued. 6/3/08: Appropriate information is included as part of the Energy 101 training and Summer Prep materials.
Communication	Update the existing Customer Central Web pages to include the enhanced mapping function.	5/1/2008	VI-R8	Corp Communicatio n	Complete	6/3/08: Con Edison integrated an enhanced mapping facility to summarize customer outages into the Con Edison Corporate website (http://www.coned.com). The enhanced mapping facility leverages Microsoft's Virtual Earth technology to summarize outages on a real-world geospatial platform.

Category	Pre-Summer Enhancements Task	End Date	Report Rec#	Task Owner	Status	Update and Documentation
Training	Conduct the Bronx Westchester municipal liaison training for the recently identified augmented staffing.	6/1/2008	None	Regional EM	Complete	6/3/08: This training was completed and provided to 68 employees.
Training	Implement Incident Command System (ICS) Planning Section courses to address Incident Action Plan development	3/31/2008	III-R21	Central EM	Complete	6/3/08: Three sessions of a two day ICS Planning Section course were presented on 2/11-12, 2/26-27, and 3/10-11/2008. These courses were attended by 61 company personnel responsible for performing duties in the Operations Section, Planning Section, and IMAT capacity.
Call Center Drill	Design Call Center capability test scenario	4/1/2008	VI-R2	Customer Ops	Complete	6/3/08: The drill scenario was developed by April 1, 2008 and the drill was completed by May 1, 2008.
Call Center Drill	Perform Call Center capability drill exercise	5/1/2008	VI-R2	Customer Ops	Complete	6/3/08: This drill was completed on April 29th, 2008.
Call Center Drill	Complete "Blue Sky" emergency calls test with TFCC	3/31/2008	VI-R2	Customer Ops	Complete	6/3/08: This test was completed on April 4th, 2008.
Heat Drill	Develop standardized drill objectives and proficiency requirements for heat drill	4/15/2008	V-R1-4	EM Regional EM	Complete	6/3/08: A standardized objective and proficiency document was developed in April.
Heat Drill	Develop regional heat drill scenarios utilizing the standardized drill objectives and proficiency requirements.	4/15/2008	V-R1-4	EM Regional EM	Complete	6/3/08: The standardized objective and proficiency document was utilized by each region in developing their region specific scenarios.
Heat Drill	Conduct regional heat drills utilizing the standardized drill objectives and proficiency requirements	6/1/2008	V-R1-4	EM Regional EM	Complete	6/3/08: The region's heat drills were completed on May 7 (Brooklyn / Queens), May 9th (Staten Island), May 13th (Bronx / Westchester) and May 14th Manhattan

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Category	Pre-Summer Enhancements Task	End Date	Report Rec#	Task Owner	Status	Update and Documentation
CERP (Post 4/1/2008 part 105 filing)	Update Electric Operations Corporate Emergency Response Program (CERP) to reflect revised process for estimating Global ETR for overhead distribution system power outages taking into consideration weather, number of customers affected, storm job counts and storm severity.	6/1/2008	IV-R4	Regional EM	Complete	The revised process and training for estimating a Global ETR has been added to the Bronx/Westchester section of the CERP.
CERP	Revise the CERP to include pre summer tasks in accordance with part 105 for submittal by 6/1/2008	6/1/2008	N/A	Regional EM	Complete	CERP filed with PSC Secretary on 6/2/08.
Communication	Update the existing communication mechanisms to emphasize the customer outage reporting, and web site communications message in summer prep materials sent to elected officials, community organizations, strategic partners, and the media.	6/1/2008	VI-R1	Corp Communicatio n	Complete	Appropriate information is included as part of the Energy 101 training and Summer Prep materials.
Communication	Update the existing Customer Central Web pages to include the enhanced mapping function.	5/1/2008	VI-R8	Corp Communicatio n	Complete	Con Edison integrated an enhanced mapping facility to summarize customer outages into the Con Edison Corporate website (http://www.coned.com). The enhanced mapping facility leverages Microsoft's Virtual Earth technology to summarize outages on a real-world geospatial platform.

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Call Center Drill	Design Call Center capability test scenario	4/1/2008	VI-R2	Customer Ops	Complete	The drill scenario was developed by April 1, 2008 and the drill was completed by May 1, 2008.
Call Center Drill	Perform Call Center capability drill exercise	5/1/2008	VI-R2	Customer Ops	Complete	This drill was completed on April 29th, 2008.
Call Center Drill	Complete "Blue Sky" emergency calls test with TFCC	3/31/2008	VI-R2	Customer Ops	Complete	This test was completed on April 4th, 2008.
Heat Drill	Develop standardized drill objectives and proficiency requirements for heat drill	4/15/2008	V-R1-4	EM Regional EM	Complete	A standardized objective and proficiency document was developed in April.
Heat Drill	Develop regional heat drill scenarios utilizing the standardized drill objectives and proficiency requirements.	4/15/2008	V-R1-4	EM Regional EM	Complete	The standardized objective and proficiency document was utilized by each region in developing their region specific scenarios.
Heat Drill	Conduct regional heat drills utilizing the standardized drill objectives and proficiency requirements	6/1/2008	V-R1-4	EM Regional EM	Complete	The region's heat drills were completed on May 7 (Brooklyn / Queens), May 9th (Staten Island), May 13th (Bronx / Westchester) and May 14th Manhattan

III Thematic Team Summaries

Team 1 - Corporate strategy and master plan (III R1-7)

Immediately following the receipt of the Audit Report, the Company proactively established an Emergency Management Steering Committee (Steering Committee) led by senior executives who are also members of the Corporate Policy Committee. Highlighting the role of senior management in communicating and implementing vision and priority for the Company's approach to reliability and emergency management, the Steering Committee is providing the leadership and vision necessary to develop the MIP and the CEMS (III R1). Furthermore, the Steering Committee is also providing oversight for the evaluation of the findings and recommendations contained in the Audit Report. To facilitate this process, all the findings and recommendations in the Audit Report have been grouped into 14 thematic categories. Therefore, fourteen teams have been established to address the respective thematic areas; each reporting to the Vice-President of Emergency Planning and Security who, in turn, coordinates team efforts with the Steering Committee.

The thematic team content areas and associated recommendations are:

1. corporate strategy and master plan (III R1-7)
2. emergency management organizational structure (III R 8-19)
3. incident command system refinements (III R20-22)
4. comprehensive emergency response program effectiveness (IV R1-9)
5. emergency drill program expansion (V R1-4)
6. trouble assessment process (V R5-6)
7. workforce capability review (V R7-10)
8. reliability and technical design criteria (V R11-20)
9. customer communication (VI R1&5)
10. call center capability testing (VI R2)
11. estimated time of restoration methodology (VI R3-4)
12. vegetation management program (VIII R1-2)
13. financial and operational metrics (VII R3-4)
14. best practice benchmarking (VIII R1-2)

These teams will review the recommendations and associated findings to determine how they fit into the strategic plan and integrate the implementation of recommendations through the new coordinated strategy where appropriate (see Attachment C; Emergency Management Policy Process Flow Diagram). (III R6)

The Steering Committee recognized the value of having an experienced outside consultant review the process being undertaken by the Company. Davies Consulting Inc., a management consulting firm, was engaged to assist the Company in utilizing accepted emergency management processes and provide benchmarking guidance.

The Corporate Strategy and Master Plan team, working closely with the Steering Committee, has developed the CEMS, including the Emergency Management Vision and Policy Statements, which are consistent with the Corporate Mission Statement and Corporate Strategy, and keyed on reliability and outage management (Attachment B). (III R3)

Emergency Management Vision

"The Company strives to meet our customers' needs through effective emergency risk assessment, mitigation, preparedness, response and communications. Our goal is to achieve excellence as an industry leader in emergency management performance."

Emergency Management Policy

The commitment to be a recognized leader is further delineated in the Emergency Management Policy, which states:

Aligned with our commitment to The Way We Work, the Company strives to utilize effective emergency management principles that enhance the Company's ability to provide safe and reliable energy services and its ability to communicate timely and accurate information to our customers and stakeholders by:

- *Conducting effective risk assessments for operating and business functions,*
- *Developing appropriate prevention or risk mitigation strategies,*
- *Implementing comprehensive emergency preparedness programs,*
- *Responding with appropriate resources to address the emergency,*
- *Communicating with customers and other stakeholders timely and accurate information using voice, Internet, media and other appropriate methods,*
- *Recovering from events expeditiously; and,*
- *Improving continuously.*

Emergency Management Principles and Goals

To drive the enhancements to the Company's Emergency Management program, Con Edison's CEMS establishes seven principles and accompanying goals that embody the commitment to improve and will provide a framework for the future. These principles are an expansion of academically well-defined emergency management principles.

1. **Risk Assessment** - Conduct risk assessments utilizing a process that evaluates the likelihood of an event, its consequences and impact to customers, stakeholders and the public.
2. **Prevention and Mitigation** - Employ prevention and mitigation strategies to eliminate or reduce the frequency and consequences of events that adversely impact the community.
3. **Planning and Preparedness** - Ensure that response plans and preparedness initiatives are appropriate for the potential consequences of emergency events.

4. **Response** - Perform an event assessment that ensures the utilization and response of the necessary resources to safely minimize hazards and restore service, in support of the community.
5. **Communication** - Communicate timely information to customers, employees and other stakeholders.
6. **Recovery** - Establish the appropriate process to restore the impacted system to its normal state and address the needs of the community.
7. **Re-assessment** - Utilize lessons learned from internal events and drills, while benchmarking with external organizations to improve the future implementation of emergency management principles.

Team 1 Implementation Plan:

EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 1)	Start Date	End Date	Report Rec#	Status	Update and Documentation
1. Communicate with Public Service Commission	1/15/2008	On-going	III-R1 thru R7	Complete	6/3/08: Updated information was provided through various meetings with DPS Staff and as part of the electric rate case 08-E-0539.
2. Communicate with internal stakeholders	3/3/2008	On-going	III-R1 thru R7	Complete	6/3/08: Consistent with the Communication Plan, various initiatives were undertaken to communicate with internal stakeholders.
3. Communicate with external stakeholders	3/3/2008	On-going	III-R1 thru R7	Complete	6/3/08: Consistent with the Communication Plan, various initiatives were undertaken to communicate with external stakeholders.
4. Evaluate Emergency Management Communications Plan effectiveness	6/1/2008	On-going	III-R1 thru R7	Complete	03/03/09: A link to CEMS will remain available on our web site. We will continue to include CEMS in yearly Energy 101 courses. 12/3/08: Initial surveys had limited response from customers. A second survey was conducted with improved participation. The results from the second survey and recommendations are attached. The recommendations are being reviewed for the feasibility of implementation. Con Edison Survey Results.doc ... Recommendations of Web Usabili... 9/3/08 follow up: Attached is a sample of the request letter that was sent out to public officials as part of LIC recommendation #8 (Con Edison should update their contact information for public officials, community based organizations and critical care/large facilities) as well as the document with the list of parties that have been contacted regarding updating their information (also as part of LIC #8). Also attached are the results from the second survey we conducted as part of our Vantage/CEMS recommendations. (reference Clark email to Torphy 11/3/08)

					Truncated list as of Oct 2008 ... sample letter.doc (34 KB) Con Edison Survey Results.doc ... 9/3/08: Surveys were developed and distributed to elected officials, their staff, and community organizations in NYC and Westchester County. In an effort to get additional feedback, phone surveys will be conducted with offices that did not reply to the electronic survey. These surveys will be conducted in the fourth quarter of 2008. 6/3/08: Surveys are being developed and are anticipated to be sent out by June 13.

Team 2 - Emergency management organizational structure (III R 8-19)

Con Edison was one of the first utilities in North America to establish and utilize an emergency management group to oversee the Company's emergency management activities on a corporate level. Known as Corporate Emergency Management and Security (EM), the group is currently comprised of six Con Edison personnel (a Vice President and five technical staff) and is focused on corporate events and ensuring close coordination with the New York City Office of Emergency Management (NYC OEM) and Westchester County Department of Emergency Services (WC DES). In addition to EM, Con Edison's emergency management responsibilities are managed by Electric Operations Emergency Management (EOEM), Distribution Engineering (DE), and the regional Engineering groups. EOEM, which evolved from the storm team of the late 1990s, is comprised of six staff, and had responsibility for overseeing the emergency management preparedness functions in the four electric operating regions. DE was responsible for internal resource allocation for emergency management. The regional Engineering groups had responsibility for emergency management on a regional basis. Orange & Rockland's emergency planning and preparedness responsibilities are overseen by Electric Operations Emergency Preparedness (ORU-EM) and comprised of two staff.

The Audit Report notes that organizational improvements to the Company's planning and preparedness structure would improve preparedness for and responses to events and ultimately result in a coordinated strategy and approach to emergencies. The Emergency Management Organizational Structure initiatives address Recommendations III-R7 through III-R18. Con Edison will improve its emergency management structure through a re-organization that: combines EM, EOEM and ORU-EM into a single corporate organization with overall responsibility for Con Edison's emergency management activities, re-defines the responsibilities of DE, embeds staff from the newly-formed corporate group in the regional business units to manage region-specific emergency management, and assists the regional Engineering groups in their responsibility for emergency management. Ultimately, EM strategies will be applied across each of Con Edison's operating business units (i.e., electricity, steam, gas)

In order to develop a final organizational structure, create roles within that structure, and define the responsibilities of each member of the corporate group, the initiatives, key processes, deliverables, and resources required to accomplish each of the initiatives will have to be fully defined and finalized. More specifically, and based on the finalized requirements for the initiatives, Con Edison will develop a work and staffing plan that clearly delineates the appropriate qualifications, establishes the number of required resources, and provides a detailed timeline of when each of those resources will be required to accomplish the initiatives, as a whole. The Company anticipates that the work and staffing plan will be included in the next quarterly filing.

Team 2 Implementation Plan:

EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 2)	Start Date	End Date	Report Rec#	Status	Update and Documentation
1. Define emergency management responsibilities to be aligned with the CEMS	3/1/2008	4/1/2008	III-R8 thru R19	Complete	9/3/08: Corporate Instruction (CI) 260-4 updated on June 2nd 2008. 6/3/08: Corporate Instruction (CI) 260-4 was updated on May 28th 2008 and is awaiting final approval.
2. Identify required staffing resources based on Electric Operations emergency management responsibilities	4/1/2008	5/1/2008	III-R8 thru R19	Complete	6/3/08: Emergency Management Staffing Plan submitted as Exhibit___(EMP-5) in Con Edison's electric rate case 08-E-0539 filed on May 5th 2008.
3. Implement Electric Operations Emergency Management organizational changes (recruit, hire, train)	3/1/2008	12/31/2009 Revised: 4/1/2009	III-R8 thru R19	On-going	03/03/09: Emergency Management has hired 14 of the 16 positions. The remaining 2 positions have been made offers. 12/3/08: EOEM – The overhead Project Specialist has been filled and the underground Project Specialist is posted. OEM – The steam Project Specialist, S&TO Project Specialist and Substation Ops Project Specialist have been filled. The gas Project Specialist is posted. EMOS – The Risk Management, Weather Analysis and Benchmarking Section Manager has been filled. One Project Specialist in Plans, Policy and Procedures is filled with interviews being conducted for the remaining position. The two Project Specialists in Risk Management/Weather Analysis have been posted. Interviews are being conducted for the Project Specialist in Strategic Planning. The project Specialist position in preparedness and Liaison is filled. 9/3/08: The Department Manager- Gas / Central Operations position has been filled. The embedded emergency position for Steam Operations has been posted and interviews are being conducted. The Section Manager for Risk Analysis position has been posted. Position guides for the embedded positions in Electric Operations, Gas Operations, Substation Operations, and System and Transmission Operations have been developed and it is anticipated that postings for these positions will completed by October 31. Additional position guides are being developed and are strategically being posted consistent with the expansion of the organization.

4. Merge the existing Emergency Management organizations into a new central group known as Corporate Emergency Management.	1/1/2008	4/15/2008	III-R7 thru R18	Complete	6/3/08: The Director of Emergency Management - Operations Services and the position for a Business Continuity Senior Specialist have been filled. The Department Manager – Gas / Central Operations and select embedded emergency positions have been posted. Additional position guides are being developed and are being posted consistent with the expansion of the organization. 6/3/08: The merger of the emergency management organization was effective on May 1st, 2008.

Team 2 Risk/Cost/Benefit Analysis:

As noted in the Audit Report, the current emergency management structure is driven by a strong team of capable people. Using these capabilities to drive the organizational changes highlighted above will clearly benefit Con Edison in how the Company plans and coordinates its response to emergency events. In addition, and from a resource perspective, Con Edison staff will be more efficiently utilized and emergency management activities will be consistent across the entire organization.

Team 3 - Incident command system refinements (III R19-22)

The Incident Command System (ICS) has been a cornerstone of Con Edison's emergency response and restoration efforts for more than a decade. The policy mandating the use of ICS at Con Edison is established in Corporate Instruction 260-4, *Corporate Response to Incidents and Emergencies*, and the structure and operational use of the system is explained in greater detail in Con Edison's Comprehensive Emergency Response Program (CERP). The current Con Edison ICS approach incorporates the ICS organizational structure, the procedures for activation of the system during events, and a robust training process, including an online class, a one-day session, and an advanced two-day session.

The Audit Report acknowledged that Con Edison has placed significant emphasis on and made a solid commitment to ICS which places the Company at the forefront of the industry (III-F19). Furthermore, the Audit Report found that the use of ICS has provided a great benefit in helping to manage large scale events. Finally, the Audit Report noted that Con Edison's relationship with the NYOEM and other related emergency organizations has had a positive impact on emergency response.

Notwithstanding the above, the Audit Report notes that improvements to Con Edison's existing program might positively affect future responses. The ICS initiatives address Recommendations III-R19 through III-R22. Con Edison will improve its ICS program through initiatives that improve resource tracking, realign the Distribution Engineering Command Post (DECP) function within ICS, refine the process for developing Incident Action Plans (IAPs), and improve the use of Incident Management Assist Teams (IMAT) during drills and upgraded or serious events.

From a resource typing perspective, and to better track and monitor, as well as provide current information to operating organizations, a "Logistics Equipment Management System" (LEMS) is being developed. Although Con Edison sees the benefits of the Federal Emergency Management Agency's (FEMA) resource typing plans, the current state of the effort and FEMA's generic approach make adoption of FEMA's resource typing difficult to implement at this time. Con Edison will re-visit the issue at a later date. (III-R19)

Con Edison will update the current DECP procedures and organization to more clearly identify and align its role in the Company's overall ICS organization, starting with changing the name of DECP to Distribution Engineering Situation Room (DESR). In addition, the CERP and other appropriate Company procedures will be revised to address these changes to establish clarity of purpose and responsibility. The use of an IMAT during drill, exercises, and real-time incidents will also reinforce the ICS process. (III-R20)

Con Edison acknowledges that, overall, the application of the operational planning process and the development of IAPs vary from incident to incident, and between organizations. As a result, Con Edison will:

- Refine corporate procedures to better enforce the operational planning process for incidents;
- Review existing job descriptions and assignments related to the Planning Section and modify where necessary;
- Develop and conduct an ICS Planning Section training/course that establishes expectations for IAP development, uniformity of information, and detail; and

- Modify existing processes to facilitate the development of a single IAP through a unified planning process. (III-R21)

Con Edison acknowledges that IMATs have not been fully utilized in drills and emergencies and their use should be encouraged and expanded for Serious and Full Scale incidents and exercises. Full implementation of ICS will include establishing IMATs. These IMATs will be available to respond to Serious and Full Scale incidents or when requested by the Incident Commander. In addition, the IMATs will participate and assist in drill/exercise development and their sole role during incidents will be to facilitate the operational planning process **(Recommendation III R-22)**.

Finally, to sustain the ICS improvements and facilitate continued excellence in activation and use of ICS at Con Edison, a member of the Corporate Emergency Management organization will continue having primary responsibility and accountability for ICS oversight. Corporate Emergency Management personnel will be embedded in the regions to promote consistency between the corporate emergency management organization and regional ICS protocols.

Team 3 Implementation Plan:

EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Teams 3)	Start Date	End Date	Report Rec#	Status	Update and Documentation
Team 3 -Refine Incident Command System (ICS) practices	**2/1/2008**	**12/31/2010**	**III-R19 thru R22**	**Complete**	**See below**
1. Utilize Federal Emergency Management Agency (FEMA) software standards where appropriate to improve resource typing efforts	3/1/2008	9/30/2009	III-R19	Complete	03/03/09: The company will continue to utilize LEMS. This item is closed. In the event that FEMA software becomes available, it will be considered. 12/03/08: The incorporation of electric utility types of equipment into the FEMA software - Incident Resource Inventory System (IRIS) is uncertain at this time. As a result, Con Edison will continue to use and enhance its LEMS system. 9/3/08: The current status of FEMA software - Incident Resource Inventory System (IRIS) has not yet incorporated electric utility resource typing. Con Edison has incorporated the concept of resource typing within its Logistic Equipment Management System (LEMS). Con Edison continues to move forward with its implementation plan involving LEMS. Phase 1, which was put into production within Central Field Services during the summer of 2008, manages the deployment and operation of mobile electric generators. As part of this roll out, enhancements to the operating system are being addressed. Future phases will incorporate additional electric utility specific resource types.
2. Make organizational adjustments to Distribution Electric Command Post (DECP)	2/1/2008	6/1/2008	III-R20	Complete	6/3/08: Con Edison has updated the current DECP procedures and organization to more clearly identify and align its role in the Company's overall ICS organization, starting with changing the name of DECP to Distribution Engineering Situation Room (DESR). In addition, the CERP has been revised to address these changes to establish clarity of purpose and responsibility.
3. Develop and implement Incident Action Plan (IAP)	2/1/2008	12/31/2008	III-R21	Complete	12/03/08: An additional Planning Section class is scheduled for 12/11 & 12/12/2008. During the first quarter of 2009 another class will be scheduled to ensure company personnel responsible for performing duties in the Operations Section, Planning Section, and IMAT capacity are trained and qualified. At the completion of the December 2008 class, there are sufficient personnel trained to staff the required planning section positions. Additional classes will continue on an as needed basis to ensure that personnel movements will

					not affect the staffing requirement for the planning section. 9/3/08: Additional ICS Planning Section courses are being identified. 6/3/08: Three sessions of a two day ICS Planning Section course were presented on 2/11-12, 2/26-27, and 3/10-11/2008. These courses were attended by 61 company personnel responsible for performing duties in the Operations Section, Planning Section, and IMAT capacity.
4. Define and implement Incident Management Assist Teams (IMAT)	4/1/2008	12/31/2010	III-R22	Complete	12/03/08: The role of the IMAT is defined in position overview (attached). Emergency Management and Operations personnel have been trained. Newly hired personnel in Emergency Management are being trained to assume the role of IMAT's in response to Serious and Full Scale incidents. IMAT checklist Feb. 2006.doc 9/3/08: On target 6/3/08: Individuals have been identified from key operating organizations and trained for this position. Additional personnel will be identified and trained.

Team 3 Risk/Cost/Benefit Analysis:

Benefits include better understanding of roles and responsibilities during events, improved responses, improved organizational structure and clarity, and enhanced coordination among response personnel.

Team 4 - Comprehensive Emergency Response Program (CERP) effectiveness (IV R1-9)

In 1999, Con Edison consolidated its regional storm response plans. By 2004, the plan was enhanced to the level of the CERP to include underground electric system emergencies. The CERP has seven distinct parts that address outage response both on an overall/corporate basis and on a regional basis (i.e., Brooklyn Queens, Bronx Westchester, Manhattan, and Staten Island). The CERP includes: Introduction (with Mission Statement), overview of the Incident Command System, Overhead Plan, Underground Contingency Plan, Program Review, Recovery Preparedness/Readiness, Reference Documents, Self Assessment/Lessons Learned, Definitions, Glossary and Cross Reference to the requirements of PSC Part 105. The Consolidated Plan is filed annually with the PSC and meets the requirements of Part 105

The Audit Report recognizes that the CERP has a wealth of emergency information that positively affects the Company's response to events. In addition, the Audit Report acknowledges that CERP tables, which link resources to event classifications, are the result of extensive planning efforts and positively affect the Company's emergency response efforts.

The Audit Report notes that improvements to Con Edison's existing CERP might positively affect future responses. The Comprehensive Emergency Response Program Effectiveness initiatives address Recommendations IV-R1 through IV-R9. Con Edison will improve its CERP through initiatives that generally provide Con Edison personnel with a greater understanding of the role of the CERP and the processes and procedures that are included in the CERP and that should be followed during emergency outage events.

More specifically, Con Edison acknowledges that the role of the CERP needs to be clarified and that the existing procedures, guidelines, checklists, and instructions should be updated to further define expectations and improve the usability of the document by emergency response personnel. (IV-R1, IV-R4)

In order to standardize distribution of the CERP, Con Edison will use the Emergency Management Web site to maintain and distribute updated versions of the CERP. Each of the process guides, which are described in greater detail below, will be updated by the process owners on at least an annual basis. Furthermore, in the event that significant changes are made to the document between annual updates, Con Edison personnel with emergency management responsibility will receive a timely briefing on the changes. (IV-R2)

The refinement of process procedures and guides, as detailed below, are designed to improve Company manager effectiveness under emergency conditions. In addition, the new format of the CERP will result in a more user-friendly document. (IV-R3)

In order to clearly define responsibility for approving emergency management documents, Con Edison will implement a procedure requiring that the CERP be signed by the Director of Emergency Management. Supporting procedures, guidelines, and processes, as detailed in each of the process guides, will be approved by each process guide owner. For example, the Damage Assessment process will be approved and reviewed annually by the Construction, Central Operations groups (the process owner). (IV-R5)

Action checklists are helpful tools, particularly when emergency response is infrequent. Each person who fills a key emergency response position (as indicated on the Incident Command organization charts in CERP) must review and update their checklists as appropriate.

Emergency Management will define the expectations for each checklist, the frequency of review, the processes for updating checklists, and the means of ensuring that up to date checklists are included and easily accessible on the EOEM Web site. (IV-R6)

Con Edison will develop a procedure to annually perform an analysis of past storms to review the criteria and assumptions used as the basis for the Plan, including staffing levels. (IV-R7) Following completion of the planning analysis, Con Edison will use the results to develop a framework and process for improved planning processes. (IV-R8) Utilizing the results of IV-R7 and IV-R8, EOEM will be accountable for ensuring that resource planning is being performed on a regional basis and in a consistent fashion. (IV-R9)

Con Edison will use the current CERP as a basis for development of a document that fully addresses the Audit Report recommendations. More specifically, Con Edison will divide the CERP into two separate documents – one for purposes of regulatory filings and one that includes process guides to assist ICS response personnel in performing their duties during any event resulting in the activation of the CERP. A review of the existing process will determine the revision schedule. More specifically, the process guides will outline procedures for the:

- Incident Commander
- Environmental, Health & Safety Officer (EH&S)
- Information Officer
- Liaison/Energy Services Officer (Municipal/Municipal Field Liaison Group)
- Customer Operations Officer
- Planning Section
- Trouble Analysis
- Damage Assessment
- Operations
- Logistics Section
- Administration/Finance Section

Each procedure will clearly detail the organizational structure, responsibilities, key relationships with other sections, training requirements, drills, and information systems needed. In order to sustain the CERP improvements and facilitate continued excellence in activation and use of the CERP at Con Edison, each of the process owners above will have oversight responsibility and accountability for the guides addressing their specific role.

Team 4 Implementation Plan:

EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 4)	Start Date	End Date	Report Rec#	Status	Update and Documentation
Team 4 - Review and revise Corporate Emergency Response Program (CERP) to improve its structure, storm matrix, document access, approval process and content (including checklists)	**2/1/2008**	**12/31/2009**	**IV- R1 thru R9**	**On-going**	**See below**
1. Review 2007 Corporate Emergency Response Program (CERP)	2/1/2008	3/31/2008	IV-R1& R4	Completed	6/3/08: The CERP was filed with the PSC on April 1, 2008 and June 1, 2008.
2. Identify & update current distribution and revision processes	4/1/2008	10/1/2008 3/31/09 Revised	IV-R2, R3 & R5	On-going Reopened 3/3/09	03/03/09: As part of the annual review and updating of the Electric Emergency Response Plan (ERP) for submittal in accordance with Part 105, the role of the Electric ERP is being further clarified. The existing CERP is being divided into separate documents. The Electric ERP, formerly known as the Consolidated Plan – Sections 1, 6, & 7 of the CERP, will serve the purpose of meeting the regulatory filing requirement. Process guides will be developed that extracts the operational information from Sections 2, 3, 4, & 5 of the CERP to assist ICS response personnel in performing their duties during any event resulting in the activation of the Electric ERP. The new format of the CERP will result in a more user-friendly document. (IV-R3) Completion date: March 31, 2009 The current approval processes for emergency planning documents have been reviewed, gaps have been identified and an approval process has been developed, including signing authority. (IV-R5) Completion date: March 31, 2009 6/3/08: Newsletter available on intranet site, link sent to all key emergency response personnel.
3. Define expectations for each checklist, including frequency of review, the processes for updating checklists, and the means of ensuring that up to date	3/1/2009	4/1/2009	IV-R6	On-going	03/03/03: Checklists are available on the website and each time there is a pre-event conference call, whether inter- or intra-regional, the review of the plan, associated process procedures, checklists and staffing is reinforced. 12/03/08: Expectations for each checklist, including frequency of review, and the processes for updating checklists, are being made easily accessible on the Electric

checklists are included and easily accessible on the Electric Operations Emergency Management (EOEM) Web site					Operations Emergency Management (EOEM) Web site including. The work continues on the conversion of the EM main web page. The main page will contain in the main body: Mission Statement, Color coded readiness level, Weather station display, Vice Presidents message, EM Newsletter Link, and both external and internal EM hot sites drop down Listed on the left side of the main page will be our four departments (Emergency Management Operations Services, Electric Operations Emergency Management, Operations Emergency Management and O&R Emergency Management) Clicking on any one of the departments will take you to that departments page. 9/3/08: The Electric Operations Emergency Management web site has been combined with the Emergency Planning web site to reflect the new Emergency Management Organization and to provide one centralized location for the dissemination of emergency management information. 6/3/08: The use of checklists will be reinforced during each response event. Users are asked to offer suggestions for improvement to their checklists after each use. EOEM will be responsible for updating them and re-posting on the website for ease of access. Checklists will be reviewed at least annually in conjunction with the CERP.
4. Review 2008 Storm Classification Matrix criteria and assumptions	1/1/2009	3/31/2009	IV-R7, R8 & R9	On-going	03/03/03: The CERP was activated five times in 2008. On each occasion, the criteria and assumptions in the 2008 Storm Classification Matrix were reviewed and in line with predictions. ETR targets were accurate in that 95% to 100% of customers affected were restored within the time indicated on the matrix. This information is scheduled to be filed in conjunction with the CERP filing on April 1as per the PSC's July 20, 2007 Order Implementing Outage Recommendations.

Team 4 Risk/Cost/Benefit Analysis:

Improving the CERP process will strengthen the Company's ability to effectively respond to emergencies. The development of standardized process guides will improve the effective use of resources across regional boundaries and will assign ownership for those who are responsible to lead specific functions. Improving the usefulness of the CERP for field operations will enhance their ability to execute the response and recovery plans defined in their functional area of responsibility.

Team 5 - Emergency drill program expansion (V R1-4)

Con Edison has utilized the Audit Report findings and recommendations as part of its comprehensive evaluation of the effectiveness of the Company's emergency management drill program. The Audit Report acknowledged that Con Edison's emergency drills are effective in terms of numbers, scope, applications, quality, and resources and that the Company appropriately uses drills to refresh skills, learn from prior events, and enhance preparedness. However, through its comprehensive evaluation of its existing program and the evaluation of the audit's findings and recommendations, Con Edison has identified additional opportunities to improve the overall effectiveness of the program. The Emergency Drill Program Expansion (EDPE) initiatives include items that address Recommendations V-R1 through V-R4.

Con Edison will improve its emergency management drill program through initiatives addressing organizational structure and drill program requirements. The organizational structure improvements will focus on organizational clarity and increased resources. The enhanced drill program requirements will expand and refine the emergency management drill program. The improvements to the organizational structure and enhancements to the drill program will be aligned with the CEMS principles of Planning, Preparedness, and Re-assessment established in the Company's CEMS. (V-R2)

Improvements in the emergency management drill program will:

- define requirements for drill frequency. (V-R3);
- standardize drill objectives including proficiency requirements;
- establish drill development guidance;
- include outside participation of appropriate external stakeholders (V-R4);
- modify the Action Tracking System to standardize documentation for recording and tracking implementation of improvements identified during drills (V-R1);
- establish accountability for completing improvement opportunities identified during drills;
- require update of written procedures to reflect identified process improvements;
- establish a mechanism to communicate across operating areas and commodities appropriate lessons learned.

In order to facilitate and sustain the enhancements to the emergency management drill program, dedicated personnel will be established as part of the emergency management organization. These individuals will have responsibility to oversee corporate development and implementation of significant drills. They will work closely with the emergency management personnel who are embedded in the operating organizations to enhance the standardization and overall consistent application of the emergency management drill program.

Although the implementation of the CEMS eventually will be applied to all operating business units (electricity, gas, steam), the initial implementation of the emergency management drill program will be focused on Electric Operations.

Team 5 Implementation Plan:

EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 5)	Start Date	End Date	Report Rec#	Status	Update and Documentation
Team 5 - Expand and improve Emergency Management drill program	**1/1/2008**	**5/31/2009**	**V-R1 thru R4**	**On-going**	**See below**
1. Develop standardize drill objectives and proficiency requirements for heat drill	10/1/2008	4/15/2008	V-R1-4	Complete	6/3/08: Standardized heat drill objectives and proficiency requirements were provided for the regional heat drills.
2. Define requirements for drill frequency for Winter Drill Milestone	6/1/2008	8/30/2008	V-R1-4	Complete	9/3/08: The Draft Exercise/Drill development guide identifies the requirement for winter drill frequency.
3. Identify resources required to manage drill program	9/1/2008	10/1/2008	V-R1-4	Complete	12/03/08: The drill program has been finalized and the resources required to manage drill program have been included in the EM staffing plan.. A copy of the Con Edison "Exercise/Drill Development and Evaluation Guide" is attached. Exercise Drill Development Evaluat 9/3/08: As we continue to identify roles and responsibilities within the emerging Emergency Management organization, we are reviewing new processes and programs, which will provide us with a better understanding of the required resources needed to maintain this increased momentum in Emergency Management.
4. Standardize drill objectives and proficiency requirements	10/1/2008	11/1/2008 Revised: 12/1/08	V-R1-4	Complete	12/03/08: Drill program has been finalized including the standardized drill objectives and proficiency requirements. (See Team #5 Item 3 for copy of Con Edison "Exercise/Drill Development and Evaluation Guide") 9/3/08: As outlined in our "Exercise/Drill Development and Evaluation Guide", we have developed a standard drill objective template and proficiency requirements which will provide guidance to drill and exercise developers. The guide is currently in draft with a final version to be competed before December 1, 2008.
5. Develop drill guidance and standardized documentation (templates)	11/1/2008	12/1/2008	V-R1-4	Complete	12/03/08: Drill program has been finalized including drill guidance and standardized documentation (templates). (See Team #5 Item 3 for copy of Con Edison "Exercise/Drill Development and Evaluation Guide") 9/3/08: The Con Edison "Exercise/Drill Development and Evaluation Guide" is in draft form and will be finalized before December 1, 2008. The guide provides overall performance guidance in conducting and evaluating drills and exercises. The guide provides templates and timelines which will standardize this process.

6. Enhance process for lessons learned; identification, tracking and implementation – procedure update	12/1/2008	1/1/2009	V-R1-4	Complete	03/03/09: The final Exercise/Drill Development and Evaluation Guide has been issued and available on the Emergency Management website. (see item #3 12/3/08 update for a copy) 12/03/08: Drill program has been finalized including an enhanced process for lessons learned; identification, tracking and implementation We continue to evaluate best practices for the identification, tracking, and implementation of lessons learned. 9/3/08: We continue to evaluate processes which would be best suited for identification, tracking and implementation of lessons learned. This may include new software and/or procedural modifications. Once finalized, Corporate procedures will be modified to reflect the final implementation.
7. Action Tracking System will also be modified to enhance notification of upper levels of management (Information Resource 3rd part vendor required, maybe longer)	1/1/2009	5/31/2009	V-R1-4	Ongoing	03/03/09: On target 12/3/08: On target 9/3/08: Emergency Management will be working with Information Resources to develop notification mechanisms for its action tracking system. Doing so will allow the Action Tracking System to make notification to upper levels of management regarding progress and completion date requirements.
8. Revise appropriate procedures to include the process improvements identified in the drill program	2/1/2009	3/1/2009	V-R1-4	Complete	03/03/09: CI 260-4 been revised to include the use of the Exercise/Drill Development Guide by all operating organizations and has been submitted for final review and approval. CI-260-4 is being processes for distribution. 12/3/08: On target 9/3/08: When the "Exercise/Drill Development and Evaluation Guide" is completed, Corporate Instruction 260-4 will be updated to include the requirement for all Company operating organizations with responsibility for conducting drills and exercises to utilize the new "Exercise/Drill Development and Evaluation Guide". This will provide for a more consistent planning, preparation, execution and follow-up to drills and exercises Company-wide.
9. Revise Corporate Instruction CI-260-4 to include criteria for outside participation of appropriate external stakeholders	3/1/2009	4/1/2009	V-R1-4	Complete	9/3/08: On June 2, 2008 Corporate Instruction 260-4 was updated to include consideration for the inclusion of outside stakeholder participation in serious and full scale exercises.
10. Develop process for communicating lessons learned across operating areas and commodities	4/1/2009	5/31/2009	V-R1-4	Ongoing	03/03/09: On target 12/3/08: On target 9/3/08: As we continue to strengthen our drill and exercise program we are considering the best practice in preparing, documenting and communicating lessons learned. We continue to evaluate internal and external processes.

Team 5 Risk/Cost/Benefit Analysis:

As a result of the work of this team and consistent with the Commission's January 2008 Order, Con Edison is finalizing its CEMS and has identified significant enhancement opportunities that will be realized through increased staffing. The resource (including staffing) requirements necessary to support the CEMS have not been finalized. The additional personnel will facilitate the EDPE initiatives and provide dedicated regional support to facilitate regional preparedness and standardization of plans and implementation strategies.

Team 6 - Trouble assessment process (V R5-6)

The Storm Recovery Group instituted in 1997 was established to ensure that the newly upgraded Westchester storm plan was implemented as written. The 1997 plan included improvements in the Company's damage assessment, trouble analysis, Estimated Time of Restoration (ETR), communications, restoration and support processes. As a result of the analyses performed by this group, Con Edison improved its trouble assessment process. Furthermore, Con Edison began using several outage management systems to aid in the restoration and response effort. System Trouble Analysis and Response (STAR) analyzes problems and tracks jobs on the Company's electric distribution system. The Emergency Control System (ECS) is a Con Edison-developed on-line Information Management System (IMS) mainframe system designed to provide features for monitoring and processing work created for emergency calls. Both of these systems have effectively supported the trouble assessment process at Con Edison since their implementations.

The Audit Report noted that the skill requirements, including those for damage assessors, are clearly defined in the CERP. Position checklists for emergency response personnel provide summaries of pre- emergency management, on-shift duties, change of shift responsibilities, de-mobilization, and communication procedures. In addition, the Audit Report acknowledged that Con Edison maintains reasonable resource levels of skilled field support personnel, including damage assessors during events. The Audit Report also notes that the training of Field Damage Assessors has been effective.

The Audit Report points out that improvement to Con Edison's existing trouble assessment process might positively affect future responses. The Trouble Assessment Process initiatives address Recommendations V-R5 and V-R6. Enhancements that Con Edison will make to fully address these recommendations include structural changes and improvements to the Trouble Analysis Unit (TAU), improved training for designated members of the TAU, and expanded STAR training. Since the January 18, 2006 storm, the trouble analysis/damage assessment process has improved continuously – including the cessation of manual grouping of jobs, by the TAU, in the later 2006 storms. Prior to the Audit Report, a Con Edison team analyzed lessons learned from the January storm and recommendations were implemented in order to improve the process.

In order to minimize instances of incomplete job packages and trouble assessments, and enhance communication and reduce analysis time at the TAU, Con Edison will reorganize the TAU to imbed the Damage Assessment Coordinators within this Planning unit. In addition, engineering technicians will be imbedded in the operations group to assist planners in assembling job packages. Con Edison will also enhance training for designated members of the TAU by requiring STAR training specific to assignments, annual refresher training, and training in processing of trouble work through the TAU. The final training piece is designed to enhance skills in: job priority communication; information standards for trouble communication; transitioning from municipal assistance to service restoration orders; trouble type referrals; and operating group functional capabilities. (VR-5)

Although Con Edison currently has formal STAR training, the Company believes that training can be expanded to include more practical application exercises and increased focus on TAU processes. STAR training has been developed and provided for the Trouble Analysis

Designers, Engineering Staff, and Control Center operators in all regional Engineering groups. Each of these training courses was a five-day session for first-time users. In addition, Con Edison has developed and is currently implementing training for managers, supervisors, and clerical staff in Construction, which manages the damage assessment process. In order to accommodate the above classes, the Company's training center has assigned one full-time and two part-time trainers and set-up seven training stations. (VR-6)

Team 6 Implementation Plan:

EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 6)	Start Date	End Date	Report Rec#	Status	Update and Documentation
Team 6 - Execute process, structural and training changes to increase the effectiveness of the trouble analysis unit.	**1/3/2008**	**7/1/2008**	**V-R5 & R6**	**Complete**	**See below**
1. Identify facility locations for feeder cell teams for all categories of storm events (Brooklyn-Queens)	1/28/2008	2/15/2008	V-R5	Complete	6/3/08: The location for Trouble Analysis Unit personnel has been established in Brooklyn – Queens region.
2. Complete IR wiring and hardware additions to Bronx-Westchester to accommodate feeder cells through a level 3A storm	1/3/2008	2/29/2008	V-R5	Complete	6/3/08: The location for Trouble Analysis Unit personnel has been established in Bronx – Westchester through a level 3A level event.
3. Make any facilities changes identified for Brooklyn Queens.	2/15/2008	6/1/2008	V-R5	Complete	6/3/08: The location for Trouble Analysis Unit personnel has been established in Brooklyn – Queens region.
4. Develop learning objectives and course materials for "Analysis to Action" training for Trouble Analysis Unit [TAU] staff members.	2/13/2008	4/16/2008	V-R5	Complete	6/3/08: Analysis to Action learning objectives and course material were developed.
5. Finalize training lists for Trouble Analysis Unit [TAU] staff	1/15/2008	2/29/2008	V-R6	Complete	6/3/08: All Overhead Engineering departments have identified Trouble Analysis Staff.
6. Identify Trouble Analysis Unit [TAU] trainer resources, venue and schedule	2/13/2008	4/16/2008	V-R6	Complete	6/3/08: All Engineering Technicians assigned to the Trouble Analysis Unit in the overhead regions have been identified.
7. Complete required Trouble Analysis Unit [TAU] training course	4/16/2008	7/1/2008	V-R6	Complete	6/3/08: All Engineering Technicians assigned to the Trouble Analysis Unit in the overhead regions have been trained.
8. Complete conjunctional System Trouble Analysis and Response (STAR) training see (VR-6)	1/15/2008	6/1/2008	V-R6	Complete	6/3/08: Training has been completed for all overhead regions.

Team 6 Risk/Cost/Benefit Analysis:

The benefits of addressing the recommendations, as above, include in increased restoration efficiency and, potentially decreased restoration times. Risks associated with not performing the above improvements include a damage assessment process that is not optimized during events, as to the role of the process in the overall restoration and the functionality of STAR. STAR is an integral part of Con Edison's outage management system. Appropriate use of STAR, including knowledge of its functional specifics, is a necessary piece of the Company's restoration effort. Finally, and as noted in the Audit Report, failing to address the recommendations may result in continued incomplete job packages and trouble assessments, which could affect the restoration effort.

Team 7 - Workforce capability review (V R7-10)

To maintain a high degree of readiness, Con Edison continues to improve its CERP, specifically as it relates to the mobilization of a qualified work force. The Company has undertaken steps to enhance its response and recovery capability by developing the ability to increase and supplement its internal capabilities, including the acquisition of outside assistance. Through extensive training, the company has increased the availability and capability of a "supplemental" or non-traditional workforce for major outage events. This entails the utilization of employees from other commodities and support functions to assist with response and recovery efforts. Con Edison has increased its use of mutual aid from neighboring utilities and contract vendors, adding manpower to assist its internal resources and accelerate the restoration process. As part of its planning for a full scale emergency, the Company developed a database that identifies an emergency assignment for each employee.

The Audit Report correctly recognized that the mobilization of hundreds of employees and crews is a massive undertaking. It also recognized that the Company must do more than simply expand its pool of resources. A stable and base level of qualified employees, available to be mobilized at the earliest stages of an incident, is critical in setting the tone and maximizing the efficiency of the response effort. If the magnitude of the event is large enough, having this base work force available to "hold the line" is important, especially as external resources and non-traditional employees are acquired and mobilized to supplement the field work force. The Audit Report makes a number of findings and recommendations regarding the staffing issues that support a holistic view of outage management and response.

Con Edison agrees that it should review the planning process for filling key field positions and implement plans to increase the number of qualified employees in the Line Constructor and Underground Worker series, and has laid out a strategy to address this issue that includes the following (V–R7 and V-R8):

- Outline career paths for lead titles in Underground and Overhead;
- Distinguish between the term "Trainee" that was used in the Audit Report and the productive functions of a General Utility Worker (GUW) (helper);
- Determine the appropriate ratio of "Qualified" (lead) to "Helper" (GUWs);
- Identify areas where the ratio differs significantly from the preferred ratio;
- Develop a model that captures the 'fall-out' (attrition, promotion, transfers) as helpers progress to lead title;
- Predict the future make-up of the underground workforce based on current hiring and training projections;
- Identify opportunities to increase the retention rate of both lead and helpers;
- Identify opportunities to speed the progress of a helper to lead title; and
- Identify opportunities to recruit candidates with levels of experience or aptitude that will increase the likelihood of rapid progression to lead title.

Con Edison is evaluating the impact of high levels of overtime on the workforce as it relates to callout response rates, particularly overtime rates for Electric Operations and assessing these rates against historical averages, budget growth, and staffing levels. However, specific data relative to callout acceptance rates is neither available nor tracked. Therefore, any attempt to

associate high levels of overtime with low callout acceptance rates would be purely speculative. To address this issue, Con Edison is considering acquiring and utilizing an automated callout system to speed the callout process and track various metrics around callouts.

Con Edison is also reviewing the hiring process for Engineering Designers and Technicians and will implement plans to increase the number of qualified employees. (V-R10) The Company's long term plans to address this issue include:

- Outline career paths;
- Develop a model that captures the 'fall-out' as junior designers progress to senior designer;
- Predict the future make-up of the designer family based on current hiring and training projections;
- Identify opportunities to increase the retention rate and speed the progress of junior designer; and
- Identify opportunities to recruit candidates with a level of experience or aptitude that will increase the likelihood of rapid progression to lead title.

Con Edison will further refine these proposals and leverage the work underway to address the staffing and planning process for Engineering Designers and Technicians.

Team 7 Implementation Plan:

EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 7)	Start Date	End Date	Report Rec#	Status	Update and Documentation
Team 7 - Develop and Execute a hiring strategy for the field and engineering functions	**6/1/2008**	**7/1/2011**	**V-R7 thru R10**	**On-going**	**See below**
1. Develop and Implement Workforce (succession) plan for the Field organization	9/1/2008	12/31/2009	V-R7	Complete	03/03/09: We have updated the document below with our current status and ongoing program. Develop and mplement Successi.. 12/3/08: The status of the Workforce Plan as it pertains to this recommendation is attached: Develop and mplement Successi.. 9/3/08: The status of that effort as it pertains to this recommendation is attached: 2nd Quarter 2008 Vantage Follo... 6/3/08: Human Resources hired a strategic staffing manager who is developing a succession planning strategy consistent with the Master Implementation Plan.
2. Implement a new callout system and track metrics around callouts	1/1/2009	7/1/2011	V-R8 & R9	On-going	03/03/09: The Company is presently reaching out to potential vendors and discussing the technical feasibility of creating an automated crew call out system. 12/3/08: Funding for an automated crew call out project has been provided in the 2009 Electric Operations capital budget. Implementation date of this project is being determined.

					9/3/08: An evaluation of automated crew call out systems has been completed and a decision has been made to implement the selected vendor crew callout system. An implementation plan is being developed and will be provided for the next update. 6/3/08: Two automated crew call-out systems are presently being evaluated. It is anticipated that the evaluation will be complete by July 31, 2008.
3. Develop and Implement Workforce (succession) plan for the Engineering organization	6/1/2008	12/31/2008	V-R10	Complete	03/03/09: The attached document provides the closeout to this recommendation. Develop and mplement Successi.. 12/3/08: The status of the Workforce Plan as it pertains to this recommendation is attached: Develop and mplement Successi.. 9/3/08: A review of the flows into the engineering family over the last several years has been completed. Utilizing this data, HR and the Electric Operations Regional Engineering Managers will develop a succession plan. It is anticipated that the plan will be developed by 12/31/08. 6/3/08: Human Resources hired a strategic staffing manager who is developing a succession planning strategy consistent with the Master Implementation Plan.

Team 7 Risk/Cost/Benefit Analysis:

A qualified work force is needed to maintain a high degree of readiness. Implementing these recommendations will enable Con Edison to enhance its emergency response and recovery capability by developing a stable and base level of qualified employees available to be mobilized at the earliest stages of an incident. This is critical in setting the tone and maximizing the efficiency of the response effort. If the magnitude of the event is large enough, having this base work force available to "hold the line" is particularly important, especially as external resources and non-traditional employees are acquired and mobilized to supplement the field work force.

Team 8 - Reliability and technical design criteria (V R11-20)

As part of the response to the Audit Report, Con Edison has separated all technical recommendations or issues raised in the Reliability section of the Report from all other recommendations included in that section. It should be noted that the vast majority of the technical recommendations made in the Audit Report have either already been addressed or are currently being addressed in Case No. 06-E-0894.

The Audit Report addresses reliability through analysis of four topics: tree trimming practices and performance; O&M and capital spending; reliability; and reliability impacts on management compensation. With respect to tree trimming, the Audit Report notes that that Con Edison has: increased clearances (expanded line clearance standards); conducted inspections prior to trimming; increased communication with community leaders; developed new written material on tree maintenance; demonstrated commitment to forestry professionals; and established a process to proactively contact landowners prior to trimming. In addition, the Audit Report recognizes that the Company has increased its tree trimming expenditures in Bronx/Westchester area by approximately 80% in 2006. The expenditures were further increased in 2007.

Regarding O&M and capital spending, the Audit Report acknowledged that Con Edison's Capital Budgeting process follows a traditional utility process and addresses major categories associated with system reliability, including: load relief/capacity improvement; facility obsolescence; reliability/availability: environmental; safety/government regulatory requirement; cost savings/operations improvement; retirement; and other. In addition, Con Edison's O&M reports and budget projections provide significant detail on programs completed and budgeted. These reports demonstrate that reliability continues to be one of Con Edison's priorities in work performed on the electric distribution system. In 2007, Con Edison undertook numerous initiatives designed to improve reliability, including, but not limited to: a distribution system relief program; distribution feeder relief; distribution transformer relief; a program designed to reduce feeder restoration times; and engineering modeling enhancements.

Con Edison prepares and distributes, on a monthly basis, a report entitled "Electric Distribution System Performance." This report provides internal Con Edison stakeholders with an overview of how the distribution system performed during the previous month through calculation of performance measures (SAIFI and CAIDI) on both the network and non-network system. The company then provides a year-to-year comparison and a five-year monthly average. Similarly, the monthly value is ranked relative to the monthly value reported in each of the last 20 years. Overall, Con Edison tracks the performance measures against targets, internal goals, and minimum standards developed by the PSC. Finally, the report provides a description of all outages involving 500 or more customers. By creating and disseminating such a report, Con Edison has taken a proactive approach to tracking reliability and ensuring future improved performance.

Non-network Reliability (Section VII – Findings XVI-XVIII)

Finding VII-F16 (p. 197) states that Con Edison's "reliability has deteriorated in recent years and continues to worsen." In support, the Audit Report (p. 197) cites a "trend" based on increases in reliability performance measures from 2004 to 2006.

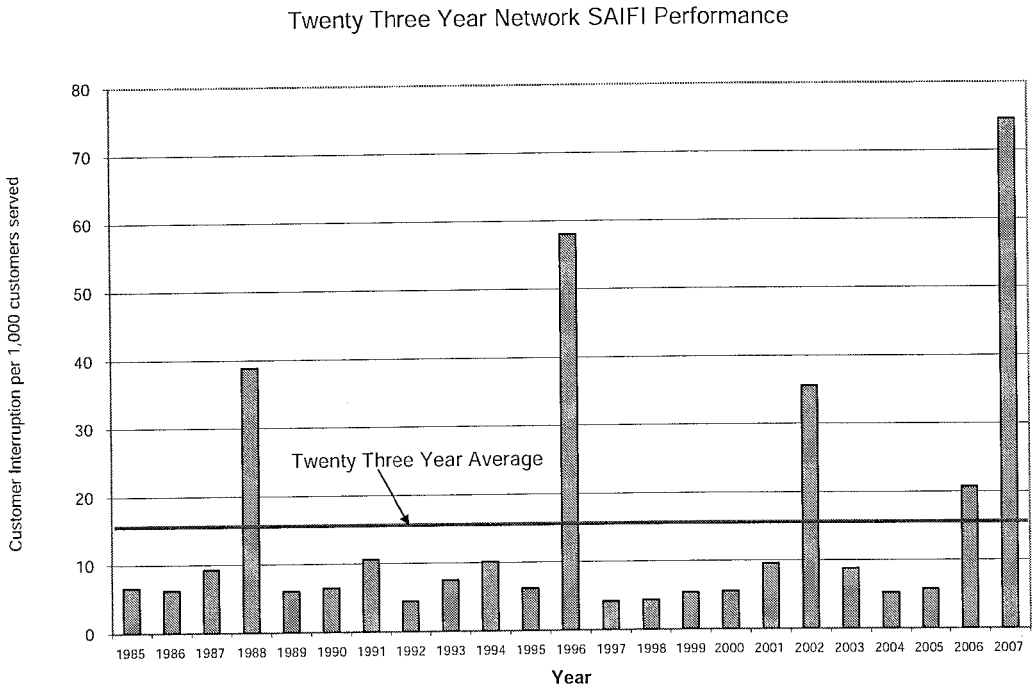
> Reliability performance measures began to deteriorate in Con Edison's distribution system in recent years. ... For the last three years, all four [reliability measures] measures have increased. ... [T]he trend is clear. All of the performance indices have increased since 2004.

These findings are not supported by appropriate analysis. These short-term performance variances do not demonstrate a trend. For example, while the Audit Report is correct that 2005 non-network interruption frequency (SAIFI) performance of 506.7 was "the 19th worst year out of the last twenty," performance both before and after 2005 was significantly better. Performance in 2004 was 392.7 and performance in 2007 was 380. The 2004 and the 2007 performance were each better than the 23-year average of 399 and ranked 10th and 9th, respectively, in the prior 20 years.

Similarly, the Audit Report also provides tables containing 22 years of performance data (Exhibits VII-10 and VII-11) and, incorrectly concludes that the data "straight forwardly portrayed Con Edison's decline." However, the report includes a graph of 11 years of that data (Exhibit VII-9, p. 199), which tracks the Company's interruption frequency (SAIFI) performance from 1996 through 2006, and clearly illustrates that Con Edison's network and non-network reliability performance has been steady and has not declined.

The fact is that Con Edison's reliability has remained steady and consistently high over the last two decades. The attached charts, titled "Twenty-Three Year Network SAIFI Performance" and "Twenty-Three Year Non-Network SAIFI Performance," prepared by Con Edison, show the steady performance of network and non-network interruption frequency (SAIFI) from 1985 through 2007.[2]

[2] The charts reflect the same 22-year (1985 to 2006) data provided in Exhibit VII-10 of the Audit Report, plus 2007 data.



The Network SAIFI chart (above) shows consistent performance without deterioration from year to year with an extremely low level of outages (generally fewer than 10 customers per 1,000 affected by an outage in a year). The several outlier years showing higher outages each reflect an atypical event that skewed reported annual performance and is not an indicator of a deteriorating network reliability trend.[3]

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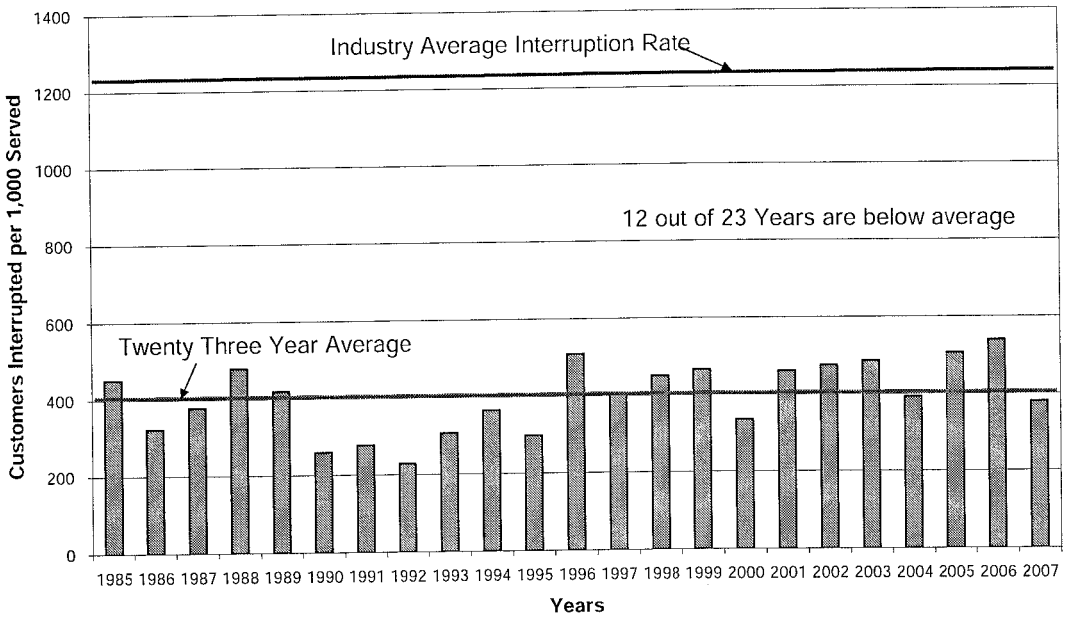
3 The outage tolerance level on network system is extremely low. The Company supplies electricity to about 2.3 million network customers. A $5 million penalty is triggered when a total of about only 35,500 network customers lose electric service for just five minutes during the course of a year. This "penalty" threshold can be easily exceeded through the contribution of one large event. Such atypical events have included the Long Island City event in 2006, which the Audit Report discounts as an indicator of a reliability trend. The Audit Report states (pp. 196, 197),

> "There was certainly an unusual sequence of events in 2006, and all of the best planning may not have mitigated the damage and interruptions they caused. ... [T]he Long Island City outage in 2006, although it occurred during a heat wave, cannot be removed from the calculations, and as a consequence it has very deleterious impact on the network performance measures."

The other atypical, events shown on the chart are:

- The June 23, 2007 transmission-substation lightning strike that interrupted service to 137,000 network customers for up to 48 minutes;
- The 2002 transmission-substation fire that interrupted service to about 63,000 customers for up to 7½ hours;
- The May 1996 transmission-transformer failure leading to load shedding that interrupted service to about 53,000 customers for up to 3 hours; and
- The December 1988 load-shedding mis-operation that interrupted service to about 63,000 customers for 43 minutes.

Con Edison Twenty Three Year Non Network SAIFI Performance



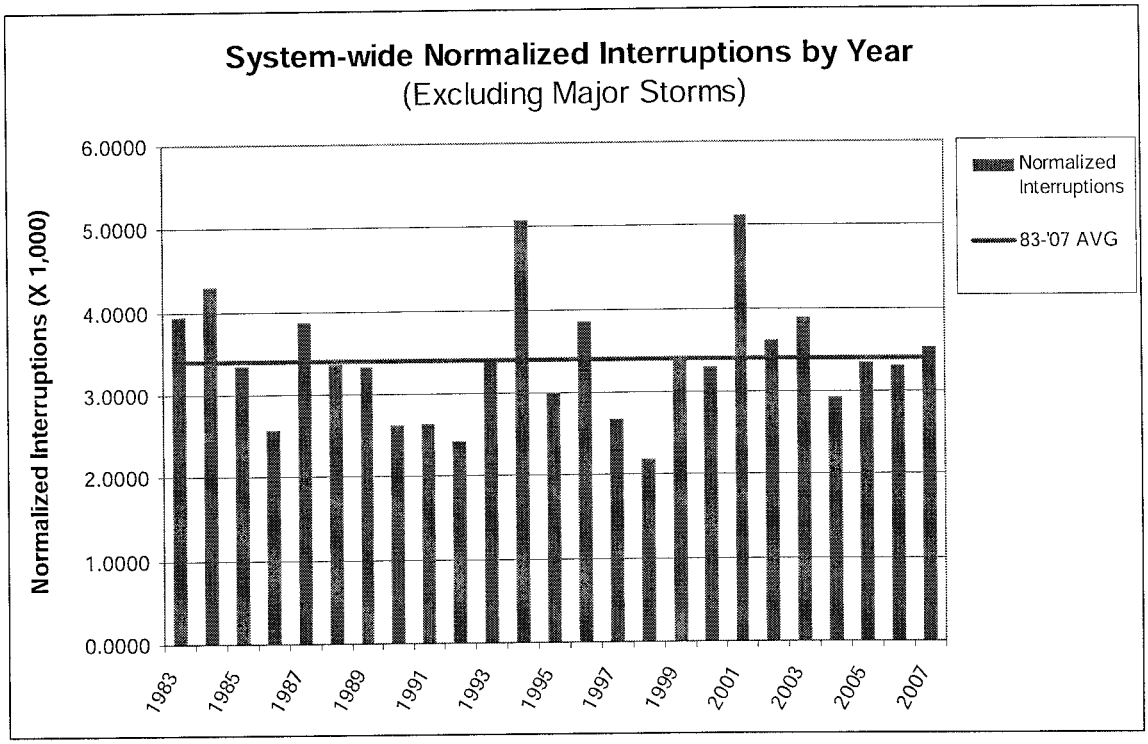
On the non-network system, weather-related outages can be excluded from SAIFI performance if 10% of the operating area's customers are affected. However, the variability of less extreme weather conditions have an impact on reliability performance measures that must be taken into account when comparing performance from different years. Unusually bad weather can make performance look worse than average in some years while unusually good weather can make performance look better than average. When these positive and negative variations are taken into account, the Company's non-network performance has been consistent over time. Con Edison's average annual outage rate of about 400 customers per 1,000 is three times better than the national average of about 1,260 outages per 1,000 customers

For the Non-Network SAIFI chart (above), the higher outage counts beginning in the late 1990s are the result of moving from a manual data entry system of outage information to an automated system and improved customer counts in areas such as Westchester which began implementation of STAR in 1999. As Con Edison converted from manual to automated methods for recording, measuring, and reporting customer outages on the non-network system, more accurate customer outage counts increased the reported non-network SAIFI numbers – an effect that is visible on the chart starting in late 1990s – but do not reflect deteriorated reliability.

It is widely recognized throughout the utility industry that upgrades to outage management systems from legacy manual systems to graphical mapping based systems often have an adverse impact on SAIFI and CAIDI measures. These changes result from the manner in which

outages are measured and not from degradation in reliability.[4] The Audit Report does not consider the effect of these improvements on the Company's reported outage counts.[5]

The chart below, titled "System-wide Interruptions by Year," illustrates Con Edison's reliability performance without the upward customer-count bias introduced by improved outage measurement systems. The chart displays interruption events and is a better measure of underlying reliability when SAIFI is being impacted by improvements in outage measurement systems and processes as was the case on the radial system. If system-wide reliability were deteriorating over the years, the number of outage events by year would demonstrate an upward trend. However, as shown in the chart, the numbers of outage events have remained steady since 1983 with only random variability around the average.



[4] In Case 00-E-1273, Central Hudson Electric Rates, Order Staying Reliability Targets and Rate Adjustments, Sept. 29, 2003, the Commission recognized that more accurate outage reporting systems can increase SAIFI and CAIDI performance levels but not indicate a deterioration in reliability performance. The January 8, 2008 Recommended Decision in Con Edison's current electric rate case, also found that "the Company has demonstrated that an enhanced outage reporting system is likely to result in higher reporting of outage frequency and duration." Case 07-E-0523, Recommended Decision, Jan. 8, 2008, p. 189.

[5] The Audit Report (p. 111) recognized Con Edison's implementation of one important computer system, System Trouble Analysis and Response (STAR), installed in 1999 to improve the outage management process, but failed to consider its impact on reported customer outage counts. STAR, plus other improvements, such as automated analysis and updates of customer calls and improved mapping system connectivity, have produced more accurate, non-network, customer outage counts while reliability performance has remained steady.

One of the findings in the Audit Report (VII-F18, p. 197) correctly notes that the Company's monthly "Electric Distribution System Performance" report to internal stakeholders on reliability performance no longer includes 20-year reliability performance data in table form. The finding implies that Con Edison's reliability performance over time is no longer "straight forwardly portrayed" to the reader. Con Edison disagrees. The monthly report explicitly states exactly where the Company's performance stands relative to both the last five years and the last 20 years. As the Audit Report (p. 196) correctly states, the monthly report "compare[s] the monthly values to the value for the same month in the previous year as well as the 5-year monthly average, [and] the monthly value is ranked relative to the monthly value reported in each of the last 20 years." These statistics, as well as the overall report prepared each month, provides the reader with an accurate assessment of the Company's reliability performance.

In order to tie reliability and performance of the Company as a whole to individual performance, Con Edison operates under a Management Variable Pay Plan (MVP). Through the MVP, the Company links a manager's compensation with job responsibilities and individual performance. Key performance indicators in the MVP include SAIFI and CAIDI, safety, customer satisfaction surveys, budgets, other operational variables that are outage-related, and financial results. Through utilizing the MVP system, Con Edison encourages and expects managers and senior executives to have a personal interest in how the Company performs. Such a relationship shows that the Company, as a whole, is focused on performance and reliability.

In developing responses to the recommendations and findings contained in the Audit Report, the Company considered all the comments submitted in this proceeding by various parties, including those submitted by the City of New York.

Notwithstanding the above, the Audit Report notes that improvements to Con Edison's existing programs might positively affect future reliability. The Technical Design Criteria initiatives address the technical recommendations (Recommendations V–R11 through V-R20) included in the Audit Report's Reliability section. As noted previously, all technical recommendations made in the Audit Report's Reliability section are being submitted under separate filing in Case No. 06-E-0894. The table below describes the status of items in the separate proceeding that also apply to the Audit Report recommendations and which have not yet been completed. The status of items in Case No. 06-E-0894 is periodically updated, with the next update to DPS Staff due on March 1st, 2008.

Team 8 Technical Recommendation status:

EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 8)	Chapter #	#	Recommendation	Previously submitted related reports.	Complete (Y / N)	Update
Emergency Response Performance	V	19	Continue feeder testing with Hi Pot methods as currently practiced until such time as Con Edison completes its evaluation and refinement of the program for VLF testing and determines whether/how to implement same. Continuation of exploration of other non-destructive technologies suitable for the network environment should continue. (Refer to Finding V-F56.)	Related to PSC 37 – AC VLF hipot testing (Final copy is being finalized)	Complete	03/03/09: **High Potential Feeder Testing:** This item is completed. The AC VLF withstand test been evaluated and found to add value to the company's reliability programs. The testing has been integrated into the company's Hipot program. The specification that governs the Hipot program, EO-4019, has been refined to include the implementation of AC VLF testing. The table below is the company's 2009 Hipot program. The application of the AC VLF Hipot is dependant on several factors including the amount of PILC cable on a program feeder. Team 8 090303 attachment #19.d... In addition to the three mobile test sets currently in use, twelve stationary test sets have been ordered for installation into the company's area substations. Test set have been installed in the North Queens, Corona, Rockview and Parkview substations, with installations planned for Seaport and Brownsville by March 31, 2009. The company will continue to refine its Hipot program to insure the most cost effective use of this technology. **Non-destructive Testing Technologies:** INFRA-RED TESTING OF UNDERGROUND CABLES AND JOINTS

Master Implementation Plan of Consolidated Edison Company of New York, Inc.

EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 8)	Chapter #	#	Recommendation	Previously submitted related reports.	Complete (Y / N)	Update
Emergency Response Performance	V	19				(CONTINUED) To date, the Company has conducted infra-red scans of 31 splices on 11 Feeders in eight manholes. There were no indications of any problems in the splices scanned. The Company has also initiated a research project to understand the thermal behavior of splices in manholes. The project entails thermal analysis of both normal splices and splices with intentional defects under load in the laboratory. This experiment will allow us to better understand the impact of the arc proofing covering on the ability to detect internal defects in splices via infra-red thermography. PARTIAL DISCHARGE TESTING OF UNDERGROUND CABLES AND JOINTS The company completed the training of field inspection personnel on the use of the EA Technologies Partial Discharge units. One of the two units purchased has been deployed with field inspection forces. The Company completed additional inspections of 40 splices in 15 manholes for a total of 62 splices in 25 manholes. Although most splices showed low or nonexistent partial discharge, two splices showed levels marginally higher than average. These splices have been retested and the partial discharge readings have been confirmed. The company plans to continue the partial discharge scans of additional splices and then analyze the data collected. The Company will select a splice or splices with readings that are determined to be outside of the average range and remove them for analysis to determine if the higher readings are associated with a detectable abnormality. Handheld partial discharge detection device (UtilX). UtilX has modified the Sniffer design. Plans are being developed to test the new design in UtilX' testing facility in Seattle, WA. Con Edison has sent field aged cable samples to UtilX for these tests, which are anticipated to begin in March 2009. In order to avoid multi-day outages for sensor installation, KEMA is developing a plan to install sensors without the need of feeder outage or minimum outage (four hours or less). A meeting at Con Edison or conference call is to be scheduled for March 2009 to discuss the details.

Master Implementation Plan of Consolidated Edison Company of New York, Inc.

<table>
<tr><th>EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 8)</th><th>Chapter #</th><th>#</th><th>Recommendation</th><th>Previously submitted related reports.</th><th>Complete (Y / N)</th><th>Update</th></tr>
<tr><td>Emergency Response Performance</td><td>V</td><td>19</td><td>Continue feeder testing with Hi Pot methods as currently practiced until such time as Con Edison completes its evaluation and refinement of the program for VLF testing and determines whether/how to implement same. Continuation of exploration of other non-destructive technologies suitable for the network environment should continue. (Refer to Finding V-F56.)</td><td>Related to PSC 37 – AC VLF hipot testing (Final copy is being finalized)</td><td>N</td><td>12/3/08: High Potential Feeder Testing

Since the June 1, 2008 four additional 27 kV feeders have been subjected to an VLF-AC Hipot test. The results are contained in the table below.

AC Highpot Test Data

May 01, 2008 Through October 27, 2008

<table>
<tr><th>Network</th><th>Voltage Level</th><th>Network ID</th><th>Feeders Tested</th><th>Number of Tests</th><th>Number of Passed Tests</th><th>Number of Failed Tests</th></tr>
<tr><td>Park Slope</td><td>27kV</td><td>2B</td><td>1</td><td>2</td><td>1</td><td>1</td></tr>
<tr><td>Long Island City</td><td>27kV</td><td>1Q</td><td>1</td><td>2</td><td>1</td><td>1</td></tr>
<tr><td>Jamaica</td><td>27kV</td><td>5Q</td><td>1</td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>Richmond Hill</td><td>27kV</td><td>9B</td><td>1</td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>Harrison</td><td>13kV</td><td>17W</td><td>1</td><td>2</td><td>0</td><td>2</td></tr>
<tr><td>Central Bronx</td><td>13kV</td><td>4X</td><td>1</td><td>7</td><td>0</td><td>7</td></tr>
<tr><td>South Bronx</td><td>13kV</td><td>7X</td><td>1</td><td>2</td><td>1</td><td>1</td></tr>
<tr><td>Harlem</td><td>13kV</td><td>2M</td><td>4</td><td>6</td><td>4</td><td>2</td></tr>
<tr><td>Yorkville</td><td>13kV</td><td>3M</td><td>4</td><td>11</td><td>4</td><td>7</td></tr>
<tr><td>Grand Central</td><td>13kV</td><td>4M</td><td>1</td><td>1</td><td>1</td><td>0</td></tr>
<tr><td>Times Square</td><td>13kV</td><td>5M</td><td>1</td><td>1</td><td>1</td><td>0</td></tr>
<tr><td>Cooper Square</td><td>13kV</td><td>7M</td><td>1</td><td>1</td><td>1</td><td>0</td></tr>
<tr><td>City Hall</td><td>13kV</td><td>8M</td><td>1</td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>Sheridan Square</td><td>13kV</td><td>10M</td><td>2</td><td>2</td><td>2</td><td>0</td></tr>
<tr><td>Plaza</td><td>13kV</td><td>11M</td><td>1</td><td>2</td><td>1</td><td>1</td></tr>
<tr><td>Empire</td><td>13kV</td><td>12M</td><td>1</td><td>1</td><td>1</td><td>0</td></tr>
<tr><td>Pennsylvania</td><td>13kV</td><td>16M</td><td>1</td><td>1</td><td>1</td><td>0</td></tr>
<tr><td>Columbus Circle</td><td>13kV</td><td>21M</td><td>1</td><td>3</td><td>1</td><td>2</td></tr>
<tr><td>Lincoln Square</td><td>13kV</td><td>23M</td><td>1</td><td>2</td><td>1</td><td>1</td></tr>
<tr><td>Turtle Bay</td><td>13kV</td><td>25M</td><td>1</td><td>1</td><td>1</td><td>0</td></tr>
<tr><td>Greenwich</td><td>13kV</td><td>32M</td><td>1</td><td>1</td><td>1</td><td>0</td></tr>
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</td></tr>
</table>

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EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 8)	Chapter #	#	Recommendation	Previously submitted related reports.	**Complete (Y / N)**	**Update**
						In addition: The Company plans to purchase and install, at various 27 kV and 13 kV substations, five fixed AC test sets (two sets in Queens, one in Brooklyn and two in Manhattan substations) by the end of 2008. This allocation may change based on detailed engineering review. The substation selection will be based on amount of solid dielectric cable installed as well as space availability to install the sets in existing substations. The lead time for delivery of the AC sets is approximately 6 months. One fixed AC test set has been delivered and installed in the North Queens substation. The unit will be tested and commissioned the first week of December, 2008. A second fixed AC test set will be delivered to the Corona substation, in Queens, the second week in November. This test set is scheduled to be commissioned the first week of December, 2008. The other three fixed test sets scheduled for installation in 2008 will be delivered as they become available. We are currently working on the design to install AC test sets in trucks and expect to purchase two sets in 2009. As of this update no AC test sets in trucks have been purchased. The plan is to purchase two trucks by the end of 2009. The Company also adjusted it's VLF-AC Hipot Voltage levels and time durations to be more inline with the industry standard, IEEE 400. The new Voltage levels and time durations are listed below: For 4kV Feeders - 7.5 Kv for 10 minutes For 13 Kv Feeders - 22 kV for 30 Minutes For 27 Kv Feeders - 40 kV for 30 Minutes For 33 Kv Feeders - 45 kV for 30 Minutes

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<tr><th>EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 8)</th><th>Chapter #</th><th>#</th><th>Recommendation</th><th>Previously submitted related reports.</th><th>Complete (Y / N)</th><th>Update</th></tr>
<tr><td>Emergency Response Performance</td><td>V</td><td>19</td><td>Continue feeder testing with Hi Pot methods as currently practiced until such time as Con Edison completes its evaluation and refinement of the program for VLF testing and determines whether/how to implement same. Continuation of exploration of other non-destructive technologies suitable for the network environment should continue. (Refer to Finding V-F56.)</td><td>Related to PSC 37 – AC VLF hipot testing (Final copy is being finalized)</td><td>N</td><td>9/3/2008:
High Potential Feeder Testing:

Since September, 2007 twenty VLF-AC Hipots were performed on eight 27kV feeders operating in Brooklyn and Queens. A summary of the results are presented in the table below.

<table>
<tr><th colspan="6">AC HiPot Tests between September 01, 2007 and June 01, 2008</th></tr>
<tr><th>Region</th><th>Voltage</th><th>Feeders Tested</th><th>AC Tests Performed</th><th>Passed</th><th>Failures</th></tr>
<tr><td>Brooklyn</td><td>27kV</td><td>3</td><td>8</td><td>3</td><td>5</td></tr>
<tr><td>Manhattan</td><td>13kV</td><td>24</td><td>40</td><td>19</td><td>21</td></tr>
<tr><td>Queens</td><td>27kV</td><td>5</td><td>12</td><td>2</td><td>10</td></tr>
<tr><td>Bronx</td><td>13kV</td><td>3</td><td>5</td><td>2</td><td>3</td></tr>
<tr><td colspan="2">Systemwide</td><td>35</td><td>65</td><td>26</td><td>39</td></tr>
</table>
Refinements to the VLF-AC Hipot program will continue to be made where appropriate. The most recent refinement is contained in the June 3 update.

Non-destructive Testing Technologies:
Con Edison has completed its evaluation of infrared cameras and has selected an Aveo TVS 620U. This camera produces a relatively high quality image, does not require extensive, specialized training to operate and is currently owned by the company. Manhole inspections are scheduled to begin in September, 2008 and continue for several months. These inspections will be conducted, to the extent possible, concurrently with partial discharge inspections so as to optimize the use of the company's resources. Manholes will be selected which have a varied representation of the medium voltage cable and splicing technologies in use. Further laboratory tests have been designed and set up at the vendor's (UtilX) facility. UtilX is currently acquiring field aged cable samples from various utilities in order to conduct further testing. Con Edison will assist this effort by sending field aged cable samples removed from service within next few weeks. The Company has requested that UtilX provide a testing schedule.

The Company has provided all information requested by KEMA for completion of the feasibility study, except for photographs of pothead compartment interiors. In consideration that these photos may not be obtained since outages would be needed, KEMA has been asked to re-evaluate the information required to complete the feasibility study. A conference call has been scheduled with KEMA for mid September to discuss an action plan for completion of the study..</td></tr>
</table>

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EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 8)	Chapter #	#	Recommendation	Previously submitted related reports.	Complete (Y / N)	Update
Emergency Response Performance	V	19	Continued		N	CONTINUED Non-destructive Testing Technologies: Infrared Camera: Distribution Engineering is currently evaluating two infrared cameras suitable for performing manhole inspections. The FLIR (P640 and P660 model imaging systems) camera is a very sophisticated and highly specialized instrument that requires a trained operator. It produces very high quality images. The Zistos Portable Video Systems camera costs a third of the FLIR camera and does not require extensive training to operate. The image quality, however, is not as refined as the FLIR product. It is designed to highlight conditions that could lead to an imminent cable or splice failure. It takes a rather course infrared scan of the energized cable operating in the structure. No additional scans have been performed since the last update because the EA Technologies device that was used to perform the initial scans had been loaned to the company and was subsequently returned to EA Technologies. The Company completed its purchase of two EA Technologies Ultra-TEV Plus units and has scheduled meetings with field inspection personnel to conduct training on use of the units and planning for additional field scans. 6/3/08: High Potential Feeder Testing: Since September, 2007 we have performed 19 VLF tests on eight 27kV feeders. We have been collaborating with NEETRAC on the CDFI (Cable Diagnostic Focused Initiative). In January, 2008 NEETRAC presented an interim report on the effectiveness of our AC (VLF) and Dc Hipot programs. Based, in part, on the findings of that report we have modified the VLF test Voltage level and time duration. In March of this year we reduced the VLF test voltage for 27kV feeders from 50kV to 40kV and increased the rest time duration from 15 minutes to 30 minutes. We will continue to work with NEETRAC to monitor the performance of these 27kV feeders tested under the new criteria. Refinements to the VLF testing program will continue to be made where appropriate. Non-destructive Testing Technologies: Infrared Camera: Distribution Engineering is currently evaluating two infrared cameras suitable for performing manhole inspections. The FLIR (P640 and P660 model imaging systems) camera is a very sophisticated and highly specialized instrument that requires a trained operator. It produces very high quality images. The Zistos Portable Video Systems camera costs a third of the FLIR camera and does not require extensive training to operate. The image quality, however, is not as refined as the FLIR product. It is designed to highlight conditions that could lead to an imminent cable or splice failure. It takes a rather course infrared scan of the energized cable operating in the structure..

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Emergency Response Performance	V	19	"continued"		N	CONTINUED An evaluation is currently being performed to determine if the higher image quality of the FLIR camera is necessary to perform an adequate manhole and service inspection program. The evaluation should be complete by July 15, and it should then take one month to issue a purchase order and receive the camera. Manhole inspections should commence in September 2008 Handheld partial discharge (PD) detection device (EA Technologies): The objective of this project is to evaluate the effectiveness of the device to detect defects in cables and splices in manholes. We met with the manufacturer and resolved the questions on the device's ability to detect PD. Currently six manholes with approximately 22 splices and associated cables have been scanned. No partial discharge was detected. Since the rate of defects in distribution system components is so low, it is possible that numerous manholes will need to be entered before partial discharge is detected. The Company will continue to conduct scans of splices and associated cable in manholes and evaluate the program at quarterly intervals. Handheld partial discharge detection device (Utilx): In 1Q 2008, Con Edison conducted additional laboratory tests of a partial discharge "Sniffer" device, developed by Utilx, at the company's Cable and Splice Center for Excellence. The tests showed that further development work is needed for the Sniffer. Our next step is to review (currently in progress) and modify the Sniffer design and conduct further lab tests to evaluate the modification before field trial can begin. Scoping study project to assess the applicability of KEMA developed on-line partial discharge technology for monitoring of the Con Edison distribution system: The Company has chosen six feeders in the Staten Island service area as subject feeders for the scoping study to assess the applicability of the KEMA technology to the Con Edison distribution system. This scoping study is underway and a report is scheduled to be issued on July 1st. 1/18/2008 The company is currently analyzing historical high pot and feeder performance data to determine whether there is evidence that some changes in protocol could enhance the operating benefit. We continue to perform VLF high pot tests on 27kV feeders and are analyzing the early data so that we can refine and finalize the VLF test protocol. Con Edison also is exploring other non-destructive technologies through the USDOE-funded Cable Diagnostic Focused Initiative (CDFI), infrared imaging, and partial discharge.

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Emergency Response Performance	V	11	Review the current voltage reduction program of load reduction to ensure its effectiveness when applied for an extended period. They should also ensure that the level of voltage reduction will not result in damage to customer's motors and other voltage sensitive loads. (Refer to Finding V-F35, 36 & 37.)	Related to PSC #6, #30 Low voltage procedures reviewed and changed (EOP 5023 and EO 4095	On-going Target date 5/31/09	03/03/09: DE is working with University of Texas at Arlington fine-turning the voltage dependent load model. This project is progressing and is on schedule to be completed when its product is fully incorporated into PVL by the end of May, 2009. 12/3/2008: The University of Texas at Arlington is on target to complete the study by 12/31/08. The study's recommendations will be incorporated into the PVL software and tested and completed by end of May 2009 for next summer on line application. (This project is progressing and is on schedule). 9/3/08: The 6/3/08 update is still valid. The impact of voltage reduction on the customer demands is being incorporated in the PVL models of networks with distributed loads on the grids. There is a joint effort with DE and the University of Texas at Arlington. This project is progressing and is on schedule. 6/3/2008: Voltage Reduction Program: To examine how voltage reductions will change the MW, MVAR, current, and voltage values on the network while in a cascading event, Con Edison has initiated a study to distribute the loads on the grid and to account for voltage reductions and their impact on customer loads. The scope of work for the study is completed. The study is in progress and is expected to be completed by the end of 2008. 1/18/2008 This recommendation is addressed by detailed studies conducted by Polytechnic University on the impacts of low voltage on modern loads and equipment with electronic control. The studies determined that modern loads such as refrigerators, computers, heat pumps, and fans incurred no damage and continued normal operation when voltage levels were fully restored. The studies were also utilized to develop criteria for low voltage conditions based on a voltage level that will affect the operation of refrigerators.

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EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 8)	Chapter #	#	Recommendation	Previously submitted related reports.	**Complete (Y / N)**	**Update**
Emergency Response Performance	V	17	Consider secondary feeds to high profile customers such as the MTA and Long Island Rail Road when reconfiguring or modifying future networks. (Refer to Finding V-F52.)	PSC 22 - effects of power disruptions on the major transit systems	Complete	9/3/08 Completed, see June 3, 2008 status report. 6/3/2008: In April, 2008 the company issued a specification, EO-2150, Modified Design of Distributed Networks. The objective of this procedure is to evaluate the cost effectiveness of limiting the loading on the existing distributed networks (125/216 volts) and minimizing the dependence on supplying customers partially or totally from the low voltage grid by supplying 600 kW or greater demand customers from isolated networks 125/216 volts through dedicated network transformers. The new procedure requires evaluation of alternate feeds to all large customer loads greater than 600 KW. The new specification meets the requirement of the recommendation. 1/18/2008 3G system of the future is evaluating a transferable feeder group distribution system that will provide two substation sources to specified isolated customers.
Emergency Response Performance	V	12	Develop and implement changes to PVL and WOLF that lead to improved results and greater confidence. (Refer to Finding V-40, 41, 42 & 43.)	Related to PSC #39, #40, WOLF & PVL	Complete	9/3/08 Completed. See June 3, 2008 status report. 6/3/2008: This recommendation has been completed per report provided on the implementation of Staff's recommendations 39 and 40 in Case 06-E-0894 (Long Island City Outages Investigation). 1/18/2008 WOLF2 (enhanced version of WOLF) and Remote Monitoring Estimator (RME) are two new applications which will provide dependable load flow results even during advanced network contingencies (N-2). There are also more accurate distributed secondary models and visualizations underway.
Emergency Response Performance	V	15	Reconsider the guidelines regarding network shutdown in EO-4095, and make the decision process more defined and less subjective. (Refer to Finding V-48-53.)	Related to PSC 30 EO 4095	Complete	9/3/08 EO-4095 has been revised and issued. This recommendation is completed. 6/3/2008: This recommendation has been completed per report provided on the implementation of Staff's recommendations 30 in Case 06-E-0894 (Long Island City Outages Investigation). 1/18/2008 Con Edison has worked closely with the PSC Staff to revise EO 4095 and develop a more defined set of guidelines for this specification. It addresses individual steps to take when a feeder opens auto, correlation with reactance to fault application, and the use of HUD display associating indicators of network stress. Also, this spec clearly defines the responsible person for ordering a network shutdown.

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EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 8)	Chapter #	#	Recommendation	Previously submitted related reports.	**Complete (Y / N)**	**Update**
Emergency Response Performance	V	16	Place a higher priority on replacement of failed or nonfunctioning network systems components including transformers, network protectors, and RMS transmitters immediately prior to and during the summer months. (Refer to Finding V-F52.)		Complete	9/3/08: Distribution Engineering continues to prioritize transformers that have been designated for replacement as a Category 2 emergency. A team effort from the Distribution Engineering, Department, regional control centers and regional I&A departments resulted in the overall reduction of units pending category 2 emergency removal. In February 2008 there were 88 units pending emergency removal. This total was reduced to 24 as of early June, and the present total is 9. The team goal is to keep the pending number of transformers that require emergency removal to a minimum by promptly replacing these units. This has contributed to the overall reduction of in service network transformer failures. As a result of the collaborative effort, no changes to the Banks Off system are necessary. 6/3/2008: Transformers and Network Protectors: Distribution Engineering conducted a benchmarking the Banks Off process with each of the regional control centers to identify the current process for the replacement of transformers and network protectors on the network system. This process mapping identified opportunities to standardize and streamline the existing replacement process, and prioritization tools have been developed to help manage this process. Distribution Engineering is also working with the regional control centers to prioritize the removal of transformers scheduled for replacement Off On Emergency Category 2 (OOE2) using equipment attribute and maintenance history characteristics. This prioritization has been effective in addressing higher risk units and has led to the reduction of the number of units waiting for replacement and mean time to replacement. Clearer metrics for oversight and tracking are in place, and additional enhancements to the Banks Off system are scheduled to be completed by the 4th quarter, 2008. RMS Transmitters: Con Edison continues to improve RMS reporting using the initiatives previously reported. As of April 2008, the regional breakdown of the RMS reporting rate is Manhattan 97.4%, Brooklyn/Queens 96.2%, and Bronx/Westchester 97.8%. Ten networks reported at less than 95% with the lowest reporting rate at 92.5%. 1/8/2008 The response to this recommendation is split into two parts A: "Transformers and NWPs" -Distribution Engineering will be benchmarking banks off with regional Control Centers to establish clearer metric oversight, tracking and removal of Transformers and NWP. . B: "RMS Transmitters"- In the response we highlight our 2006 program to replace all UNR by utilizing the new 3rd generation transmitters.

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EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 8)	Chapter #	#	Recommendation	Previously submitted related reports.	**Complete (Y / N)**	**Update**
Emergency Response Performance	V	20	Enhance the program for maintenance scheduling prior to and during the summer peak periods to complete all possible work during any scheduled feeder shutdown. (Refer to Finding V-F57-58.)		On-going Target date 3/31/09	03/03/09: Project progressing 12/3/08: Procedure revisions noted in the implementation plan have been completed (most notable EOP 5025). Meetings among Substation Operations and the distribution regions have been held and will continue to be part of the overall planning process. The BOSS initiative has entered the Plan and Design Phase on December 1 with an expected completion date of March 2009. The outcome of this Phase will be the blueprint for the implementation of the new system targeted to start during the first half of 2009. BOSS is envisioned to incorporate extensive process upgrades and data automation and interface capabilities that will render more efficient and effective outage scheduling coordination. 9/3/08: Procedure revisions noted in the implementation plan have been completed (most notable EOP 5025). Meetings among Substation Operations and the distribution regions have been held and will continue to be part of the overall planning process. The BOSS initiative is currently entering the design phase. A request for proposal for the design phase has been prepared and sent out. Vendor responses have been received and are currently being evaluated. A contract award for the design phase of this project is expected to take place in September or October, and work is expected to commence immediately afterwards. 6/3/2008: The BOSS initiative, which is a key component in this corrective action, will not be implemented until 2009 (at the earliest). In regards to a status update on the items discussed: • The procedure reviews noted in the implementation plan have been completed. Procedure revisions are in progress. • Work to communicate work requirements between working groups is an ongoing process. Longer range planning meetings between Substation Operations and the distribution regions are being planned for August. • The BOSS initiative is continuing to progress and will soon be entering the design phase. Extensive reviews of the outage scheduling process were completed in an effort to find opportunities to create a more effective and efficient process. The initial design phase is expected to run through the end of 2008. 1/8/2008 The response to this recommendation includes the implementation of BOSS (Best Outage Scheduling System). The response highlights the current status of the application and a milestone date of 2009.

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<tr><td>Emergency Response Performance</td><td>V</td><td>13</td><td>Improve the primary sensors, transmitters and signal transfer technologies to increase the integrity of the RMS data. (Refer to Finding V-F44.)</td><td>Related to PSC #51 RMS</td><td>Complete</td><td>9/3/08: As of December 31, 2007, the Company increased its reporting percentage for Remote Monitoring System units system wide and achieved 95% reporting functionality in all Regions. This level of reporting was also sustained through June, 2008. Reporting levels were as follows:
<table>
<tr><td>Region</td><td>12/31/2007</td><td>6/30/2008</td></tr>
<tr><td>Manhattan</td><td>96.5%</td><td>98.0%</td></tr>
<tr><td>B/Q</td><td>95.3%</td><td>95.6%</td></tr>
<tr><td>X/W</td><td>97.8%</td><td>97.9%</td></tr>
</table>
The Company also continues to improve RMS reporting on an individual network level as shown in the following table:
<table>
<tr><td>Network Reporting Rate</td><td colspan="2">12/31/2007</td><td colspan="2">6/30/2008</td></tr>
<tr><td></td><td>#</td><td>%</td><td>#</td><td>%</td></tr>
<tr><td>>= 95%</td><td>43</td><td>72.9%</td><td>54</td><td>90.0%</td></tr>
<tr><td>90% - 95%</td><td>15</td><td>25.4%</td><td>10</td><td>10.0%</td></tr>
<tr><td><90%</td><td>1</td><td>1.7%</td><td>0</td><td>0.0%</td></tr>
</table>
6/3/2008. Con Edison continues to improve RMS reporting using the initiatives previously reported. As of April 2008, the regional breakdown of the RMS reporting rate is Manhattan 97.4%, Brooklyn/Queens 96.2%, and Bronx/Westchester 97.8%. Ten networks reported at less than 95% with the lowest reporting rate at 92.5%.
Update: As of December 31, 2007, the Company increased its reporting percentage for Remote Monitoring System units system wide and achieved 95% reporting functionality in all Regions. This level of reporting was also sustained through January, 2008. Reporting levels were as follows:
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						The Company also continues to improve RMS reporting on an individual network level as shown in the following table: Network Reporting Rate 12/31/2007 # % 1/31/2008 # % >= 95% 43 72.9% 45 76.3% 90% - 95% 15 25.4% 13 22.0% <90% 01 01.7% 01 01.7% 1/18/2008 The response to this recommendation includes a summary of the improvements made to the third generation RMS transmitters. The response outlines; the upgrade of all RMS receivers on our system, pick-up coil testing & replacement initiative, increase reliability, and increasing power output signal strength.

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EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 8)	Chapter #	#	Recommendation	Previously submitted related reports.	Complete (Y / N)	Update
Emergency Response Performance	V	14	Complete the assessment of the Deep Thunder micro-weather modeling system and integrate it with either the STAR system or another emergency response program. (Refer to Finding V-F46.)	Related to PSC #6 STAR, response does not include information on Deep Thunder	On-going Target date 4/1/09	03/03/09: The project continues on schedule. Evaluation of the damage data and model prediction is progressing. 12/3/08: The project is progressing on schedule. The IBM model is being customized to enable the Company to evaluate "predicted" overhead system damage based on Deep Thunder enhanced weather forecasts. The projected completion date of this phase is 3/31/09, at which time, the Deep Thunder damage prediction model will begin to be operationally tested against real time overhead system storm related damage data for accuracy and refinement. 9/3/2008: The Company has initiated a project with IBM to apply IBM's Deep Thunder technology to the problem of forecasting weather-caused damage at a micro-geographic level. The goal of Phase I of this project is to develop and integrate more precise weather forecasting capability into our emergency response management utilizing finer resolution forecasting models. The training of key operations and planning personnel commenced on June 1, 2008 and continues as the application is modified. The Deep Thunder forecasting model is being included as appropriate in operational decisions to continue to test against real time weather data for accuracy and refinement. We are now developing the specifications and implementation for specific customizations of the current Deep Thunder capability to enable the Company to evaluate "predicted" overhead system damage based on Deep Thunder enhanced weather forecasts. The projected completion date of this phase has been updated as a result of contractual delays to 3/31/09, at which time, the Deep Thunder damage prediction model will begin to be operationally tested against real time overhead system storm related damage data for accuracy and refinement. 6/3/2008: The Company has initiated a project with IBM to apply IBM's Deep Thunder technology to the problem of forecasting weather-caused damage at a micro-geographic level. The goal of Phase I of this project is to develop and integrate the applicability of more precise weather forecasting capability into our emergency response management utilizing finer resolution forecasting models. The training of key operations and planning personnel commenced on June 1, 2008. Phase I roll out will be completed by June 30 2008, at which time, the Deep Thunder forecasting model will begin to be operationally tested against real time weather data for accuracy and refinement. Concurrently, the next phases of this project will involve developing the specifications and implementation for specific customizations of the current Deep Thunder capability to enable the Company to evaluate "predicted" overhead system damage based on Deep Thunder enhanced weather forecasts. The projected completion date of the phase is December 15, 2008, at which time, the Deep Thunder damage prediction model will begin to be operationally tested against real time overhead system storm related damage data for accuracy and refinement. 1/18/2008 The response to this recommendation includes a summary of the Deep Thunder Company initiative as well as our plans for integration with other applications. The response includes a project milestone but does not address how the incorporation of Deep Thunder into STAR would validate it but not benefit the application.

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EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 8)	Chapter #	#	Recommendation	Previously submitted related reports.	**Complete (Y / N)**	**Update**
Emergency Response Performance	V	18	Continue development of 3G research on future networks and integrate with long-term Strategic Plan as identified in Recommendation II-R3. (Refer to Finding V-F53.)	Related to PSC 59 – 3G	Complete	6/3/08: The 3G System of the Future project recently completed detailed analysis of a transferable feeder group design and issued a design specification. A transferable feeder group consists of multiple medium voltage feeders running between two area substations isolated by switches. It is possible to apply this concept to provide selected customers with two source supplies if it is geographically feasible and also if cost and reliability can be justified. Prior to implementing this concept in contexts where these concerns are satisfied, modifications are required to the distribution submersible medium voltage switches, a communication and control system must be tested in the field, and a pilot demonstration conducted to confirm the practicality of the concept. The 3G project is now expanding engineering analysis for partial and full network transfers. This design, if proven feasible and cost effective, integrates with the Strategic Plan by facilitating partial restoration and operating flexibility during system emergencies in the underground network. February 2008 Update: The 3G team considered a partitioning design for the Long Island City network as described in the report submitted to DPS staff on May 10, 2007, "Evaluation of Partitioning the Long Island City Network." The report recommended that low voltage network partitioning should not be pursued. Since that time, it has been decided to construct Newtown substation with two low voltage networks, instead of only one as originally planned. This additional split of the southern portion of the existing Long Island City network will further improve network reliability. Distribution Engineering is developing and demonstrating communication systems to facilitate remote operation of existing medium voltage switches located underground, enabling the possible implementation of the network partitioning and distribution load transfer concepts in the future. Distribution Engineering's monitoring and control demonstration pilots will continue in 2008 in Brooklyn and Queens. 1/18/2008 The response to this recommendation highlights 3 new specifications to incorporate 3G design changes in our electric system. The response further discusses the demonstration and implementation of future and past projects. 3G concludes the response emphasizing our international benchmarking abilities with examples such as; the December 2007 Eight Utilities from Around the World Conference and the Lesson's Learned Conferences with Exelon's Com Edison from Chicago and Energy Australia from Sydney.

Team 9 - Customer communication (VI R1&5)

As a result of the outages in 2006, Con Edison implemented numerous policies and procedures to provide consistent and timely messages to the media during outage events. The Company also worked to establish effective communications with the numerous public entities that it deals with during outage events. As noted in the Audit Report, Con Edison significantly expanded its customer communication efforts following the Long Island City and Westchester outages, with particular emphasis on the message advising customers that they should contact the Company if they have lost power. This has resulted in a robust communication plan that incorporates Company publications, the corporate Web site, and a substantial public education campaign on radio and in newspapers.

Con Edison developed and mailed a new Power Problems brochure to 3.2 million customers in May 2007. This comprehensive brochure includes information about the importance of contacting the Company if power is lost, how to find information about dry ice and water distribution, and cooling or warming centers. It also explains how to obtain information on; outages and estimated times of restoration; the impact of low voltage; the steps people can take to protect appliances, computers, and other equipment; how telecommunications services, technologies, and equipment might function during power outages; how the Company restores and prioritizes service; and suggested contingency planning for consumers. This brochure, available in eight languages, was advertised in major daily newspapers and local and ethnic publications. A downloadable version of the brochure is posted to the Company Web site, a link to the brochure frequently appears on the Web site home page, and it is always on the corporate home page when a major storm is anticipated.

At the same time, Con Edison mailed a bi-monthly newsletter, *Customer News*, with bills to 3.2 million customers. The newsletter includes seasonal storm preparedness and safety precaution topics. Every *Customer News* promotes the importance of customers contacting the Company if they are experiencing power problems, and highlights recent new features such as the online outage-reporting and the new home-page outage information box that will be posted during a significant event. *Customer News* is produced in English and Spanish, and every issue is posted to the Company's Web site.

The Company regularly issues press releases as major storms are reported to approach the region. These releases include an appeal to contact the Company if customers lose power, as well as general safety tips and an overview of restoration priorities. The information is included in subsequent storm related press releases.

Con Edison devoted considerable resources to promoting the message in paid media as well. Last summer the Company ran a print and radio campaign explaining customer service improvements and highlighting enhancements to the Company's outage notification processes. A second campaign outlining the ease of reporting problems online and the availability of important storm information on the Web site ran last autumn and winter. These messages appeared in over 150 newspapers (dailies, ethnic papers, and neighborhood papers) and were broadcast on 18 radio stations (news, talk, music and sports formats).

Notwithstanding the considerable improvements Con Edison has made to its outage reporting process and in communications with customers who have reported outages, and despite extensive advertising in local media, subway and bus posters, and on Company vehicles and customer inserts, the Audit Report found that the message that a customer needs to report their outage is still not achieving the desired success. (VI-F4) Con Edison concurs that it needs to further improve communications with customers as to the need for customers to report individual outages and make the need to report outages more prominent in its advertising and customer outreach efforts through enhancement to the Web site and additions to bill inserts. (VI-R1)

Con Edison is now working to identify additional outlets where it can promote the message asking customers to call if they lose power. These outlets may include electronic media as well as enlisting external organizations to help deliver the message.

The Audit Report also found that Con Edison has enhanced its Web site and the provision of outage information (VI-F8). Because customers have increasingly chosen to contact Con Edison via the Internet, the Company has improved its Web site to enable customers to report an electric service problem or to check on the status of a previously reported service outage. Customers are able to perform these activities by simply providing either their account number or by entering the phone number linked to their account and verifying the address of the location of the outage. Con Edison has implemented additional enhancements to its Web site including:

- Enabling customers to use the Internet to notify Con Edison of electric service problems, including partial lights, dim lights, flickering lights, or no lights;
- Providing information such as news releases, Company statements, location of outreach van and dry ice, and claims information;
- Including a Storm Central section that provides storm preparation information;
- Posting information on handling dry ice; and
- Allowing customers who have reported electric service problems via telephone or the Internet to obtain an ETR via the Internet.

Although Con Edison has recently expanded the use of its Web site to provide customers with and receive useful outage information, the Audit Report found that Con Edison should continue to expand the information and communication provided through its Web site to include pictures and videos of the outage situation and efforts to restore service. The report also cites examples of other utility outage web sites with varying degrees of content and quality that the Company should review for best practices (VI-F8).

Generally, Con Edison agrees with the Audit Report's findings, which recognize that the Company has made great strides to enhance the outage information available to Company employees and directly to customers so it can more accurately communicate the status of an outage and estimated time of restoration (ETR). Furthermore, the Company has continued to improve information and communication provided through its Web site and to increase communication with customers on the need to report outages. Most recently, Con Edison has developed and implemented template web pages to display photos of storm and other outage

damage and the Company's restoration efforts. The Company has internal photographic resources and contracted photographers such that photos will be available quickly. (VI-R5)

Despite these improvements, Con Edison continues to research best practices, new and improved technologies, and policy revisions that will help to identify the most effective web-based communications with employees, customers, the public, and officials. In particular, the Web continues to advance as an important communications and transactional tool. As Web technology advances, the Company will take advantage of new opportunities to facilitate and improve Web-based customer communications. Con Edison will also evaluate the communications content and functionality provided by the Company's Web site against the content and functionality provided by other utility Web sites and against recognized web industry best practices. (VI-R5) Based on this benchmarking/review, the Company will implement enhancements to Web site content, navigation, and functionality.

Team 9 Implementation Plan:

EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 9)	Start Date	End Date	Report Rec#	Status	Update and Documentation
Team 9 - Review and improve customer outage reporting and web site	**1/1/2008**	**1/1/2009**	**VI-R1 & R5**	**Complete**	**See below**
1. Expand the use of web to communicate with customers	1/1/2008	6/30/2008	VI-R5	Complete	6/3/08: Enhanced mapping page, report/check an outage, outage information box, outage/storm photos options are available.
2. Enhance customer outage reporting capabilities	6/1/2008	1/1/2009	VI-R1	Complete	12/3/08: The ability to show where the customer service vans and ice distribution locations on the internet map has been implemented. The web has been updated with the capability to "report with the wires down and tree on wire. 9/3/08: On target 6/3/08: Created additional "report an outage" options, report wires down and trees on wires. Focus groups will be held to evaluate additional enhancements.

Risk/Cost/Benefit Analysis:

Benefits include better Company information about the nature and extent of customer outages, and enhanced customer and public understanding about outages and expected Company response and restoration time frames.

Team 10 - Call center capability testing (VI R2)

A significant challenge for utilities during an outage event is to allow customers to report outages and obtain outage related information timely and accurately. Over the years, Con Edison has continued to improve its customer operations via strategic planning and lessons learned derived from service emergencies and outages.

As a result of the 2006 Long Island City (LIC) event and three storm-caused electric service outages in Westchester, Con Edison has implemented a number of Call Center enhancements that have strengthened the Company's ability to better serve its customers during emergencies and outages. While many of the Call Center enhancements are put to use on a daily basis, several are triggered only during sizable outage events, which tend to occur infrequently.

The Audit Report recommends that Con Edison should test the new enhancements and capabilities of the Call Center under a major outage scenario. Con Edison recognizes the benefits of improving its emergency preparedness and welcomes the recommendation offered in the Audit Report. To that effort, Con Edison's Customer Operations organization has assembled a team – Call Center Capability Testing team – consisting of personnel from Customer Operations, Emergency Management, Public Affairs, and Information Resources to develop a comprehensive drill exercise that will test select Call Center enhancements that are triggered during large scale outage events. (VI-R2)

Audit Report findings VI-F1, VI-F2, VI-F3, VI-F5, and VI-F7 speak directly to the enhancements Con Edison has implemented since the 2006 events. It is important to note that findings VI-F1, VI-F2, and VI-F7 address Call Center enhancements, which are utilized on a frequent basis in customer operations – in most cases, on a daily basis. Equally important, the five findings (F1, F2, F3, F5, and F7) reveal that positive initiatives and improvements have occurred in the Call Center environment since the events of 2006. These enhancements are identified in the subsequent section of this document.

In addition to the steps described above, below are some key initiatives undertaken and improvements made by Con Edison that compliment its internal work plan. Many of these initiatives and improvements derive from recommendations made following the LIC and Westchester events.

- The Company continues to improve its High Volume Call Answering (HVCA) solution with Twenty First Century Communications (TFCC).
- The HVCA electric emergency application is currently being improved so that county/borough specific outage information will also be available on the TFCC platform.
- Call routing transfer services were incorporated in the HVCA call flow to route to a Customer Service Representative, the customer who is not able to report their electric outage via the TFCC automated emergency application are routed to a Customer Service Representative.
- Modifications to the call transfer process are being made to extend the call transfer capability to remote Con Edison and O&R customer service locations.

- Due to the expected infrequent usage of the HVCA services, the team suggested that periodic test actions be conducted to facilitate system operation and functionality. One of several test actions will be to perform a quarterly drill where live 'blue sky' electric emergency calls will be redirected to the TFCC electric emergency IVR application, so that customers may report their outages via the Call Center capabilities the Company will depend on during large scale outage events. Additionally, such exercises will enable Company employees to become more familiar with the tools utilized during emergencies. The first 'blue sky' quarterly test is scheduled for mid March 2008.
- As a means to measure how many data transactions can be carried over the dedicated data connection between Con Edison and TFCC, transactional volume testing was performed at a sustained rate of one thousand transactions per minute. This test simulated the reporting of numerous simultaneous outage transactions on Con Edison's test customer information system environment.
- The Call Center has implemented a variety of emergency call routing schemes/plans which enable maximum utilization of trunk resources. Additionally, the routing plans allow for the automatic transfer of customer calls to the TFCC HVCA emergency call flow application when Call Center inbound resources approach maximum utilization.

The Call Center Capability Testing team will design the drill, review lessons learned, and make adjustments to the systems as necessary. Participants in the drill will include Customer Assistance, Strategic Applications, Public Affairs and Electric Operations, Information Resources, Emergency Management, and external parties.

Team 10 Implementation Plan:

EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 10)	Start Date	End Date	Report Rec#	Status	Update and Documentation
Team 10 - Test Call Center capacity and improve ability to implement lessons learned	**1/1/2008**	**12/31/2008**	**VI-R2**	**Complete**	**See below**
1. Design Call Center capability test scenario	1/1/2008	4/1/2008	VI-R2	Complete	6/3/08: The drill test scenario was developed by April 1, 2008 and the drill was completed by May 1, 2008.
2. Perform Call Center capability drill exercise	4/1/2008	5/1/2008	VI-R2	Complete	6/3/08: This drill was completed on April 29th, 2008.
3. Review drill performance / identify lessons learned	5/1/2008	6/1/2008	VI-R2	Complete	6/3/08: Following the drill, lessons learned were identified and corrected.
4. Develop post drill exercise action items based on lessons learned	5/1/2008	6/1/2008	VI-R2	Complete	6/3/08: Based upon the lessons learned various initiatives were identified and completed.
5. Standardize procedures for periodic drill exercises	5/1/2008	6/1/2008	VI-R2	Complete	6/3/08: The frequency of various Call Center drills/tests has been defined. Additionally, dates for such drills have also been scheduled.
6. Continue to seek and implement Call Center enhancements related to emergency preparedness	1/1/2008	12/31/2008	VI-R2	Complete	6/3/08: Customer Operations continues to work to identify Call Center opportunities.

Team 10 Risk/Cost/Benefit Analysis:

Since the events of 2006, the Customer Assistance department has continued to challenge its operations to mitigate the risks associated with large scale outage events. Internal audits coupled with the Audit Report findings and recommendations enable the Call Center to identify its strengths and deficiencies in the area of emergency preparedness. To successfully manage large scale outage events, the Call Center must continue to exercise its internal work plan, develop periodic drills that test past and ongoing Call Center enhancements, and adequately plan and implement its emergency preparedness strategy.

Team 11 - Estimated Time of Restoration (ETR) methodology (VI R3-4)

The global ETR is the estimate of when all customers impacted by an event will be restored to service. In order to provide the public with a timely and accurate global ETR, damage assessment is needed. The Audit Report acknowledges that Con Edison has already taken measures to speed up its damage assessment process. Additional enhancements to this process are described in the Trouble Assessment Process section (Team 6) of this report.

Currently, the CERP stipulates that a global ETR will be developed and communicated within 12 hours after the end of a storm. The Audit Report indicated, however, that with regard to larger storms affecting more than 40,000 customers (level 3A), providing a global ETR within the 12-hour timeframe may not be achievable.

The Audit Report suggests a matrix approach, where the period to generate a global ETR is dependent upon the severity of the event. Accordingly, Con Edison is developing a matrix to determine reasonable time frames to provide Global ETR information based on the magnitude of the storm event. The time frames to establish a Global ETR are driven by such factors as the number of customer outages, the number of trouble jobs reported in STAR, and the time needed to acquire and analyze damage assessment data. The global ETR matrix covering weather events impacting the overhead distribution system will be completed by June 1, 2008. (VI-R4)

In an effort to utilize historical information and assist in providing timely and accurate global ETR information Con Edison has undertaken key initiatives listed below. (VI-R3)

Con Edison has developed a predictive damage model. The basis for the model includes historical storm statistics, historical weather data, and the development of resource estimates against storm job types. Statistical analyses were performed to develop relationships between these factors in order to drive a pre-storm prediction. Currently, Con Edison is piloting this predictive model in Bronx Westchester. The Company will validate and enhance statistical relationships as it applies the model to future storm events.

Con Edison has also initiated a Research and Development project to examine the feasibility of applying cutting-edge technology to forecast weather to a local level and enable near real-time impact of weather conditions on the overhead electrical system. It is anticipated that the forecast and real-time weather data will allow Con Edison to more accurately predict and respond to damage to its electric distribution system, allowing Con Edison to better mobilize resources when responding to storms. The Company anticipates using and evaluating the model later this year.

Team 11 Implementation Plan:

EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 11)	Start Date	End Date	Report Rec#	Status	Update and Documentation
Team 11 - Design and implement a process to establish Global Estimated Time of Restoration (ETRs)	**1/1/2008**	**12/1/2008**	**IV-R3 & R4**	**Complete**	**See below**
1. Continue the validation of predictive modeling tool in Bronx/Westchester	1/1/2008	7/1/2008	IV-R3	Complete	9/3/08: The predictive model has proved to be no more accurate than the existing static matrix currently in use. The model's usefulness is limited and no further modifications are anticipated. Further efforts will focus on the development of the Deep Thunder Damage Prediction Model as part of Team #8 tasks. 6/3/08: The predictive model was evaluated due to the adverse weather forecast in Westchester on eight occasions for the period of 1/1/08 – 3/25/08. Depending on the frequency of use and its effectiveness, a decision will be made as early as June 30, 2008 regarding the feasibility for deployment in the other three electric regions.
2. Develop a storm matrix considering the storm severity	1/1/2008	6/1/2008	IV-R4	Complete	6/3/08: A revised matrix has been drafted and is included in the 6/1/08 CERP.
3. Review of existing restoration targets included within CERP that take into consideration weather, number of customers affected and storm job counts	1/1/2008	6/1/2008	IV-R4	Complete	6/3/08: A revised matrix has been drafted and will be included in the 6/1/08 CERP.
4. Reinforce the process for estimating Global ETR for overhead distribution system power outages	1/1/2008	6/1/2008	IV-R4	Complete	6/3/08: Training on the "Global ETR Decision Matrix" for the Bronx Westchester Planning Chiefs has been completed.
5. Conducting focus groups to understand Customer expectations	6/1/2008	12/1/2008	IV-R4	Complete	03/03/09: See Team #1 item 4 12/3/08: See Team #1 item 4 9/3/08: See Team #1 item 4 6/3/08: Surveys are being developed and are anticipated to be sent out by June 13.

Team 11 - Risk/Cost/Benefit Analysis:

Benefits associated with implementing these recommendations include improved (timely and accurate) issuance of Global ETRs. These initiatives are closely linked to those being addressed by Team #6 - Trouble Assessment Process because the capability of providing timely and accurate information is dependent upon the damage assessment process. In addition, the predictive modeling and weather forecasting initiatives will further enhance the Global ETR process.

Team 12 - Vegetation management program (VII R1-2)

The Con Edison Vegetation Management Program, also known as the tree trimming or line clearance program, was significantly revised at the conclusion of 2006 for the Westchester County service area. While reaffirming its commitment to the three year cycle, Con Edison increased horizontal and vertical clearances. The Company also began an aggressive brush removal operation with the application of growth retardant stump treatment where allowed by municipal regulation. Con Edison developed an aggressive outreach and education campaign to communicate the need to maintain the distribution system and to promote long term vegetation planning and maintenance along utility easements. Finally, Con Edison invested in the professional development of its staff, encouraged and supported three of its field inspectors to acquire their International Society of Arboriculture (ISA) Certified Arborist designation, and hired a Manager in the Bronx/Westchester Electric Operations Region to manage and direct the tree trimming program, elevating the position to a Band 3 Section Manager level.

The Audit Report acknowledged that Con Edison has taken a number of positive steps in regards to the tree trimming program. These steps include: increased clearances (expanded line clearance standards); conducting inspections prior to trimming; increased communication with community leaders; new written material on tree maintenance; a commitment to forestry professionals; and a process to proactively contact landowners prior to trimming. The Audit Report also recognizes the inherent challenges in obtaining full support for a vegetation management program from 43 different municipalities in Westchester County, individual landowners, and associations. In addition, the Audit Report recognizes that the Company has increased its tree trimming expenditures in the Bronx/Westchester area by approximately 80% in 2006. The expenditures were further increased in 2007.

Con Edison has entered into a contract with BioCompliance to conduct an urban forest study of Westchester County. The study proposes to:

- Characterize the urban forest using existing data sets and a limited field assessment. Conditions will be inferred through the use of standard mortality profiles;
- Characterize the urban forest through more in depth study including direct assessment and analysis of data acquired through structured field sampling methods;
- Complete a comparative analysis of the urban forest in Westchester County and other suitable locales; and
- The study is in progress with an anticipated completion date during the second quarter of 2008. (VII – R1)

Con Edison has evaluated the effectiveness of the current tree trimming and clearing program through:

- An evaluation of the 1999 Environmental Consultants Incorporated Report of Con Edison's tree trimming operations to determine whether additional recommendations proposed would enhance the current program effectiveness;
- A review of and modifications to, the line clearance specification and bid award for years 2008 and 2009 of the first cycle;
- A survey of regional utilities to evaluate their program's components relative to Con Edison's and generally accepted line clearance practices;

- A literature search of research and trade articles published relating to well designed line clearance programs and the use of scientific methodologies for tree trimming;
- An evaluation of reliability metrics and decision analysis tools available for line clearance program scheduling and monitoring; and
- Proposing a Danger Tree Program to identify and eliminate off right-of-way tree hazards in between cycles.

Con Edison has also concluded that a wholesale review of the currently designed program and its effectiveness should be conducted after the completion of the first cycle. The first cycle concludes at the end of 2009. Therefore, in 2010, an expert in line clearance programs will be retained to conduct the assessment. (VII – R2)

Con Edison recognizes that an important element of an effective vegetation management program is the elimination of off right-of-way hazard trees and the removal of other dead vegetation. Using the results of the urban forest study, the Company is establishing a Danger Tree Elimination Program.

Team 12 Implementation Plan:

EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 12)	Start Date	End Date	Report Rec#	Status	Update and Documentation
Team 12 - Continue to expand vegetation management program to gain better understanding of Urban Forest	**1/1/2008**	**12/31/2011**	**VII-R1 & R2**	**Ongoing**	**See below**
1. Complete Urban Forest Study	1/1/2008	6/30/2008 Revised: 12/31/08	VII-R1	Complete	03/03/09: The Westchester Urban Forest Study was completed in December, 2008. The study assessed the condition of trees in proximity to the Consolidated Edison Company of New York overhead distribution system in Westchester County. The study found that there are large groups of trees that are of similar age and species. There is a disproportionate large number off trees that will advance and go into decline together posing a risk to the Con Edison distribution system. The utility forest differs from the natural forest in Westchester as well as the urban forest in the New York metropolitan area. 40 percent of the trees in the utility forest are subject to a traditional Line Clearance trimming program while 60 percent of the stems are beyond trimming limits but have the potential to create risk to reliability. To this end, the Danger Tree Elimination Program introduced in 2008 will help mitigate the potential consequences of this finding. Furthermore, using the study's conclusions as a basis for action, the Company will seek additional funding for off right-of-way tree hazard mitigation in the 2009 rate case submittal. Additional action items arising from the conclusions of this study will be reviewed and this report will become the foundation for a full program assessment to be conducted at the end of the first line clearance cycle. 12/3/08: The Urban Forest Study is on target for completion by 12/31/08. A review of the conclusion will follow and incorporated into the current tree

					trimming and clearing program. 9/3/08: Urban Forest Study: Research project in progress. Data analysis at the over-all population level using USFS "STRATUM" is complete. The research associates are currently working on the more detailed/specific analysis using MS Excel. Early September they intend to finalize the detailed analysis of the tree/urban forest related statistics. Following that the next step will be to compare random sample (entire Westchester OH distribution system) to the representative sample of 2006 storm plots using spatial GIS tool that were created. The report is scheduled for submittal in the fourth quarter of this year. 6/3/08: Preliminary assessment of Westchester County is complete and the comparative analysis with similar urban forest regions is on-going. A final report is anticipated in the 4th Quarter of 2008.
2. Evaluate the effectiveness of current tree trimming and clearing program relative to other reliability measures.	6/1/2009	12/31/2011	VII-R2	On-going	3/3/09: The evaluation progress is in progress.
3. Develop a danger tree program	1/1/2008	12/31/2008	VII-R2	Complete	6/3/08: The program has been developed and is underway.

Team 12 - Risk/Cost/Benefit Analysis:

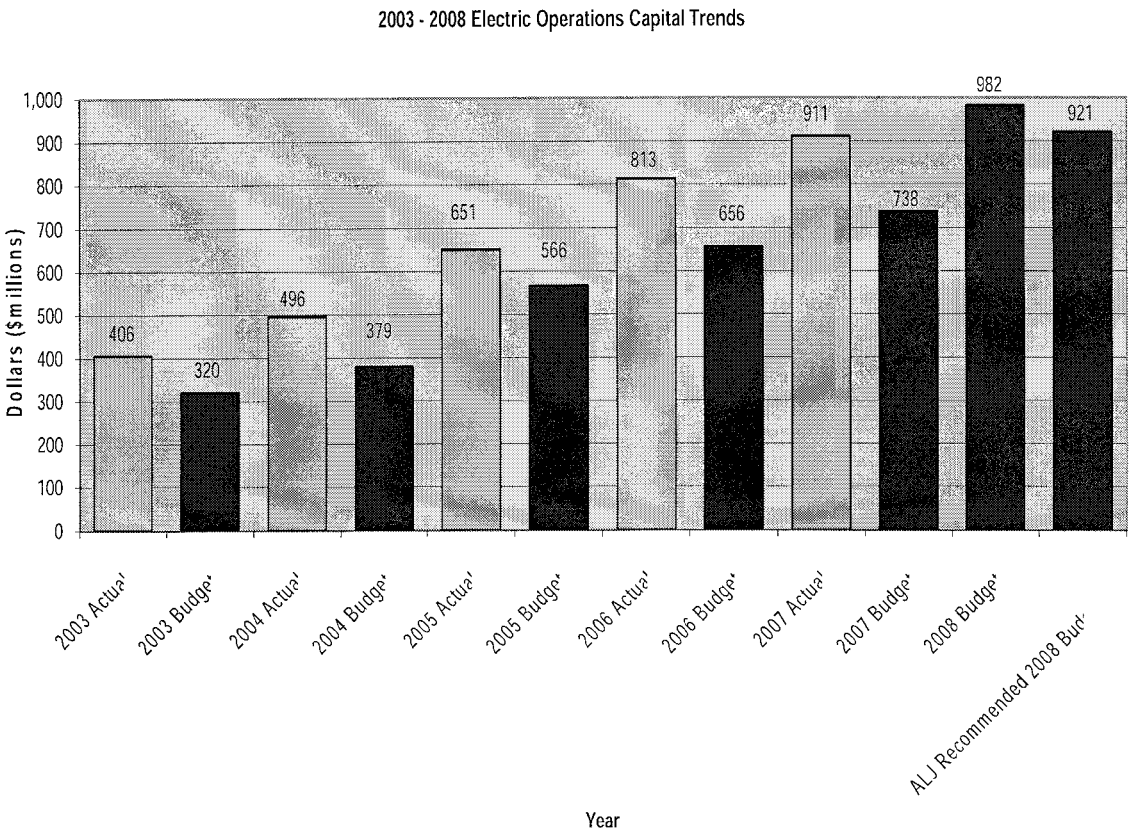
The benefits of the Urban Forest Study include a better understanding of the vegetation landscape in Con Edison's territory in order to better target the danger tree program spending. Risks associated with not performing the danger tree removal include extensive damage during future weather events (such as trees toppling over from outside the right of way) and causing significant damage and extended outages. Effectiveness review of the line clearance program after the first cycle will provide the insights on the potential improvements to the program going forward.

Team 13 - Financial and operational metrics (VII R3-4)

Financial Metrics

Con Edison's historical spending for years 2003 to 2007 includes $3.3 billion in capital investments for the electric distribution infrastructure. The Company steadily increased its budget plan and actual infrastructure investments in each of these years as shown in Exhibit 1. (VII-R3)

Exhibit 1



Con Edison's capital investments to enhance reliability are included in projects and programs. For example, between 2003 and 2004, substantial replacement of cable and equipment installations or upgrades was accounted for within other programs, such as emergency response, load relief, new business, public improvements, and maintenance work. Each year, in preparation for the summer months, the Company performs a series of maintenance and reinforcements activities that improve reliability throughout the distribution system.

These activities include:

- **Load Relief:** Cable and equipment replacement to further enhance reliability is added to work for the planned reinforcement of the primary and secondary systems.

- **Reliability Work:** Engineering reviews the reliability of distribution systems and issues layouts for the construction of reliability improvements prior to the summer months. These activities include replacing Paper Insulated Lead Covered Cable (PILC) and associated stop joints with more reliable equipment, and installing sectionalizing switches on feeders to facilitate and expedite restoration during outages.

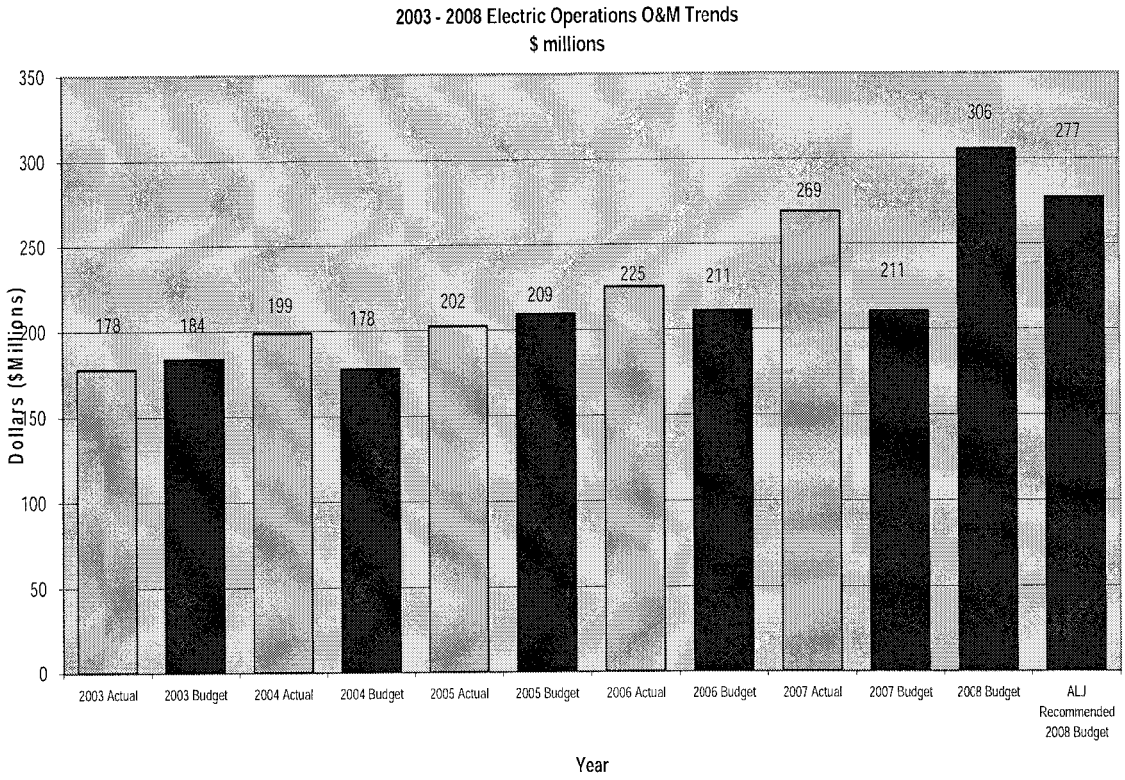
Capital investments to enhance reliability also include other work categories such as:

- **New Business** – In analyzing the distribution system to support new customer loads, the existing system is often at or beyond its capability. As a result, many of these residential and commercial projects require extensive infrastructure such as: secondary mains reinforcement, primary feeder extensions and transformer vault installations to adequately and reliably support these new/additional loads. The expenses for additional reinforcement and reliability are charged to our new business projects and therefore, results in higher costs for these projects.
- **Public Improvement** – Each year Con Edison invests significantly in public improvement projects, which require cable, manhole, transformer, and pole relocations. Projects involve system review and the resulting asset replacement contributes to overall reliability improvements.
- **Emergency Response** – Much of the PILC replacement program was charged under emergency response category. Emergency responders inspect equipment to determine if there is a need for additional PILC replacements or an opportunity to remove PILC and install new cable sections, thereby enhancing system reliability.

After 2004, Con Edison changed its record keeping to better track expenditures and to satisfy internal and external reporting requirements. Several of the reliability expenditures noted above were affected by that change.

Over the same five-year period 2003 to 2007, Con Edison has spent $1.1 billion in electric distribution operations and maintenance (O&M), as shown in Exhibit 2. This excludes expenditures associated with the July 2006 Long Island City (LIC) Network Outage and three major overhead storms in Westchester County. (VII-R3)

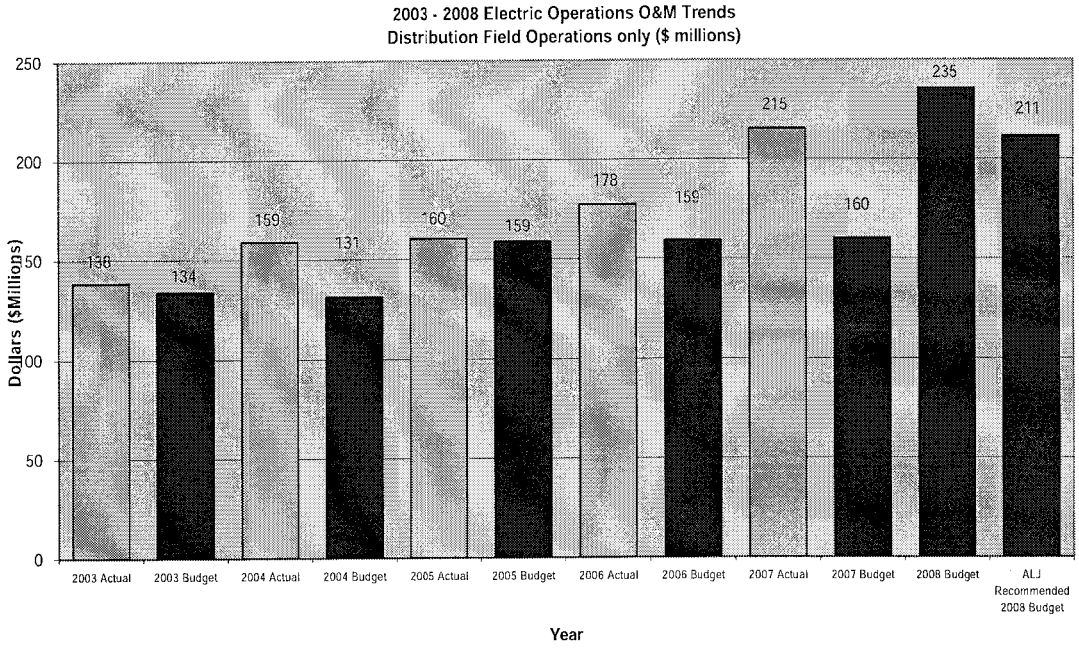
Exhibit 2



Approximately 90% of the spending is directly attributed to field maintenance activities. The balance goes to support activities such as engineering and administrative oversight. O&M expenditures in most years exceeded the budget amounts. The budget variance in some years (i.e., 2003 and 2005) was attributed to not spending storm contingency funding (which is included in every electric distribution O&M budget) as well as cost savings in engineering and administrative services.

The O&M expenditures attributed to direct maintenance activities in the field met or exceeded the budget targets in each of those years as illustrated in Exhibit 3.

Exhibit 3



The 2005 electric rate plan, currently in effect, provided the Company with significant increases for its infrastructure capital and O&M expenditures, allowing the Company the opportunity to further develop its focus on reliability. These increased expenditures reflect Con Edison's commitment to meet the continued growing customer demand and enhance reliability and safety programs. The Company is pursing the additional reliability improvement investments in the pending electric rate request.

Current Electric Operational Metrics

Con Edison has several key performance indicators that measure its performance relative to reliability, emergency response, and customer satisfaction. (VII-R4) The Performance Measures section of this report addresses future potential emergency management performance measures.

SAIFI/CAIDI Performance Indicators - The continuity of electric service is a key statistical measure of service reliability to our customers. This commonly used measure within the utility industry is known as SAIFI – System Average Interruption Frequency Index. Another measure of reliability is CAIDI – Customer Average Interruption Duration Index. Despite its ongoing and extensive participation in industry benchmarking activities, Con Edison agrees with the general findings of the Audit Report that implementation of best practices learned through these benchmarking efforts can be improved. In addition, Con Edison recognizes that there is a lack of focus among the multiple benchmarking programs, and no clear emergency response objectives are associated with existing efforts. With this in mind, Con Edison utilized the Audit Report

findings and recommendations as part of a comprehensive evaluation of the benchmarking and best practices processes utilized internally and throughout the utility industry. The Audit Report included six findings (VIII-F1 through VIII-F6) in the areas of benchmarking, best practices, strategic planning, research and development, and regulatory oversight.

At Con Edison, customer outage frequency and duration are measured for system wide reliability, Network system reliability and Non-network system reliability. These interruption measures are tracked for each outage event, compiled monthly for all regions and published monthly for the benefit of stakeholders. Annually, a formal report is filed with the DPS Staff to inform them of the Company's customer outage performance for the year. The Company is subject to monetary penalties in the event of not achieving targeted performance in any of the four categories.

Removal of Thermally Sensitive Stop Joints - during heat wave periods, 2Way 1Way stop joints are known to have above average failure rates. As a measure of reliability, removals of thermally sensitive stop joints are tracked to facilitate their removal from the system as expeditiously as possible. Current targets foresee 2Way 1Way stop joints off the system by year end 2008.

Reduction of Paper Cable - similar to the 2Way 1Way stop joint measure, paper cable (PILC) removed from the system is also a key reliability measure. Current targets require all paper cable (PILC) to be removed from the system by year end 2020.

Customer Satisfaction - during each rate year, the Company retains Communication Research Associates (CRA) to conduct two customer satisfaction surveys of callers, walk-in center visitors, and callers who call the phone center to report electric and gas emergencies. The scores for the two surveys for each application are averaged to determine the score for the year. The survey includes customers' ratings of how the Company handled:

- an electric emergency from the point of contact in the Call Center to the field repair;
- a gas emergency from the point of contact in the Call Center to the field repair;
- a call related to billing, credit or establishing service; and
- their inquiry when they visited one of our walk-in or Customer Service Centers.

Electric Shocks to the Public - A shock event is a public complaint of an electric shock to a person or animal from urban stray voltage. The Company will be considered responsible for an electric shock event having substantiated voltage and caused by failed Company equipment/cable. This indicator will measure the number of Electric Shock Incidents in Electric Operations as compared to the prior year.

Team 13 Implementation Plan:

EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 13)	Start Date	End Date	Report Rec#	Status	Update and Documentation
Develop Emergency Management performance metrics in support of the Emergency Management Principles	1/15/2008	1/1/2009	VII-R3 & R4	Complete	03/03/09: The KPI's have been finalized. 2009 KPI's - nergency Managem 12/3/08: The Key Performance Indicators are in the process of being finalized. Will provide a copy when finalized. 9/3/08: Key Performance Indicators are being developed and will be provided for the next update. 6/3/08: As the Emergency Management organization works through centralizing and begins to expand the breadth of scope consistent with the MIP, appropriate performance measures will be developed and included as part of the Company's 2009 Key Performance Indicators.
Develop Electric Operations Emergency Management performance indicator	5/1/2008	1/1/2009	VII-R3 & R4	Complete	03/03/09: The KPI's have been finalized. See item on above for a copy. 12/3/08: The Performance Indicators are in the process of being finalized. Will provide a copy when finalized. 9/3/08: Key Performance Indicators are being developed and will be provided for the next update. 6/3/08: As the Emergency Management departments develop their 2009 work plan, consistent with the MIP, appropriate performance measures will be developed and included as part of the Company's 2009 Key Performance Indicators.
Incorporate Emergency Management performance measures in 2009 Emergency Management business plan	5/1/2008	1/1/2009	VII-R3 & R4	Complete	03/03/09: The KPI's have been finalized. See item on above for a copy. 12/3/08: The Key Performance Indicators are in the process of being finalized. Will provide a copy when finalized.

Team 14 - Benchmarking & Best Practices program improvements (VIII R1-2)

Con Edison participates extensively in industry benchmarking of electric systems. Virtually every organization within the Company participates in some way in inter-utility and industry groups. Despite its ongoing and extensive participation in industry benchmarking activities, Con Edison agrees with the general findings of the Audit Report that implementation of best practices learned through these benchmarking efforts can be improved. In addition, Con Edison recognizes that there is a lack of focus among the multiple benchmarking programs, and no clear emergency response objectives are associated with existing efforts. With this in mind, Con Edison utilized the Audit Report findings and recommendations as part of a comprehensive evaluation of the benchmarking and best practices processes utilized internally and throughout the utility industry. The Audit Report included six findings (VIII-F1 – VIII-F6) in the areas of benchmarking, best practices, strategic planning, research and development, and regulatory oversight.

Con Edison reviewed existing benchmarking programs throughout the Company to evaluate the status quo and found that every organization participates in some way in an inter-utility and industry groups. The Audit Report does not adequately recognize the breadth of inter-utility activities Con Edison departments execute each year. Prior to the release of the Audit Report, Con Edison Distribution Engineering began participating in the PSE&G peer group, and also participated in an extensive statistical benchmarking effort with Polaris in spring of 2007. The Audit Report also incorrectly noted that Con Edison has yet to participate in Deep Thunder, which it considers a best practice. In fact, Con Edison is already involved in a trial implementation of the Deep Thunder system.

Con Edison's senior management has strongly supported benchmarking on a broad basis. However, the Company agrees that there are opportunities to better embed best practices within organizations. Senior management has also strongly supported research and development and the commercialization of advanced technology products. Through its comprehensive evaluation of the existing benchmarking programs and the evaluation of the Audit Report's findings and recommendations, Con Edison has identified additional opportunities to implement a benchmarking and best practices program that will effectively address Recommendations VIII-R1 and VIII-R2.

Con Edison will incorporate a centralized benchmarking effort as apart of its Corporate Emergency Management organization. As a result, Emergency Management will be responsible for coordinating with internal departments, identifying best practices, implementing lessons learned, and aligning Emergency Management benchmarking efforts with corporate strategy. This will facilitate a more formal information capture and dissemination process for communicating information as well as utilizing it to identify and implement best practices. The formalization of Con Edison's benchmarking and best practices program will be aligned with the Corporate Emergency Management principles established in the Company's Emergency Management Corporate Strategy. (VIII-R1)

Implementation of the emergency management benchmarking and best practices program will:

- Define emergency management benchmarking targets for the electric distribution organization;
- Establish a formal process for gathering, analyzing, and communicating benchmarking data;
- Identify best practices in areas with performance gaps; and
- Establish accountability for implementing best practices.

Con Edison will also work with DPS Staff to implement a collaborative program including all electric, gas and telecommunication utilities within the Commission's jurisdiction to develop best practice emergency preparedness and major outage restoration programs. (VIII-R2)

Master Implementation Plan of Consolidated Edison Company of New York, Inc.

Team 14 Implementation Plan:

EMERGENCY MANAGEMENT PROGRAM ENHANCEMENTS (Team 14)	Start Date	End Date	Report Rec#	Status	Update and Documentation
Team 14 - Review and consolidate Emergency Management (EM) benchmarking and best practice program	**3/1/2008**	**1/31/2009**	**VIII-R1 & R2**	**On-going**	**See Below**
1. Define the scope of the Emergency Management benchmarking and best practices program	3/1/2008	6/30/2008 Revised: 10/30/08	VIII-R1	Complete	12/3/08: A final version of the emergency management best practice and benchmarking program has been developed. Benchmarking Strategy Final 12010(9/3/08: A draft version of the emergency management best practice and benchmarking program has been developed. It is anticipated that this draft will be finalized for the next update. 6/3/08: The scope and strategy to be utilized for the Emergency Management benchmarking and best practice program is underway and is anticipated to be completed by June 30th.
2. Determine optimal Emergency Management benchmarking structure, establish group, develop detailed position guides and job postings for new positions.	6/30/2008	11/30/2008	VIII-R1	Complete	12/3/08: EMOS – The Risk Management, Weather Analysis and Benchmarking Section Manager has been filled. The two Project Specialists in Risk Management, Weather Analysis and Benchmarking Section have been posted. Interviews being conducted for the Risk Management and Benchmarking Project Specialist position.
3. Begin operations of Emergency Management benchmarking and best practices program	1/1/2009	1/31/2009	VIII-R1	Complete	03/03/09: The benchmarking and best practices program has commenced by developing survey and contacting utilities to set up benchmarking meetings. Team 14 090303 attachement #3.... 123-04 ConEd Survey v0.01 AK 2...

Master Implementation Plan of Consolidated Edison Company of New York, Inc.

					12/3/08: The Section Manager is currently on board and hiring risk and benchmarking project specialist.
4. Initiate Emergency Management collaborative program with Department of Public Service (DPS), New York jurisdictional electric, gas and telecommunication utilities	11/30/2008	12/31/2008	VIII-R2	Complete	03/03/09: Initiated Emergency Management collaborative program with DPS on 12/31/2008. S35C-40812311054 0.pdf (2 MB) 12/3/08: We are developing a proposal to discuss with Staff on how to initiate this collaborative program.

Risk/Cost/Benefit Analysis: Benchmarking benefits are not directly quantifiable. Dedicating employees to facilitate benchmarking on a full-time basis will provide the necessary resources to obtain a better understanding of design and operational philosophies employed at other utilities. Benchmarking with other utilities will allow Con Edison to implement the best practices throughout the Company, resulting in potential cost savings and overall improvements in business unit operations where best practices are identified and implemented, in emergency management activities, and in all aspects of customer service.

IV Attachments

A. Recent Emergency Management Enhancements

Optimal use of Company crews: When there is a reasonable probability that a major storm could hit Con Edison's service territory, including Orange & Rockland Utilities, Inc., or when OEM issues a Weather Warning, Electric Operations Emergency Management initiates an inter-regional conference call to discuss each region's preparations. The purpose of the call is to discuss each region's weather data, anticipated system impacts (if any), anticipated event classification, available resources and initial resource allocations.

Management of Mutual Assistance crews: A mutual aid organization has been formally developed and staffed with personnel with previous overhead background. This organization is responsible for the utilization of outside Mutual Assistance.

Pre-emptive declaration for a Full Scale underground event: In an effort to rapidly organize into an Incident Command System to strategically utilize the various resources of the Company, a Full Scale Incident can be preemptively declared when specific weather criteria are present.

Storm Process Overview training: Storm response employees assigned to participate in the emergency response are being offered an orientation via e-learning to help them better understand the process of emergency response efforts and their role on the storm response team.

Utilization of Underground Mutual Assistance crews: A formalized process for the potential use of underground Mutual Assistance and contractor crews during Full Scale, and possibly lower level, events has been implemented.

Optimization of trained resources: The roles of the Damage Assessor and Site Safety Representative have been clearly delineated to leverage their training. Damage Assessors will inspect locations and portions of feeders, assess associated damage conditions, and then report these conditions. Site Safety Representatives are dispatched directly to reported wire down locations to restrict access to the area and remain on site until repair crews arrive.

New Customer Count Team and Customer Assessment Team initiatives: To improve our response to secondary system problems, Customer Count Teams (CCT) composed of regional engineering personnel will utilize the new Network Trouble Indicator (NTI) algorithm designed to quickly identify potential underground outages, to investigate suspect feeders and help determine customer impacts. The CCT will interface with other storm management organizations to monitor job status and effect timely repairs.

Improved definition of Winter Storm response: In order to improve our response to underground events that typically result from salt water runoff after a snowstorm, the Comprehensive Emergency Response Program (CERP) plan now includes event classification matrices and triggers for mobilization of resources (including CCT and CAT) to respond to such events in a more timely manner.

Enhanced Outreach to Public Officials: We have formalized appropriate public official teleconference briefings during storms and other service outage related events.

Media: Media Relations will issue regularly scheduled press releases. Press releases will include information about the cause of the outage, the neighborhoods affected, estimated number of customers interrupted, overall estimated restoration time, claims information(when appropriate), and dry ice distribution sites.

Customer Service: Customers calling Con Edison's toll-free number receive information about the overall service restoration time, job specific restoration times, dry ice distribution, claims eligibility, safety tips and customer outreach advocates when dispatched to service outage locations.

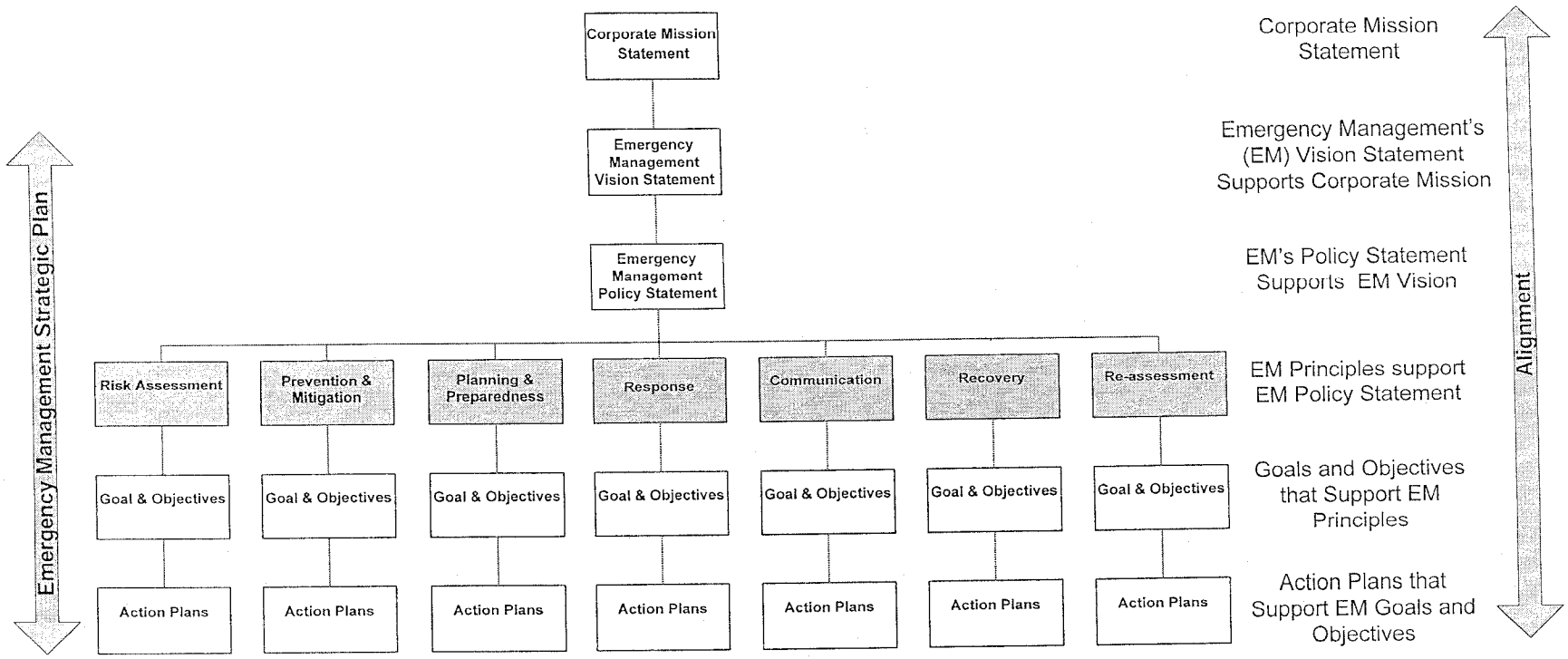
LSE Customers, Hospitals and Nursing Homes: The Communications Management Group alerts Life Sustaining Equipment (LSE) and medical hardship customers, hospitals and nursing homes prior to a serious or greater event. An annual outreach program designed to raise the awareness of customers and other affected individuals about the LSE program is conducted.

New York Mutual Assistance Group (NYMAG) Drill: Con Edison hosted the fall NYMAG meeting attended by representatives from all the NY utilities along with Northeast Utilities and First Energy. A "drill" was conducted to show members of the group what their crews can expect when they support our overhead emergency response activities.

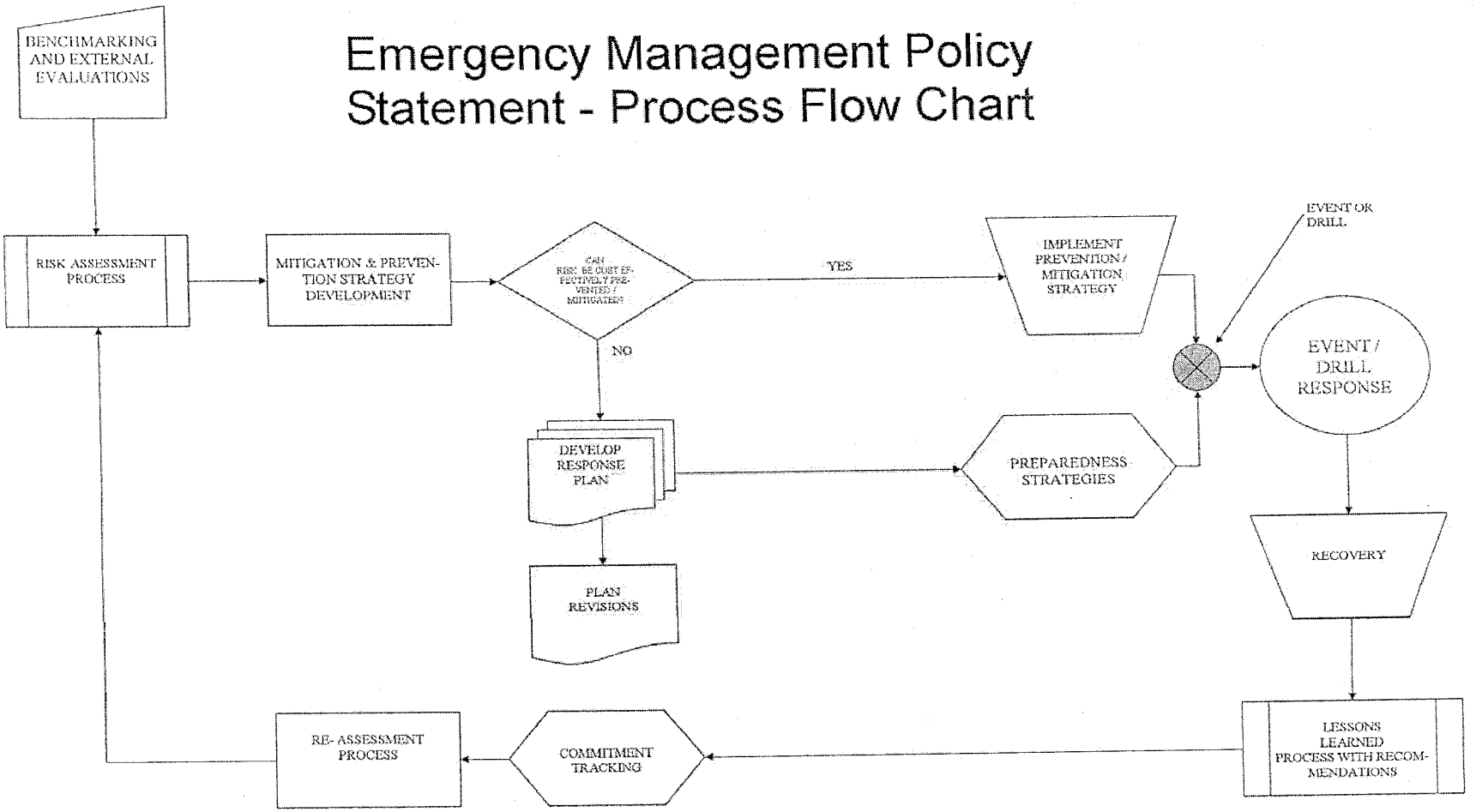
Outage Management System Enhancements: Several improvements
Several enhancements to information technology that directly affect emergency response activities have been accomplished including, automatic ETR access for voice response unit (VRU), global ETR reporting, database server upgrades, integration of Bronx/Westchester overhead Supervisory Control and Data Acquisition (SCADA) , and the integration on network graphical grouping function.

B. Emergency Management Strategic Plan Alignment

Emergency Management Strategic Plan and Alignment to Corporate Mission



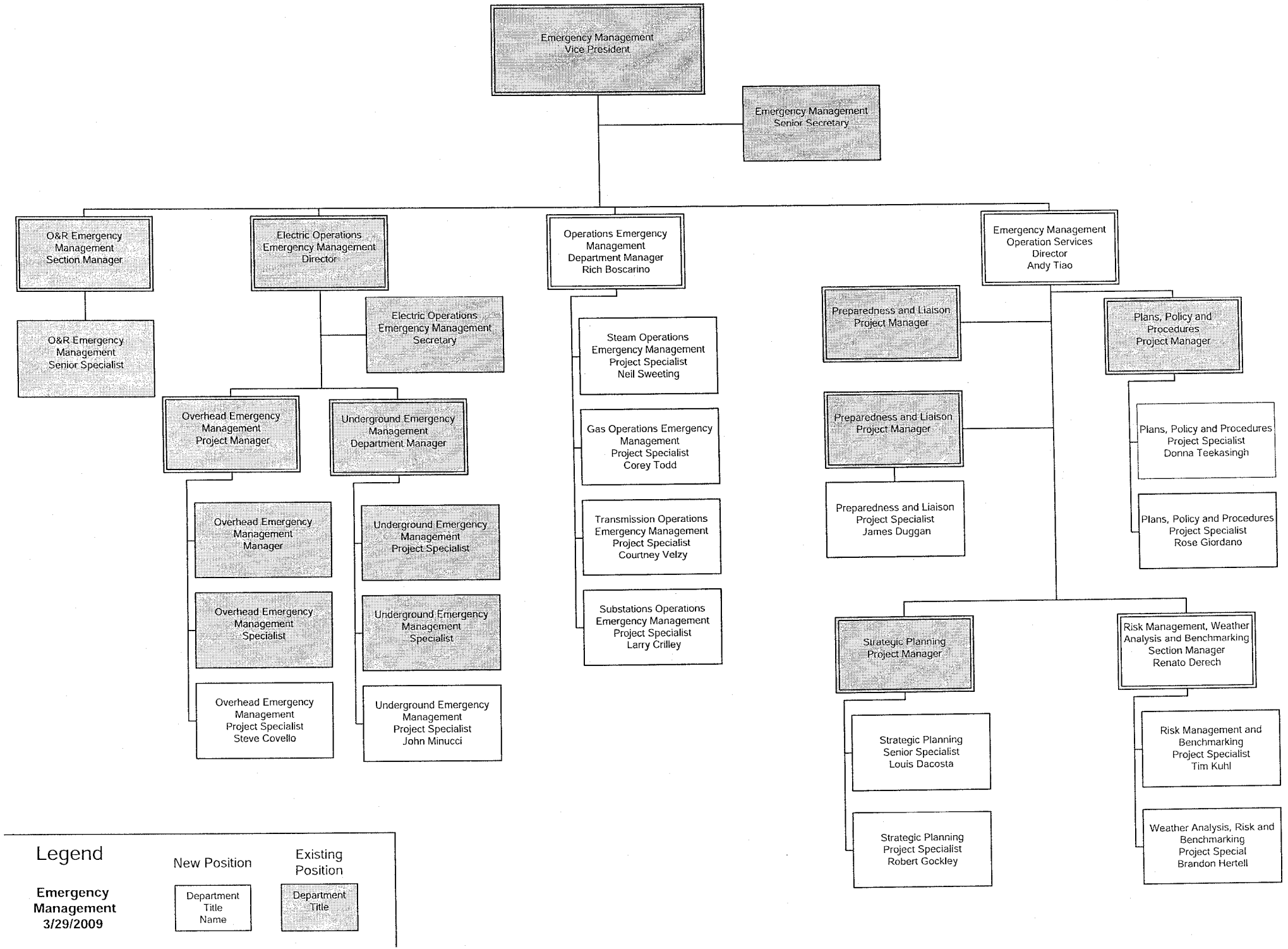
C. Emergency Management Policy Process Flow



D. Table of Acronyms

CERP	Comprehensive Emergency Response Program
CECONY	Consolidated Edison Company of New York
CAIDI	Customer Average Interruption Duration Index
CEMS	Corporate Emergency Management Strategy
DPS	Department of Public Safety
DE	Distribution Engineering
DECP	Distribution Engineering Command Post
DESR	Distribution Engineering Situation Room
EM	Emergency Management
EOEM	Electric Operations Emergency Management
ECS	Emergency Control System
EH&S	Environmental, Health & Safety
ETR	Estimated Time of Restoration
GUW	General Utility Worker
HVCA	High Volume Call Answering
IMS	Information Management System
IAP	Incident Action Plans
ICS	Incident Command System
IMAT	Incident Management Assist Team
LEMS	Logistics Equipment Management System
LIC	Long Island City
MIP	Master Implementation Plan
MVP	Management Variable Pay
PSC	New York State Public Service Commission
O&R	Orange and Rockland
STAR	System Trouble Analysis and Response
SAIFI	System Average Interruption Frequency Index
TAU	Trouble Analysis Unit
TFCC	Twenty First Century Communications

Emergency Management Organization Chart 3/29/2009



2010 O&M – Shared Services – Emergency Management

Project/Program Title	Emergency Management – Proceeding with Implementation Plan
Status	Ongoing
Estimated Service Date	Ongoing
Work Plan Category	Emergency Preparedness

Background:

In 2006, Consolidated Edison Company of New York, Inc. (Con Edison or the Company) experienced four major outage events on its electric distribution system. Three events involved storms that inflicted extensive damage on the mature urban forest of Westchester County and resulted in significant damage to the overhead distribution system. The fourth event involved extensive outages in Northwest Queens following equipment failures in the Long Island City secondary network (one of 59 such networks that Con Edison maintains in New York City). The lessons learned from these events highlighted an opportunity to redefine and enhance the scope of the Company's emergency management strategy.

Concurrent with the Company's initiative, the New York Public Service Commission (PSC) initiated an independent audit of Con Edison's electric emergency outage response program. While the Audit Report highlights many positive findings regarding Con Edison's emergency management practices, it concludes that the Company lacks a strategic framework for analyzing and making decisions on the relative priority of emergency planning and preparedness. The Audit Report recommended that Con Edison prepare a multi-year strategic plan focusing on system reliability, emergency preparedness, and major outage prevention and restoration with executive management taking a proactive role in setting the vision and priorities.

Upon the receipt of the Audit Report, Con Edison established an Emergency Management Steering Committee (Steering Committee) of senior executives. The Steering Committee oversees both the review of the findings and recommendations contained in the Audit Report and the development of initiatives to improve emergency preparedness, prevention, response and associated communication. With guidance from the Steering Committee, the Emergency Management Vision and Policy Statements were developed which are designed to be consistent with the Corporate Mission Statement and are focused on reliability, outage prevention, response and communications with our customers. Many initiatives have been undertaken as part of this implementation plan – commonly referred to as the Master Implementation Plan (MIP). The plan significantly expands and broadens the responsibilities of the company's Emergency Management resources. Staff concurred with our MIP.

As a part of this Plan, Emergency Management oversees the Company's emergency planning and preparedness activities and has increased its emergency management visibility within operations along with consolidating and centralizing the responsibilities for emergency management throughout Con Edison.

The MIP ensures that the implementation of the Corporate Emergency Management Strategy (CEMS) is consistent with the overall Con Edison Inc. Strategy. This consistency has been established and is memorialized through the alignment of the Corporate Mission Statement and Corporate Strategy with the Emergency Management Vision and Policy Statements. The Vice President of Emergency Management has overall responsibility for the implementation of the Corporate Emergency Management Strategy (CEMS). The MIP emphasizes the highest priority

2010 O&M – Shared Services – Emergency Management

efforts of communicating the plan, achieving organizational clarity and developing performance measures are consistent with the Emergency Management Principles necessary to initiate the multi year commitment to the implementation of the Corporate Emergency Management Strategy (CEMS).

The following highlight several of the 82 initiatives identified within the MIP:

- Customer Communication Enhancements
- Website Enhancements
- Global Estimated Time of Restoration
- Municipal Task Force
- Workforce Capability
- Establish Benchmarking / Best Practices Process
- Focused Drill Program
- Incident Command System (ICS) Enhancements
- The Storm Plan (Comprehensive Emergency Response Program (CERP)) Enhancements
- Enhanced Weather Modeling
- Initiation of a Collaborative with electric, gas and telecommunication utilities in New York State.

The MIP has 82 discreet items that Con Edison had to complete. On the March 3, 2009 report to Staff, Emergency Management had completed 72 of the 82 items and was on time for all items.

One of the items was associated with Emergency Management staffing plan. The MIP called for an increased in staffing from an initial count of 14 people in January of 2008 to a staffing level of 30 people by April 1, 2009 so as to be able to implement the Emergency Management Strategy. By December 2008, Emergency Management had 23 personnel. The increase in staffing included a Director, Section Manager, Project Specialist, and a Senior Specialist in Emergency Management Operation Services; a Department Manager and three Project Specialists in Operations Emergency Management; and a Project Specialist in Electric Operations Emergency Management.

In the first four months of 2009, Emergency Management hired another 7 personnel. This increase involved five Project Specialists in Emergency Management Operation Services; a Project Specialist in Operations Emergency Management; and a Project Specialist in Electric Operations Emergency Management. This brings the total staffing of Emergency Management to 30 personnel.

An increase in funding is being requested to better reflect the actual labor cost associated with filling the 16 Emergency Management personnel. The cost of labor in rate year ending 2010 reflects the cost of labor for the staff of 30.

2010 O&M – Shared Services – Emergency Management

Status of Additional Emergency Management Staffing

Emergency Management Organization	Existing 1/08	Addit'l 7/08	Addit'l 9/08	Addit'l 12/08	Addit'l 1/09	Addit'l 4/09
Executive/Administration	**2**	0	0	0	0	0
EOEM – Electric Operations Emergency Management	**7**	1	1	2	2	3
EMO – Emergency Management Operation Services	**5**	1	1	3	5	8
OEM – Operations Emergency Management	**0**	0	2	4	4	5
Total	**14**	2	4	9	11	16

Justification:

January 15th PSC Order – March 3rd Implementation Plan

Completion Date for hiring Staff:

4/2009

Total Funding ($ 000)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
950	**1,012**	**1,256**	**1,199**	**2,483**

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
4,562	**3,803**	**3,603**	**3,603**	**11,009**

2010 O&M – Shared Services – Central Field Services

Project/Program Title	Vehicle Fuel Costs
Status	Future costs
Estimated Service Date	
Work Plan Category	Efficiency and Process Improvement

Work Description:

Funding for vehicle fuel both unleaded and bio-diesel.
Note: data for gallons and price are for total Company

Justification:

Due to the dynamic nature of the commodities market and the corresponding effects on vehicle fuel, the Company seeks to have adopted a projection methodology that allows appropriate recovery of costs associated with vehicle fuel. Changes over historic years' actual expenditures can be due in part to changes in the volume of fuel consumed. However, in recent years, volatility in the commodities market has had a much greater affect on prices. There is no absolute predictor of fuel prices, especially over a 24 month horizon. It is important to develop a methodology that reflects expected prices as closely as possible. Unique considerations in the CECONY market area include the effect of local taxes on the total cost of fuel. Additionally, CECONY is subject to DOE EPAct regulations, requiring us to use B20 biodiesel fuel which is an additional premium over traditional diesel fuel.

The Department of Energy uses the most sophisticated model that we are aware of to incorporate data about the commodities markets, supply, demand and production capabilities over the appropriate planning-horizon. By combining historical and forward-looking price information published by the Department of Energy's, Energy Information Administration (EIA) and internal actual expenditures at CECONY – we intend to demonstrate the expected correlation between DOE projections and what should be expected in CECONY's market region.

DOE PADD-1 data best approximates expected prices for gasoline in the CECONY service territory and DOE national average for ultra-low-sulfur diesel approximates the cost to CECONY for ULSD B20 biodiesel. The Company has prepared testimony to describe the application of a formula to relate historic prices to expected prices using future-looking information.

2010 O&M – Shared Services – Central Field Services

Exhibit A – shows 2008 fuel data gallons and average annual price
Exhibit B(1) – shows historic national average gasoline prices as reported by DOE and actual CECONY gasoline prices
Exhibit B(2) – shows historic national average diesel prices as reported by DOE and actual CECONY diesel prices

Status:

Ongoing

Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
$4,474	$6,745	$9,746	$10,358	$13,886

Forecast 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
* $8,569	$9,634	-	-	-

* PSC ALJ Recommendation

2010 O&M – Shared Services – Central Field Services

Exhibit A

Vehicle Fuel Costs

($000's)

2008(12 Months)

	Diesel	Unleaded	Total
Gallons	1,966,276	1,999,670	3,965,946
Price/Gal.	4.054	3.353	3.710
Cost	$7,971	$6,705	$14,676

Assumption - 2011 RYE - fuel usage remains constant Average price used from DOE 2008 Forecast

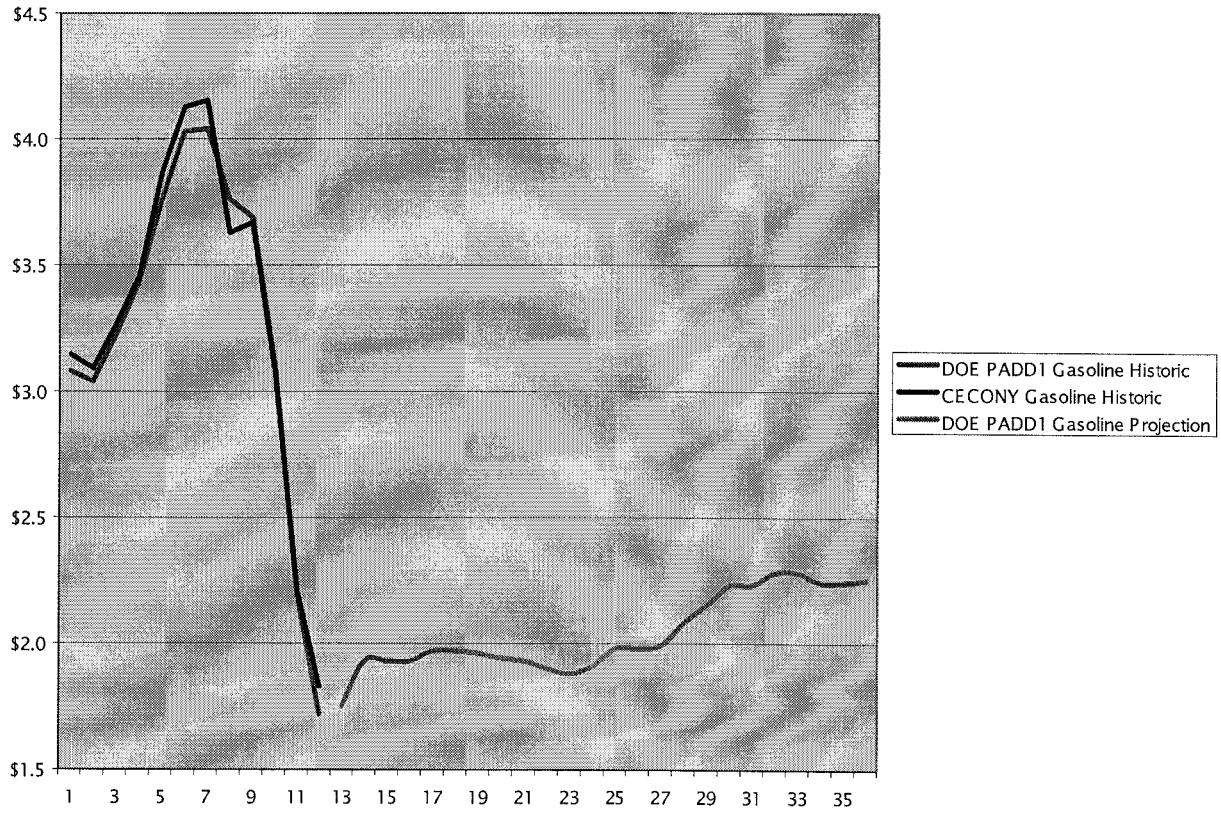
2011 (RYE - Forecast)

	Diesel	Unleaded	Total
Gallons	1,950,000	2,000,000	3,950,000
Price/Gal.	$2.8514	$2.037	$2.895
Cost	$5,560	$4,074	$9,634

2010 O&M – Shared Services – Central Field Services

Exhibit B(1)

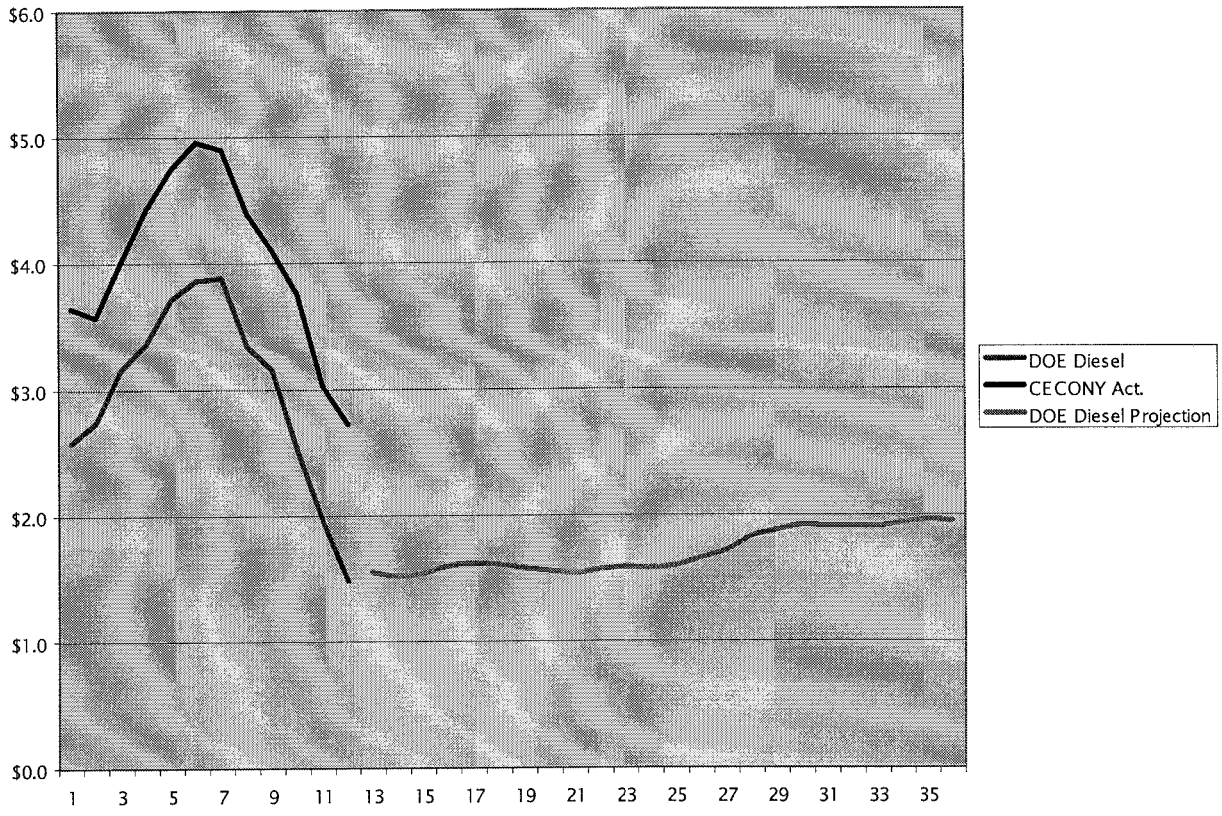
Chart shows historical difference between DOE PADD1 gasoline, the data point also used for projection of rate-year expenditure, and CECONY actual prices paid for gasoline during 2008 versus DOE projection through 2010.



2010 O&M – Shared Services – Central Field Services

Exhibit B(2)

Chart shows historical difference between the DOE national average for diesel, the data point also used for projection of rate-year expenditure, and CECONY actual prices paid for B20 biodiesel during 2008 versus DOE projection through 2010.



2010 Capital – Shared Services – Central Field Services

Project/Program Title	Emergency Operations - Logistics Emergency Management System
Status	In Progress
Estimated Service Date	2013
Work Plan Category	Efficiency and Process Improvement

Work Description:

Con Edison responds to significant events and incidents utilizing the Incident Command System (ICS) as defined under the National Incident Management System (NIMS). Within this structure, Central Field Services is tasked with managing the overall logistical response functions for CEI in support of the Corporate Emergency Management Strategy.

To help facilitate this process, the Logistics Emergency Management System (LEMS) application was developed. The initial module of this system has already been completed and it supports the sourcing, mobilizing and tracking of company-owned and leased mobile electric generators (MEGs). These units are utilized to provide system support during emergency and non-emergency conditions such as planned and unplanned outages.

Subsequent modules of the LEMS will be designed to support the following areas: the deployment of command vehicles; requests for cranes and rigging support; requests for Fleet Operations support including the deployment of tankers and the management of transporting drums of hazardous and non-hazardous waste; and requests for other logistical support such as light towers, ice and hoteling. The application will provide improved control and visibility in real time and assist with the management of resources and response efforts through readily available information for upper management, requesting organizations and external regulatory agencies. The application will also provide financial reporting capability.

Justification:

Currently, various manual processes exist for managing the deployment of resources to support planned and unplanned responses. These processes require numerous interactions and hand-offs that have the potential to cause delays and duplication of efforts. There is also a significant amount of resources dedicated to documenting and reporting this information to internal and external organizations to ensure data accuracy.

Operating departments have enhanced their IT systems to better manage work activities and they continue to move forward in this area. They also require immediate and self-service access to follow the status of their requests. Upper management and regulatory agencies have also increased their expectations towards immediate access to information. The development of this system will provide Con Edison with the ability to effectively manage resources and enhance the communication with operating areas. In addition, LEMS is being designed to classify resources following the FEMA format where applicable.

2010 Capital – Shared Services – Central Field Services

- Alternatives: Maintain the current processes that are in place

- Risk of No Action:
  Continued use of manual processes and paper documents will negatively impact CFS' ability to manage their assets and communicate effectively with their customers.

- Non-financial Benefits (if applicable):
  Self-service access for operating groups to monitor status of their requests
  Timely reporting to upper management and regulatory agencies
  Improved ability to efficiently reconcile vendor invoices

Estimated Completion Date:
All modules by 2013

Status:
Tankers module is in progress

Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	$300

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
$250	$250	$250	$275	$750	$1,775

2010 Capital – Shared Services – Central Field Services

Project/Program Title	Warehouse Management System Upgrade
Status	Planning
Estimated Service Date	2012
Work Plan Category	Efficiency and Process Improvement

Work Description:

This request is to upgrade the software of both the Warehouse Management System (WMS) and the Smartinfo reporting tool to the current release. The existing release of the products will have reached their end of their useful life and the vendor does not support releases beyond a certain time. As part of this upgrade, new functionality would also be available in the product that can be used by Central Field Services (CFS) including the ability to use RFID (Radio Frequency ID) tags and Electronic Product Code scanning. The product has also been enhanced to incorporate non RF based tasks, the ability to handle cross company/division processes and enhanced space optimization calculations.

System Description:

The WMS and its reporting tool (Smartinfo) is a vendor based product that is used by the Stores Operations department, of Central Field Services, to manage the Astoria Distribution Center (ADC) which serves as its' central warehouse. The system is wireless based and uses portable devices to receive stocked material and pick stocked material and cross-dock vendor materials for shipping. When information is entered into the WMS, it is automatically directed to Purchasing's Materials Management System (MMS) which updates the MMS in real-time. All materials transactions are stored in the WMS database and are retained there electronically for reporting purposes. The reporting function produces shipping manifests, vendor performance reports and a significant number of reports related to the management and movement of material.

When deliveries are received at the ADC the material and corresponding shipping papers are checked to ensure accuracy and that it corresponds to the WMS information. Once the material has been received and processed, it is then placed into inventory. CFS' customers place requisitions for material via MMS 24-hours a day and these orders are received by the WMS and are printed for picking. A stores employee, utilizing a forklift with an on-board radio frequency (RF) computer, enters material information and then picks the requested item(s) from the warehouse, labels the carton(s), and packages them for delivery.

Justification:

The current release of the Warehouse Management products will have reached their end of life by 2011 and will require replacement. The vendor does not support releases beyond a certain time. In order to get the proper support, we must upgrade the system at regular intervals. Additionally, upgrades allow us to use newer features that increase productivity and enhance system use. This includes the ability to use the new functionality of RFID tags and space optimization.

2010 Capital – Shared Services – Central Field Services

Estimated Completion Date:

2012

Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	-

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
-	-	$250	$275	$750	$1,275

2010 Capital – Shared Services – Central Field Services

Project/Program Title	Stores Operations – Scrap Cable and Reel Tracking (SCART)
Status	In Progress
Estimated Service Date	2010
Work Plan Category	Efficiency and Process Improvement

Work Description:

The Stores Operations department of Central Field Services is responsible for Cable Management. One aspect of cable management is the processing of scrap cable. When cable is designated for scrap, a shipping manifest is manually completed and the reels are sent to one of the contracted scrap cable vendors. Once the scrap cable has been processed, the empty reels are returned to their owners – either Con Edison or the cable supplier. The current process for creating a shipping manifest and tracking empty reels is largely manual, involving paper forms and excel spreadsheets. Significant coordination among the cable yards is required in order to track these empty reels. A project is currently underway to develop a computer system, called the Scrap Cable and Reel Tracking System (SCART), which will generate the scrap cable manifest and will allow for the tracking of the empty reels that result from the scrap process.

It is proposed that Con Edison continue to develop additional modules for the "Scrap Cable and Reel Tracking System (SCART)" application system. Modules to be included:
1. Accounts Receivable processing: A module to be implemented that would allow for the automated preparation of accounting data associated with the scrap metal process (e.g., scrap credits) and to transmit that data electronically to both the internal CECONY Accounts Receivable and the Material Management systems, as well as to and from the appropriate vendor.

2. Vendor Access: module to be implemented to allow for the scrap cable vendors to have real-time access to the SCART system in order to electronically acknowledge and confirm scrap cable deliveries and to update the status of the empty reels once the scrap cable has been removed. Also provide the ability to electronic capture scrap metal weights, metal prices and reimbursement amounts owed to Con Edison.

3. Wireless devices: the third module to be implemented would allow for the cable crews in each of the regional cable yards to operate wirelessly. Introducing a wireless handheld device would save time and eliminate paperwork at minimum, allowing the cable crew to scan barcodes on the cable reels to get reel numbers, electronically capture the weight of each scrap reel, and to electronically capture the signature of the truck driver.

2010 Capital – Shared Services – Central Field Services

4. Eliminate associated paper forms: the fourth module would both study the processes surrounding the existing paper forms like the Material Request Form, Material Credit form, Charge and Memo of Shipment form and the Hazardous Waste Manifest and build a computerized replacement to the paper process.

Justification:

Currently, various manual processes exist for managing the cable process. These processes require manual paperwork, numerous interactions and hand-offs, creating delays and duplication of efforts. A significant amount of effort is dedicated to documenting and reporting this information and reconciliation requires an extensive amount of manual effort to ensure data accuracy.

- Alternatives: None
- Risk of No Action:
  Continued use of manual processes and paper documents will be slow and labor-intensive
- Non-financial Benefits (if applicable): Automation of Process
- Project Relationships (if applicable): Hold on Warehouse Management System Project

Estimated Completion Date:
Scrap Cable Manifest and Reel Tracking – 2010

Status:
Scrap Cable Manifest and Reel Tracking is in progress

Current Working Estimate (if applicable):

N/A

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Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	-

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
$250	$250	-	-		$500

2010 Capital – Shared Services – Information Resources

Project/Program Title	ICON Radio Wireless System (iCON, UHF& Microwave) Improvements
Status	Planned
Estimated Service Date	Various – see below
Work Plan Category	Strategic IT enhancements

Wireless Systems Improvements

Work Description for establishing Mount Vernon Site:

The increased use of wireless in the area around Mount Vernon in lower Westchester boundary with the Bronx has raised the radio frequency noise floor and interference to the iCON radio infrastructure deployed in 2002.

This situation has led to marginal radio coverage in the area which makes it difficult for work crews to communicate using the iCON radio system.

A new iCON omni-directional radio site is proposed to provide reliable coverage and improved quality of service for voice communications in Mount Vernon and environs. Such benefits have already been realized on the DAS radio system from its radio equipment at Mount Vernon.

Work Description for Replacing iCON Portable Radios:

The existing iCON user radio population consists of 3500 Motorola iDEN radios altogether. There are 2500 portable radios, and 1000 mobile, desk , base and dispatch radios. The portable radios are i1000, i550, and r750 models and the others are m470 and m370 models.

The radios have been in service since 2002. The cost of repairing the radios has increased over the years and the cumulative costs will soon approach that of a new portable for the majority of the radios, having already exceeded it for those that are used in the most demanding operating environments.

Motorola has developed a new portable, the r765, that will provide the added capabilities and performance described below. Moreover, the r765 will replace the i1000, i550 and r750 models.

A program to replace the 2500 portable radios is proposed to provide reliable communications, improved voice quality and to avoid the increasing costs associated with maintaining the aging population. Also, a single portable will vastly simplify the maintenance and support processes.

r765 Features many of which do not exist on current units :

Improved RF Performance; Professional Series Connector; Antenna Port; Top Controls; Removable Fixed Antenna; Improved Battery; Top Controls; Assignable Function of Controls; Dual System Capability (Two SIM Cards); Improved Screen (Color); GPS; Bluetooth; Improved; Phone Book; Hands Free.

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Work Description for Replacing United Hospital with iCON at Rye Service Center:

The existing residence building located at United Hospital is facing eminent demolition, as the hospital is closed, and the property has been sold.

Relocation of the iCON/DAS radio site to a permanent secure facility providing equal or improved coverage is imperative. A comprehensive study was commissioned to identify possible sites within an acceptable radius; Rye Service Center (Con Edison site) met all conditions, and exceeded expectations. Additionally, a Geotech analysis site survey has proven the property is within all norms for tower construction.

Secondary benefits of relocation to Rye, elimination of rental fees for a commercial property, and the savings of utilizing existing Bedford iCON shelter and equipment, which is scheduled for decommission. This includes an additional savings of rental fees.

The scope of work includes, Construction of a 180' tower, installation of local power, direct connection to CCTN at Rye, relocation of fully operational shelter including integrated back-up generator to site.

Work Description for Consolidating Empire State Building & Buchanan SS:

Empire State Building, (ESB), and Buchanan SC/SS, (BUC), consolidation and upgrades are essential to replacing obsolete, and near obsolete infrastructure, improve site reliability, reduce rent costs, and increase safety of sites.

ESB, Reduce overall room footprint, replace inadequate HVAC systems, modernize electrical distribution, lower energy usage, rebuild grounding system, and most important, improve, fortify, and upgrade lightning protection for personnel and reliability of network systems.

BUC, Retire and relocate all communication facilities located at Buchanan Service Center, Install a prefabricated CCTN shelter at BUC SS which will contain all CCTN, Microwave Radios, including existing link to Graymoor iCON/DAS site, and planned link to Hudson River East iCON/DAS site. Improving BackHaul reliability.

All CCTN currently located in Control Room and temporary trailers on SS property to be relocated in same shelter, full backup power, including generator, will enhance the network reliability.

Work Description for Upgrading UHF Radio System:

UHF Radio System, also know as "Central", SS Man-Down, and CIG Radio. These three operational aliases share UHF channel # 6 of eight Con Edison licensed pairs.
The equipment supporting the "Mainframe" is located on ESB, (Empire State Building), four receiver "Satellite" stations, (located on towers and buildings); exist to improve "Talk In" reception. Multiple links and ancillary lines connect this system.

Most components are at or reaching End of Life. (EOL), parts are difficult, or becoming impossible to obtain.

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Upgrading is imperative, this includes replacement of Base Radios, (Repeaters), Antenna Combining System, Antennae, adding a secondary transmission site in northern Westchester, replacement/addition and possible relocation of satellite receivers. All ancillary remote control, management level access, and interface to VoIP.

The ultimate goal: A straight forward communications system for everyday SS OPS Man-Down notification, Gen Station, Over the Air backup, and a viable partner to Con Edison's iCON system which together, if the situation demands, provide a solid platform for unified radio communications system wide.

Work Description for Implementing Microwave Backhaul Links:

iCON Radio and DAS remote sites require BackHaul circuits to link voice and data to their respective networks served. Currently this connection, for the majority of sites rely on commercial carrier, i.e., Verizon, etc., some redundancy exists where CCTN is available, or Microwave BackHaul has been installed.

These are the most reliable sites in the system, as the CCTN system is second to none in reliability factor. The installation of new microwave radios at the remaining sites will provide the "Hardening" factor which is not possible from the common carriers, either land line or wireless.

Site design includes Path Analysis, for signal integrity, Structural Analysis for construction integrity, and efficiency consideration of each location.

Physical installation is a typical small Parabolic, (3') or Panel type antenna. Cabling, with mechanical supports vary by structure. Power is supplied from existing 48VDC plant.
Radio is typically located within existing shelter.

An added benefit, WAN connection remote monitoring of power supplies, real time environmental conditions, security, including video, and verification of all entry.

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Justification for iCON, UHF & Microwave Systems Improvements:

The project will:

- Improve communications reliability and availability
- Expand radio coverage of the iCON system
- Maintain workforce productivity and safety
- Improve voice quality
- Avoid increasing repair costs
- Simplify maintenance & support

Justification for Site Consolidations:

The project will:

- Improve communications reliability and availability
- Reduce lease and operational costs

Completion Dates:

Establish iCON Site at Mount Vernon	03/31/2011
Replace iCON Portable Radios	12/31/2013
Establish iCON Sites at Rye Service center	12/31/2010
Empire State Building Consolidation	12/31/2010
Buchanan Substation Consolidation	12/31/2010
UHF System Upgrade	06/30/2011
Microwave Backhaul	06/30/2011

- Alternatives: Increased costs for carrier communications to supplement iCON communication resulting in limited diversity for critical communications.

  Increased costs for repairs, difficulty in acquiring parts and service once the new radio is more widely deployed and adopted by other users. There are no alternative manufactures of iDEN equipment.

- Risk of No Action: Failure to improve radio system performance in the area will result in lower productivity of work crews and unnecessary delays in the area because of the inconvenience of using multiple communications devices.

  Diminished manufacturer's support as more resources are invested in the newer radio.

- Summary of Financial Benefits and Costs: Financial benefits will result from co-locating the iCON equipment with the existing DAS equipment at Mount Vernon as opposed to developing a new site from scratch.

  Cost avoidance to repair radios.

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- Non-financial Benefits (if applicable): Work crews will not lose the advanced emergency communications functionality available with iCON by having to resort to carrier based communications devices that do not provide this advanced capability.

  Provides a radio that is better suited to our work due to the Con Edison's input during the development phase of the r765.

- Technical Evaluation/Analysis: Initial technical analysis is inferred from the efficacy of the existing DAS radio site at Mount Vernon, which provides excellent radio coverage for the SCADA system in spite of the fact that the DAS system transmits one-tenth the power capable from an iCON radio site and that the iCON 800 MHz spectrum has better propagation characteristics than the DAS 900 MHz.
  If the DAS performs this well at Mount Vernon, the iCON is expected to do better.

  Preliminary On-Air testing of i765 show improved receiver sensitivity, increased processor speed, improved audio quality on both uplink and downlink. (Transmit and Receive).

  There are many options, which require further research to "Customize" to Con Edison's needs and preferences, total lock-out of Off System Point to Point, a.k.a. "Moto-Talk"

  Improved accessory connector, compatibility with Professional Series desktop chargers (HT-1250 UHF), is a welcome improvement.

  Addition of top controls for quick access to Talk Groups, and Private ID's is a major improvement.
  Same for top mounted volume control. We are awaiting a comparable Vehicle Install Kit to evaluate with this product.

  Full function results will be available soon.

- Sensitivity Analysis (if applicable): Not applicable.

- Project Relationships (if applicable): There is a direct relationship between establishing an iCON site at Mount Vernon and replacing the site at United Hospital with one at Rye Service center and the project to replace the iCON portable radios. They are both approaches to improving radio communications on the iCON system – infrastructure and subscriber units respectively.

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Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
0	0	0	0	0

Project	Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
iCON Site at Mount Vernon	0	90	90	0	0	180
iCON Portables Replacement	0	1,000	1,000	500	0	2,500
iCON Site at Rye Service Center	0	450	0	0	0	450
ESB Consolidation	0	250	0	0	0	250
BUC Consolidation	0	300	0	0	0	300
UHF System Upgrade	0	200	50	0	0	250
Microwave Backhaul	0	77	55	0	0	132
TOTALS	**0**	**$2,367**	**$1,195**	**$500**	**0**	**$4,062**

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Project/Program Title	SCADANet
Status	Planned
Estimated Service Date	2012
Work Plan Category	Strategic IT enhancements

Design and Implement SCADANet

Work Description:

The increased use of microprocessors in the energy delivery environment has greatly increased the ability to collect important operating data and improve automation and control of assets from control centers. A new, physically diverse SCADANet operations communications network is proposed to provide reliable access from control centers to energy assets in substations and in the field. The network will be designed and implemented using TCP/IP. A private high-speed core network will link control centers and, using a combination of company owned private communication circuits and carrier services, provide the means to run multiple SCADA applications across a single infrastructure. Substations and other locations will have multiple connections to the core. Public networks and carrier links will enter the network at 2 core locations and have additional layers of security. The project will utilize existing fiber assets from the Company's private network and be complimented by wireless technology.

Justification:

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, FERC and 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 piloting multiple new SCADA and Smart Grid applications. In addition, a February 2009 PSC order requires Con Edison to pilot AMI to determine its value in the future. The following initiatives have been identified:

- Pilot of Smart Meters and AMI
- Home Area networks for demand management
- Feeder Reconfiguration
- Secondary Model validation
- Transformer Monitoring
- Distributed Generation control

Smart Grid initiatives which monitor and control energy delivery assets require secure, reliable and high-speed communications. These applications and the data acquisition cannot be merged onto existing Corporate networks and compete against large file transfers or email. Designing and implementing individual communications for each initiative will result in the duplication of network components, increased operating costs and ultimately reduced reliability. Combining the requirements into a redundant and diverse high-speed network will provide the most efficient

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and effective solution. The proposed network will include designs to allow Smart Grid initiatives:

- High speed network with redundancy and diversity
- Leverage existing investment in Company private network
- Grow as needed without large network expenditures
- Operate securely and within regulatory guidelines
- Provide a private wireless solution to enable last mile connectivity with incremental costs with only incremental costs for field devices
- Establish security layers for public network (Internet and carrier) interconnections

Completion Date:

2012

- Alternatives: Alternative networks for providing Smart Grid solutions will require extended use of the Internet and other public networks. This will increase security and reliability risks associated with using public networks. A carrier based network will also increase costs associated with providing scalability, redundancy and diversity. Installation and support costs increase due to duplication of network components.

- Risk of No Action: Failure to implement new smart grid technologies due to security and reliability exposures. The proliferation of multiple critical and unmanageable networks to support energy delivery

- Summary of Financial Benefits and Costs:

- Non-financial Benefits (if applicable):

- Technical Evaluation/Analysis:

- Sensitivity Analysis (if applicable):

- Project Relationships (if applicable):

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Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
0	0	0	0	0

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
0	$1,900	$1,630	$1,370	0	$4,900

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Project/Program Title	Data Warehousing & Business Intelligence
Status	Working
Estimated Service Date	2012
Work Plan Category	Strategic IT enhancements

Work Description:

A Data Warehousing and Business Intelligence *(BI)* program will be implemented in key operational areas for Con Edison. The fundamental goal of the program will be to improve Con Edison's business intelligence to further achieve customer and management goals. The data warehouse /BI project will improve both strategic and operational decision-making by providing analytical information (historical and predictive) that can be managed by members of the business areas. For the program, the following major components will be developed:

- An Enterprise Data Warehouse architecture to address data quality, timeliness, availability and accessibility of information.
- A Metadata layer to enforce information consistency by allowing data within the data warehouse to be defined in business terms and using business rules.
- A framework that aligns operations and management strategy and communicate performance results and actions at all levels, and to respond to internal and external stimuli in real time.
- Business scorecards and dashboards, designed in cooperation with business users, which provide "at-a-glance" information.

Justification:

The objective of the Data Warehousing and Business Intelligence program is to provide Con Edison operations personnel and management with better insight across operational groups and systems, with the help of data warehousing and business intelligence technologies, leading to:

- Improved understanding of our customers
- Business optimization through greater operational efficiency and cost control
- Improved management reporting and the ability to "drill down" to details
- Effective leveraging of information stored in disparate systems
- Improved information reliability and timeliness for compliance reporting

The Data Warehousing and Business Intelligence program will enable the business to:

- View the organization from a customer, financial, business process and learning perspective (consistent with the concepts of a Balanced Scorecard)
- Respond to compliance reporting requirements with greater information accuracy, timeliness and traceability.
- Increase productivity by providing self-help capabilities and enabling users to spend more time in decision-making
- Focus on targets and goals through improved visibility and measures and reduced time to action
- Share quality and timely information across the organization

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- Measure critical success factors such as productivity, profitability, quality, safety, compliance, customer service/satisfaction and employee satisfaction
- Provide the ability to mine data – predict future performance based on past behavior, and identify patterns and trends to predict performance

Alternatives:
- None. There is no real alternative to bringing information together for meaningful reporting and analysis.

Risk of No Action:
- Lack of timely, quality information for operational users and management
- Information that supports strategic insight more difficult to obtain or not available
- Compliance reporting is more difficult to accomplish and less reliable
- Lack of information lineage (i.e. traceability of information)

Estimated Completion Date: 2012

Status: **Working**

Current Working Estimate (if applicable):

Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	793

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
2,300	2,300	2,100	1,800	-	8,500

- **Authorization – $8.5M**
- Appropriation – The project has been appropriated for $1.9M. Individual appropriations will be prepared on a yearly basis

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Project/Program Title	Data Center Renovation / Network Operations Center
Status	On-going
Estimated Service Date	2011
Work Plan Category	Strategic IT enhancements

Work Description:

One of the goals of the data center renovation project is to construct facilities that would support a Network Operations Center (NOC). The NOC would be constructed in the data center in close proximity to critical corporate IT resources. The NOC facility would be staffed 24/7/365 by experienced systems analysts who would conduct enterprise-wide predictive, condition-based monitoring of Business Application, servers, networks, communications, and infrastructure in order to meet expectations for 24/7 availability of critical computing and communications resources.

The major objectives of the NOC implementation include:

- Design and implement the physical control room structure that will achieve monitoring objectives through the efficient use of audio/video technology and location of personnel resources.
- Evaluate and implement enterprise monitoring software tools that will enable real-time predictive and proactive monitoring capabilities.
- Centralize the organizational roles for monitoring of infrastructure, applications, telecommunications, facilities, Help Desk and mainframe operations.
- Consolidate routine operational maintenance activities.

A future phase of this project would include an alternate NOC back-up location

Justification:
Information Resources currently performs decentralized monitoring of its telecommunications, mainframe and distributed systems, with limited monitoring of facilities related resources.

The current decentralized monitoring model is not operating at optimal operational efficiency. Centralizing and consolidating operational staff into one physical location would enable Information Resources to focus on strategic initiatives that support business goals and Con Edison's commitment to electric, gas and steam customers.

Establishing a centralized monitoring model through a NOC will also:

- Reduce the risks and vulnerabilities associated with network outages by consolidating monitoring responsibilities under one organization.
- Reduce the likelihood of downtime of IT resources through proactive and predictive monitoring.
- Improve operational efficiency through enhanced controls and improved operating processes.
- Improve communications and coordination between internal support groups
- Improve scheduling and change management strategies.
- Improve the coordination of third party circuit carriers, i.e., Verizon, response by evaluating current outages and prioritizing their repair.

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- Alternatives: Failure to improve monitoring capabilities will result in reduced availability of critical business applications. As more applications become integrated failures in any application will affect others but recovery and impact will be delayed without the focus prescribed in this project.
- Risk of No Action: Failure to improve monitoring capabilities will result in reduced availability of critical business applications. As more applications become integrated failures in any application will affect others but recovery and impact will be delayed without the focus prescribed in this project.
- Summary of Financial Benefits and Costs: see below
- Non-financial Benefits (if applicable): see above
- Technical Evaluation/Analysis: Organizational structure planning is in progress, monitoring tools have been identified for selection.
- Sensitivity Analysis (if applicable):
- Project Relationships (if applicable):

Estimated Completion Date: 2011

Status: Working

Current Working Estimate (if applicable):

Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	-

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
$2,726	-	$909	-	-	$3,635

- **Authorization – $3.6M**
- **Appropriation – $2.4M**

Through consolidation and automation, it is expected that the NOC would realize an IR Human Resources savings of two (2) FTE's (equivalent annual savings of approximately $200,000).

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Project/Program Title	Other Business
Status	On-going
Estimated Service Date	On-going
Work Plan Category	Strategic IT Enhancements

Replacement of Unsupported Technologies

Work Description:

The application portfolio and infrastructure technologies will remain current and supportable by Company resources. Security, functionality and reliability necessitate maintaining software and hardware components at version levels that are supported by vendors, manufacturers and market work force. Technologies that are unsupported are targeted for replacement or upgrade. Scheduled projects in this category include:

- Ramis
- SQL Windows
- Cobol Upgrade

Justification:

The project will provide for:

- Improve system reliability and availability
- Maintain secure computing environment
- Align skills with market workforce availability

Completion Date:

On-going

User Technology Plan

Work Descriptions

Create an environment where computer users are informed of available technology, how to use it and how to incorporate into business processes. Ensure personnel receive maximum gain from software and other technology purchases. Develop and implement applications to improve employee productivity and efficiency. Provide awareness about security and IT procedures, and provide self service processes to improve productivity. Provide access to assistance and information about the best ways to use technology including user guides and web sites. Improve access to procedures to allow more employees to access security and IT information. This will include

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- Develop and implement desktop applications
- Implement Microsoft Office 2007 and train employees on new features
- Expand the computer security website
- Program for employee technology notifications and awareness
- Develop and implement a web based computer security awareness quiz for all users

Completion Date:

On-going

Enterprise Software & Collaboration

Work Description:

Provide an environment for employees to collaborate and communicate using latest desktop and office tools. Enable employees and teams to collaborate and share information in an efficient and organized fashion. Efficiently use computing hardware and network assets by minimizing duplication and dated files. Improved communications among employees by providing other alternatives to email and traditional telephone.

Justification: Implement the following technologies to maximize employee productivity through collaboration and workflows. Enable trusted outside entities a secure method to access limited but required information. Provide improved methods of communications among mobile employees. Planned projects include:

- Sharepoint development
- Enterprise Instant Messaging architecture
- Web Conferencing
- Electronic Whiteboarding and file collaboration
- Single File repository for email

Completion Date:

On-going

CCTN Expansion

Work Description:

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Con Edison owns and operates a private communications network called Corporate Communications Transmission Network (CCTN). This network is the vehicle that enables the computing and storage for consolidation, disaster recovery, computing efficiencies and cost savings. The expansion scheduled for the years 2010 – 2013 include the following:

- Implement fiber connectivity between O&R and CECONY
- Implement WiMax technology to compliment existing fiber infrastructure across the network
- Fiber expansion between Dunwoodie and 4 Irving Place to provide needed capacity and diversity for continued voice, data and protection circuits
- Increase capacity and more efficient use of existing fiber plant by upgrading legacy Lucent Sonet equipment to Cisco DWDM technology

Justification:

- 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 will provide protection and data services to all critical substations necessitating capital projects to improve diversity and capacity to those locations. CCTN will far surpass the use of public carriers for communications in the next 3 years and will provide a corporate backbone for all communication services for the foreseeable future. All major CCTN nodes 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. Substations will be interconnected to the core CCTN network with fiber runs to support high speed services. Wireless microwave will be considered when fiber is not feasible or justified. A new wireless technology called WiMax has created a new opportunity for high speed data networking.

Completion Date:

On-going

Other XC Projects

Included in this section are smaller projects which are part of the 2009 – 2013 Five Year Budget. They are:

- Server Room (IRIS) inventory and inspection system
- Telecom Central/Computer Cost Central to control asset lifecycle
- TEMS Enhancements to improve communication cost tracking
- Server Farm Enhancements to ensure continued reliable environments during sustained growth in capacity

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- Data Protection initiatives of critical and sensitive Company information
- Identity Management to improve role based access controls to business applications

Justification:

- Alternatives: Increased costs for carrier communications, resulting in limited diversity for critical communications.
- Risk of No Action: Risk of failure to replace obsolete technologies will result in frequent and extended outages of production systems. Failure to invest in CCTN infrastructure will result in increased hardware failures and performance necessary for new business and operations applications.
- Summary of Financial Benefits and Costs:
- Non-financial Benefits (if applicable):
- Technical Evaluation/Analysis:
- Sensitivity Analysis (if applicable):
- Project Relationships (if applicable):

Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
$1,210	$2,428	$5,465	$4,499	$6,601

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
$4,831	$6,427	$5,397	$5,565	$13,853	$36,073

2010 O&M - Shared Services – Information Resources

Project/Program Title	Info Resources – SCADA Net - Additional Network Analysts
Status	In progress
Estimated Service Date	On-going
Work Plan Category	Strategic IT enhancements

Work Description:
The SCADANet operational network will provide a secure, high-speed network for SCADA, Smartgrid and control applications. The network will connect control centers and substations and will operate in parallel to the Corporate Information network. The network is scheduled to begin in 2010 and be completed by 2012. Three additional network resources will be required during the implementation and for operational support as the network grows in function and criticality.

Justification:
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, FERC and 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 piloting multiple new SCADA and Smart Grid applications. In addition, a February 2009 PSC order requires Con Edison to pilot AMI to determine its value in the future. The following initiatives have been identified:

- Pilot of Smart Meters and AMI
- Home Area networks for demand management
- Feeder Reconfiguration
- Secondary Model validation
- Transformer Monitoring
- Distributed Generation control

Smart Grid initiatives which monitor and control energy delivery assets require secure, reliable and high-speed communications. These applications and the data acquisition cannot be merged onto existing Corporate networks and compete against large file transfers or email. Designing and implementing individual communications for each initiative will result in the duplication of network components, increased operating costs and ultimately reduced reliability. Combining the requirements into a redundant and diverse high-speed network will provide the most efficient and effective solution. The proposed network will include designs to allow Smart Grid initiatives:

- High speed network with redundancy and diversity
- Leverage existing investment in Company private network
- Grow as needed without large network expenditures
- Operate securely and within regulatory guidelines
- Provide a private wireless solution to enable last mile connectivity with incremental costs with only incremental costs for field devices
- Establish security layers for public network (Internet and carrier) interconnections

Alternative:

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We have considered using contractors instead of hiring new employees. The yearly cost for a comparative skilled contractor would be substantially higher than a new employee. In addition more stringent security checks would be required for individuals working on the network.

Estimated Completion Date:
2012

Status:

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
	330	330	330	990

2010 Electric Rate Case - Shared Services O&M

Project/Program Title	**Computer Hardware and Software Costs**
Status	**In Progress**
Estimated Service Date	**On-going**
Work Plan Category	**Strategic IT enhancements**

Work Description: A number of contracts with a variety of vendors are in place to provide desk top and laptop computer hardware and software maintenance, licenses and related expenses. Examples of the contracts included are pc, server, and printer repairs, software such as the Microsoft and Oracle products enterprise agreements, several antivirus, security and firewall protections, laptop network connectivity and several process specific products (Hyperion, Impromptu). These contracts are administered by Information Resources.

This program change has three segments: growth, mostly in field laptops; new software licenses, and software and network equipment coming off of warranty. The growth in laptops can be attributed to the expansion of a number of applications for field force work management. Examples of new software and software coming off warranty include emergency messaging, laptop security, penetration testing, monitoring, firewall, and server certificates. This equipment is part of numerous planned programs, projects and work force growth. Issuance of computing hardware requires providing the association hardware and software and related support.

Justification: Failure to provide necessary maintenance and support may impact operational and monitoring functions. The figures below indicate the level of growth has been consistent.

Units							
Measurement Point	Year	Total #	Laptop	Desktop	Server	Growth	Growth %
	2006 Year End	12,739	n/a	n/a	n/a		
2007 Year End	2007 Year End	13,345	4,274	8,288	783	606	5%
	2008 Year End	15,174	5,593	8,603	978	1,829	14%
Budget	2009 Budget	15,287	5,921	8,339	1,027	113	1%
2008 Year End	2009 Projection	10,307	6,134	9,128	1,055	1,020	7%
as of 2/23/09	2010 Projection	17,384	6,248	9,439	1,697	1,077	7%

Estimated Completion Date:

On-going

Status:

On-going

2010 Electric Rate Case - Shared Services O&M

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
na	na	4247	4654	5524

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
6620	7524	7524	7524	22,572

2010 O&M – Shared Services – Information Resources

Project/Program Title	Information Resources – Mainframe Operating & Maintenance Costs
Status	Current
Estimated Service Date	On-going
Work Plan Category	

Work Description:
The Corporate Mainframe computing environment hosts critical applications for CECONY, including the Customer Information System and critical financial applications. The mainframe software environment must be upgraded to meet vendor support specifications and to support new hardware implementations which are driven by business and utilization requirements. The mainframe environment requires software licenses which are leased from a variety of software development companies. The software lease is required to provide use of the software, upgrades to the software and support for the software. The lease charges are based on the capacity of the mainframe computer. Mainframe software costs are driven by the MIPS (millions of instructions per second) or MSU (millions of service units) ratings of their respective mainframe processors. Accordingly, software and hardware maintenance support services increase on a yearly basis and/or when contract terms are renewed. The software includes the operating system, database management systems and system tools and utilities.

Justification:
To maintain the quality and availability of the mainframe environment for support of critical corporate data, hardware capacity upgrades and software maintenance for operating system, application development, database management systems and associated utilities, must be implemented and managed effectively. Fundamental to its effective operation, is properly maintained hardware as well as a properly maintained and managed operating system, database management systems, and mainframe system tools and utilities.

Alternatives:
Alternative options include implementation and utilization of distributed, Windows-based and/or Web-based software solutions and technologies to bypass the mainframe computing environment, where possible. Through the elimination of further mainframe capacity requirements and by decreasing mainframe utilization, additional MIPS would not be required. These alternatives are used by CECONY where possible, however cannot be easily or cost effectively implemented because of legacy systems whose databases reside on the mainframe platform.

Risk of No Action:
Due to vendor software maintenance agreements and contractual obligations, failure to not appropriately account with the vendor for the mainframe MIPS and MSU ratings would result in software product failure on the new or upgraded mainframe hardware platform. Many vendors include software authorization keys with their products which validate the mainframe hardware type and capacity in order for the software product to function properly.

2010 O&M – Shared Services – Information Resources

Estimated Completion Date:
On-going

Status:
In progress

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
3,357	3,455	2,830	3,509	3,043

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
3,677	4,023	4,383	4,759	13,165

2010 O&M – Shared Services – Human Resources

Project/Program Title	Career Path Training Program
Status	Ongoing
Estimated Service Date	Ongoing
Work Plan Category	Employee Development

Work Description:

Career Path Training

Career path training includes three (3) areas and incremental costs for rate year ending periods 2011 through 2013 as follows:

1. Increased Customer Service Rep Training: 2011 ($174,000), 2012 ($174,000) 2013 ($174,000)

2. Additional Supervisory Technical Training: 2011 ($306,000), 2012 ($306,000), 2013 ($306,000)

3. Tri-Annual Refresher Training: 2011 ($256,000), 2012 ($0), 2013 ($85,000)

Justification:

Career Path Training

Two additional instructors are required for Customer Operations to meet the anticipated training needs for Customer Service Representatives. Customer Operations will be hiring Customer Service Representatives and without instructors these new employees will not have the necessary training to perform their normal job functions. These instructors were hired in February and March 2009. The individuals filling these positions will be transfers from another department in Con Edison.

One additional instructor is required to address the technical training needs of the new supervisory population. It has been acknowledged that the work force at Con Edison is changing from one of experienced manpower moving up through the internal promotion system to one of newly hired less experienced men and women. It is projected that many supervisory positions will be filled with candidates coming directly from positions held outside the company. This shift in personnel characteristics comes with its own set of challenges. The Company is committed to responding more aggressively to meet these challenges. One major challenge will be to equip the newly hired supervisor with the technical knowledge and skills comparable to those supervisors who historically have been promoted into the position. To successfully confront this challenge, Con Edison is implementing a formal program to ensure its future workforce of technical supervisors is able to work safely and competently to the degree necessary for the company not only to remain competitive but also to satisfy its many stakeholders. This position will be filled in April 2009.

2010 O&M – Shared Services – Human Resources

Beginning January 2010, the three year requirement for First Aid refresher training will be due for approximately 6,500 CECONY employees. In 2010, this will double the number of classes needed for this training. Initially, all field employees receive First Aid and CPR training certifications in an eight hour class. Subsequent to the initial class, annual CPR refresher training is required and First Aid Training is refreshed every three years. As per the American Red Cross Standards the ratio of students to instructors is 1 to 10 students.

For the past two years when only a four hour class was required, co -instructors conducted two classes in one training day, 20 students each for a total of 40 student completions. For 2010, two instructors will need a full day for every 20 students. The additional funding will be used to supplement the instructors with contractors to meet this additional training need.

Estimated Completion Date:

Career path training programs are ongoing development initiatives however, the tri-annual refresher training program occurs once every three (3) years.

Status:

Our career path training program is an ongoing annual employee development initiative. The 1st aid refresher training program is also an ongoing initiative but is required once every three (3) years.

Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
$717	$560	$610	$976	$876

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011 – 2013
$559	$1,598	$1,257	$1,342	$4,197

2010 O&M – Shared Services – Human Resources

Project/Program Title	Human Resource Workforce Strategy Summary
Status	Ongoing
Estimated Service Date	Ongoing
Work Plan Category	Employee Development

Work Description:

Compensation Management - $85K

An additional specialist will work in the Compensation section on various activities such as developing the capabilities associated with the new application, Authoria, used in salary decisions. They will assist organizational personnel in their utilization of this system and the outputs it can provide in helping them make informed salary decisions. They will conduct benchmarking surveys of salary studies to determine where we compare against the marketplace. They will also assess our comparison to the marketplace and determine if retention of key personnel might be at risk based on this data.

Justification:

Compensation Management

This additional resource will assist organizations in the implementation of salary decisions that maintain a fair and equitable treatment across all employees. Addressing this activity will ensure that decisions are addressed in a timely manner with minimal disruptions to operations. This position was filled in January 2009.

Estimated Completion Date:

Ongoing

Status:

Ongoing

Current Working Estimate (if applicable):

2010 O&M – Shared Services – Human Resources

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
$283	$269	$403	$405	$476

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast - Total 2011-2013
$104	$561	$561	$561	$1,683

2010 O&M – Shared Services – Human Resources

Project/Program Title	Strike Contingency
Status	Ongoing
Estimated Service Date	Ongoing
Work Plan Category	N/A

Work Description:

The existing Local 1-2 contract is for the period June 29, 2008 through June 30, 2012 and the existing Local 3 contract is for the period June 26, 2005 through June 27, 2009. Contractual negotiations planned for 12 months ended March 31, 2011 will not require the Company to incur costs for consultants, hotels, food procurement and supplies, instructors, course materials, electronic data processing, reproduction and forms, telephone/communication and other miscellaneous items.

Justification:

This program is required for the company to conduct contract negotiations with both Local 1-2 and Local 3.

Estimated Completion Date:

Local 1-2 December 2012 and Local 3 December 2013.

Status:

The Local 1-2 & Local 3 Contingency Programs are ongoing initiatives that occur once every four (4) years. As a result, for rate case filings, the cost for these initiatives is priced out at one-fourth. The estimated cost of the next round of union contract negotiations is $1.3 million for Local 1-2 and $0.2 million for Local 3, or a total of $1.5 million. One-fourth, or $375,000 will be included in the rate filing.

Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
$961	$80	-	-	$1,301

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
$200	$0	$0	$1,301	$1,301

2010 Capital – Shared Services - Human Resources

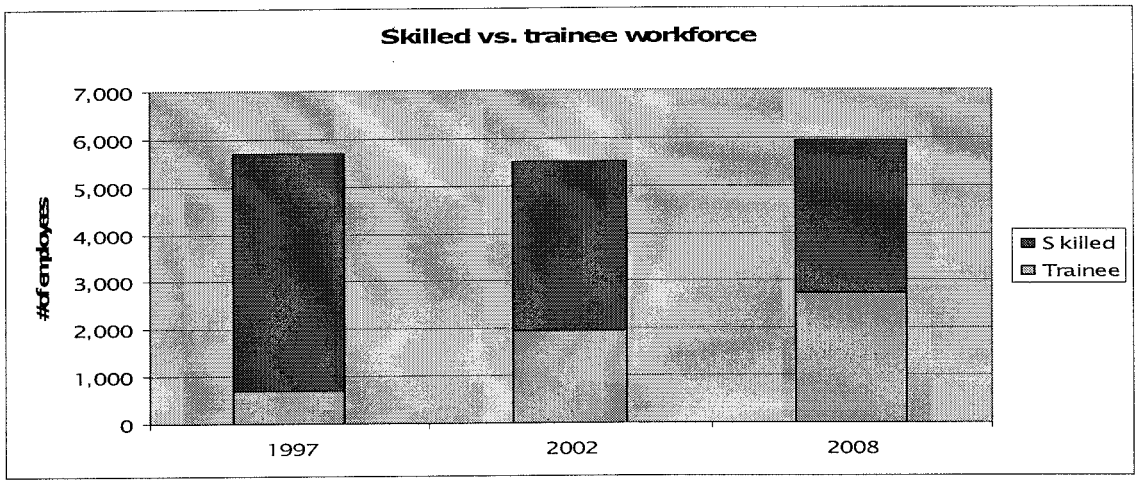
Project/Program Title	HR – Enterprise Shared Services – Projects
Status	Ongoing
Estimated Service Date	Ongoing
Work Plan Category	Employee Development

Work Description:

Human Resources must upgrade and enhance various aspects of training to ensure that future training needs are met. Our current 5 year Capital budget plan includes 4 projects. A description which details the justification and benefits of each of these is discussed below.

1. ELearning course development

The needs for training and developing employees have risen dramatically in the last several years. This increased need is largely driven by the number of new hires that has been brought on board since 2003 to replace an experienced workforce that is leaving at an annual rate of 1,000 per year. The chart below demonstrates the increasing population of trainees as compared to skilled employees. This chart represents various operating groups of our union employees.



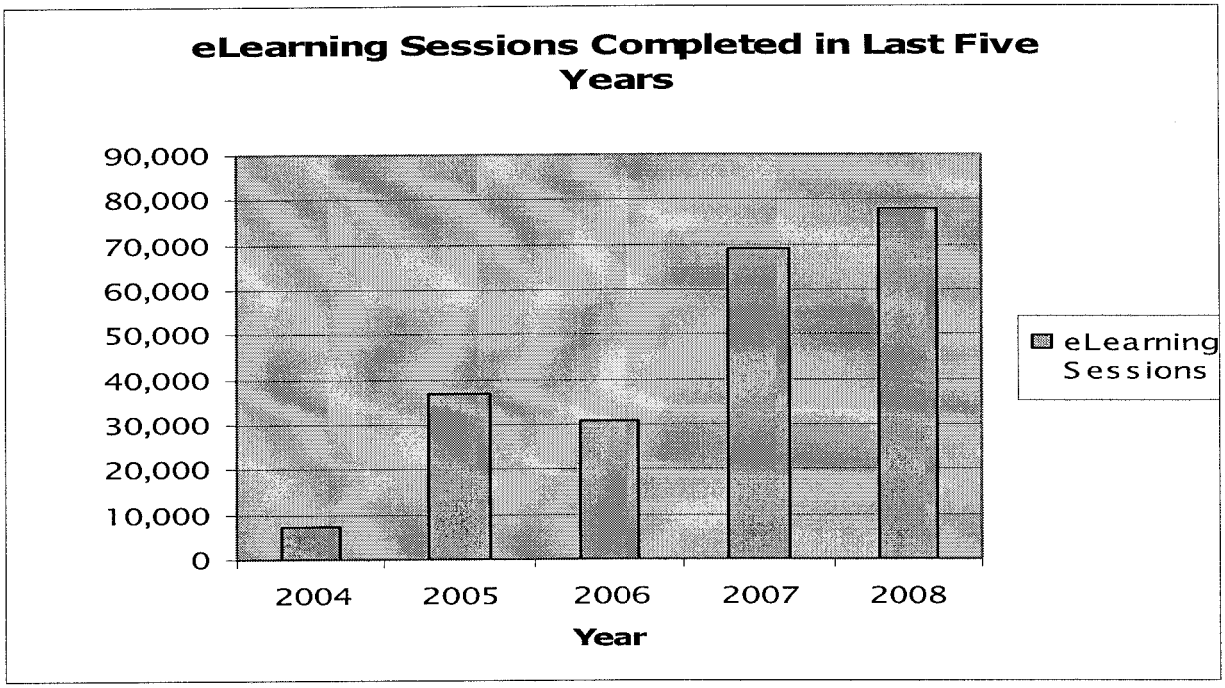
Employees hired into Con Edison are trained exclusively by Con Edison instructors according to curriculum designed and developed by these instructors. Traditional costs associated with instructor led training are:

1. Instructors time in preparing and teaching employees (Labor Cost)
2. Student and instructor materials (Materials Cost)
3. Costs associated with scheduling training classes (Labor Cost)
4. Travel time to the training facility (Expenses)
5. Facility costs associated with maintaining classrooms (Labor Cost)
6. Class duration that is generally scheduled to accommodate the employee with the longest learning pace. (Labor)

2010 Capital – Shared Services - Human Resources

In order to address this increased training need, one direction we have invested in is to develop a robust eLearning process. This process consisted of creating the IT infrastructure to deliver eLearning programs and also to design and develop content to be delivered through electronic mediums. The eLearning program is one of our training initiatives to meet the need of the increased training needs of the workforce.

The use of eLearning is not a process that can be deployed to take the place of all learning. It is useful when you are attempting to inform employees about some information relative to their job duties. It doesn't work well when learning takes place as a result of the interaction in class or when you need to demonstrate some hands on physical learning, i.e. climbing an overhead pole. As an illustration of how we have used eLearning in the past we would cite the training we were required to conduct as a result of an audit that was conducted by a consultant commissioned by the Public Service Commission to look at our response to storm emergencies. We were required to train over 5,000 employees in a short period of time on the Storm Overview process. We were able to conduct this training by creating an eLearning course and then following up with operating groups to complete the training by taking the eLearning course. We avoided instructor time, reduced scheduling activity; eliminated costs associated with material for the course and reduced costs associated with tracking completions. In the last several years our use of the eLearning process has grown substantially in use. The chart below illustrates the amount of training that has been completed using eLearning.



The benefits of eLearning include:

1. A self-paced and self-directed, approach, allowing students to choose content and tools appropriate to their differing interests, needs, and skill levels
2. Accommodation of multiple learning styles using a variety of delivery methods geared to different learners
3. Content that is designed around the learner

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4. 24/7 accessibility making scheduling easier and allows a greater number of people to attend classes
5. On-demand access where learning can happen precisely when needed
6. Reduction or elimination of travel time and associated costs (parking, fuel, vehicle maintenance)
7. Instruction cost avoidance
8. Content that is standard and the lesson does not deviate from the stated objectives
9. Elimination of material costs associated with student book and instructors guide

We have tracked the costs associated with developing and delivering these costs and based on the usage for each course and the total dollars invested in creating these courses the average cost per student in taking an eLearning course is $4.80 through June 2008. By instituting the eLearning process we were able to avoid some additional costs associated with traditional training.

2. Learning Center Infrastructure Improvements

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 people work. In addition, as equipment and process improvements take place in our operating areas, our training facilities and course curriculum must also change to insure that the training experience reflects the field environment. The requested funding will allow the Learning Center to upgrade the Facilities to modernize classroom space by increasing space utilization with modern designs.
We have established an Infrastructure Improvement program at The Learning Center to address the increased training required for our population of new, less experienced employees and to address the improvements needed in our training environment. The Learning Center was built and opened in the early 1990's at a time when hiring was on the decline. The training environment was constructed to address the needs at that time. Since then our training needs have increased due to the growing trainee population and the need to reorganize our space to address these needs. We have found a need to reduce space on activities that are no longer as relevant as they use to be such as the library and our gas parts training. We have also found we need to increase classroom space for Customer Operations and Environmental, Health and Safety training. We also need to increase our space associated with lab training. Additionally some of the hands on training labs over time have required upgrades either due to overuse or upgrades to address environmental concerns.

This program consists of a series of small projects intended to address these concerns. A list of projects we are currently focusing on is provided below with a description of the project:

1. TLC – Room 104 Renovation - After 15yrs of operation and changing needs of our Corporation a room renovation is requested. This space is currently used as a shop and hands on lab for training Gas Operations. It was originally designed as a hands on classroom for the parts plus program and the appliance repair program which are now both defunct due to rulings by the PSC. The room is currently under utilized and has a very low frequency of daily usage. The new space should be a standard classroom

2010 Capital – Shared Services - Human Resources

available for cross functional use such as Customer Operations training.

2. TLC Room 125 Renovation - After 15yrs of operation and changing needs of our Corporation a room renovation is requested. This space is currently used as a classroom for OSHA training and other large groups. It was originally designed as hands on classroom for auto mechanic instruction. The room is the 2nd largest room in the facility and has a 90% usage frequency. The room requires an enormous amount of energy fore heating and cooling due to the high ceilings. It was never intended to function as a classroom but has been utilized as such. We need to modify the design of the room from an auto bay setup to a traditional classroom setup.
3. Library Consolidation - Due to changing operational needs of the Learning Center, changes need to be made, to renovate the Library, from its existing format to a Library / Employee Testing Center to better utilize the space and to reduce operational costs. The front section would remain as a Library / Reference Center while the back portion would be set up for employee Testing using PC's for the on line testing environment.

An Engineering Service Request has been issued on each of these projects.

Additional projects include:

1. Power Plant Control Room Simulator Renovation – underutilized space for power plant control room training. Due to divestiture of our plants we do very little of this training anymore and this space can be converted to classroom training for Customer Operations training.
2. Renovate rooms 202/203 to increase lab training for Protective Systems testing due to an increased need of training for new PST employees. We would relocate Customer Field Representative training to a new location.
3. Upgrade Welding Booths at Van Nest – We conduct welding training at Van Nest and the booths we use need to be upgraded to improve the venting conditions and improve our controls over the sparking conditions. Over time, due to usage, the booths have deteriorated and need upgrading.

We have not investigated alternative arrangements for these projects such as renting space at a hotel or constructing new classrooms at other locations because in all cases the cost would be prohibitive but more importantly we have the space to accommodate just not in the useable form it needs to be in. Therefore we concluded an upgrade and renovation process would deliver the needs we want at the lower cost.

The cost benefit in this project is the avoidance of higher cost projects such as:

1. Avoiding the cost of construction of additional building space
2. Avoid having to lease additional space at higher market rates such as a conference center in local hotels

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3. Learning Center Registration System Upgrade.

The current Registration system has fallen behind with our new corporate standard 2003 server/Windows XP desktop environment. We will not be able to support the integration of new applications/software as well as new eLearning technologies. This may hinder the processing of training data and the development of eLearning training modules, both of which are key corporate performance indicators. This upgrade will extend the life of the Registration System since it is not going to be replaced as part of the HR PeopleSoft implementation.
The TLC Registration System is Con Edison's corporate Learning Management System (LMS). It provides all functionality required to schedule and enroll employees into mandatory and non-mandatory training. As an enterprise wide application this system is used by employees, contractors, and external customers who need the use of Con Ed sponsored training. It is not going to be replaced as part of the HR Payroll System. The cost of the Registration System upgrade is driven by both technological and functional obsolescence.

On the technology side there are several issues with the Registration System:

- Its current technology platform is in Visual Basic and needs to be upgraded to the Microsoft .NET platform to conform to the corporate standard for desktop applications.
- The current TLC Registration System has fallen behind with our new corporate standard 2003 server/Windows XP desktop environment.
- Users are unable to access the application remotely since the software requires a local installation.
- The application requires the purchase of costly dedicated servers that need to be replaced every 3 years. If the application was in the .NET environment it could run in a shared environment on the corporate intranet servers.
- The servers and the software need to be maintained manually instead of remote upgrades via a central installation server.

On the functional side there are also issues with the Registration System:

- The current platform does not provide for the inclusion of self-service applications such as conferencing and self-enrollment in courses.
- The current platform does not provide for an integration of O&R training data, a critical need as a result of Shared Services.
- The tracking of training for the Contingency is done on a separate system and cannot be tracked through the Registration System to the level that is required.

The costs associated with the current system that will be avoided include:

1. Reduction in future programming services to handle system upgrades
2. Manual intervention to capture Orange and Rockland employees in the current Registration system
3. Elimination of the purchase and maintenance of costly dedicated servers

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The benefits to be realized from this upgrade include:

1. Roll-out will be quicker, giving users and administrators real-time access to the information they need anytime and anywhere.
2. System expansion to include Orange & Rockland will support our shared services initiative.
3. The application, designed specifically to run inside an Internet browser. This advanced network architecture requires zero client maintenance and provides unlimited access over an existing LAN or Internet connection.
4. Users will benefit from the same, consistent user interface with data safely stored on a corporate server.
5. The new architecture requires zero client maintenance and provides unlimited access over an existing LAN or Internet connection. Users will benefit from the same, consistent user interface with data safely stored on a corporate server.
6. One system to track training for the Contingency

4. HR Payroll

One of our biggest challenges continues to be that we have currently many systems gathering Human Resource information. The systems are not integrated and do not provide an effective method of accessing all relevant employee data. The integrated HR/Payroll system will Improve our capabilities in performance management, career development, succession planning, and other Human Resource functions.

Among the anticipated benefits of this system are to (1) provide a common systems platform for CECONY and O&R, (2) allow older, high maintenance legacy systems to be retired, (3) provide employees and managers with easy access to personal, compensation, payroll, and benefits information, (4) streamline HR, payroll, and time transaction processing by having them initiated and routed/approved electronically through employee and manager self-service applications, (5) provide a more integrated external recruitment and internal posting process.

As we integrate this application and it successfully upgrades our Payroll process we expect that in the future, four to five years out, additional costs will develop related to upgrades and improvements. We have planned for this in 2013..

We expect to have growing pains as we move to full utilization of the application but once we mature in our ability to utilize the application we do expect to realize savings. No savings are anticipated to materialize in the first year of the rate case (RYE 2009). Over time, we expect there to be savings in addition to the qualitative benefits described below:

A. Reduce the transactional work activity of Human Resource professionals and focus on more strategic activity that supports our HR Strategy

For many years, Human Resource activity has been driven by processes that require multiple manual interventions based on old systems or no systems at all. This constant intervention and handoffs have always diverted Human Resource professionals from addressing high

value activities that support operating organizations in meeting their goals and objectives. By implementing PeopleSoft's Human Resource/Payroll Enterprise Resource Planning (ERP) application we will now be able to address these high value activities centered on our four HR Strategy imperatives: Attraction, Development, Retention and the Way We Work Environment. The savings achieved in this conversion will be realized by Human Resource Professionals not having to address transactional, routine HR issues and begin focusing on more strategic HR work. The savings is not in reducing Human Resources but in freeing current Human Resources to address this strategic work and not having to put in a request beyond what our current Workforce Strategy request is.

B. Replace existing HR processes with industry proven workflow provided by the new system

- Eliminate the functional silos dictated by the current systems and support end-to-end processes in the new system. An example from today's environment related to the CECONY recruitment process:

  Department manager notifies HRG of a vacancy. The HRG creates requisition and wording for posting in the RANDS system. Recruitment creates the posting in MJOL and notifies all employees. Employees apply for position through MJOL. Recruitment re-enters applicant information into the ARTS system. The manager, HRG and Recruitment use E-Hire for managing the screening and selection process.

  With the new system: Current recruitment process and the systems above will be replaced by PeopleSoft's Recruitment Solution that is designed to expedite the hiring process. It allows the end-to-end process to be streamlined and automated, from the initiation of the job to the final HR record update. One set of shared data allows employees, external candidates, managers and the recruitment personnel to easily search, view, apply for jobs online, create workflows, schedule interviews, reduce hand offs and track status on all stages of the process

- Eliminate the need for duplicate data entry and the attendant errors that come with it by maintaining one comprehensive record for employee information. An example from today's CECONY environment related to the new hire process:

  External applicant enters baseline data into E-Hire (address, phone, education information) and completes the Employment Application form that is then entered into ARTS by Recruitment. Selected candidate information is then entered on to the Employment Authorization form that is then re-entered by Payroll into EPPS and by the HR Service Center into Profile (Educational information).

  With the new system: Entry of new hire information (data) will flow directly from the Recruitment activities for personal and job data to the HR record and through self-service for benefits, direct deposit enrollment and tax withholding. The HR Service Center and Payroll will no longer be involved in the manual data entry and setup for new hires

2010 Capital – Shared Services - Human Resources

- Simplify and expedite routine transactions by shifting the initiation of transaction to the decision maker and eliminate the need for back-office support. An example from today's environment related to the job change process:

  This transaction is initiated by the Department Manager and sent to the HRG. The HRG generates an email to the HR Service Center, which looks up data in the EPRS system to complete the PCA form and routes it back the HRG via email. HRG forwards it to the Department Manager for approval. Department Manager sends approval back to HRG who forwards it to HR Service Center. HR Service Center reviews and forwards to Payroll. Payroll enters into the EPPS system. This process is manually tracked via email.

  With the new system: Job changes involving salary actions will be initiated and approved during internal recruitment activities. Deferred merit and equity adjustments will be initiated by managers through the Manager Self-Service function and routed using workflow for approvals and notifications. The HR Service Center, Payroll and the HRG will no longer be involved in the preparation and manual data entry for PCA/PSA for job changes

- Streamline processes to eliminate handoffs wherever possible. Where handoffs are necessary, enable them via automated electronic workflows. An example from today's environment related to a CECONY weekly career path promotion process:

  This transaction is routed via email from TLC to the HR Service Center, to the HR Generalist, to the Section Manager, to the HR Service Center, to Payroll without any central tracking. It requires manual look up and completion of paper forms and access to EPRS, Registration and EPPS systems.

  With the new system: Transaction will be initiated through a self-service function and electronically routed for approval, notifications and update. The HR Service Center, Payroll and HRG's will no longer be involved in the preparation and manual data entry for career path promotions

C. Give managers and supervisors the information and tools they need to drive organizational performance through improved workforce analytics.

- Provide easy access to information, simplify all workflow and approval processes, and eliminate manual/redundant hand offs and provide employees and managers with tools that enable them to become more self-sufficient. Two examples of report requests from today's CECONY environment:

  A Manager needs to see salary history in preparation for preparing annual performance reviews. This request is initiated by the Manager and sent to the HRG. The HRG accesses EPRS and HR Online databases and re-enters pay history into

2010 Capital – Shared Services - Human Resources

Excel (or provides individual screen shots). HRG formats the merit and variable pay Excel report and forwards to the manager.

A Manager needs to know the number of employees, by title, reporting to each work out location. This request is initiated by the Manager and sent to the HRG. The HRG accesses EPRS and HR Online databases and downloads data to Excel. HRG formats the report and forwards to the manager.

With the new system: Self-service functionality allows mangers to view total compensation-related and non-confidential personal information for direct reports. Standard reports are centrally located/accessible and query tools are available to easily manipulate the data based on the manager's request.

Estimated Completion Date:

Ongoing

Status:

Ongoing

Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
$35	$203	$1,442	$13,064	$17,387

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
$3,055	$1,300	$1,050	$1,600	$2,600	$9,605

2010 Capital – Shared Services - Human Resources

Projects	2009	2010	2011	2012	2013
HR Payroll System and future upgrades	$ 2,005	$ 0	$ 0	$ 0	$ 1,300
eLearning	550	400	750	1,000	700
TLC Infrastructure Improvements	300	300	300	600	600
Registration System Upgrade	200	600	0	0	0
Total Requests	$3,055	$ 1,300	$ 1,050	$1,600	$ 2,600

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. FACILITIES CAPITAL BUDGET PLAN

	2008 Actuals	2009 Budget		2010 Forecast	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	Workpaper number
2008 PROJECTS	2,705	-		-	-	-	-	-	
MULTI-YEAR PROJECTS									
Astoria - Water main replacement	1,497	50							
Flatbush Ave - Perimeter HVAC Program	78	3,200							
Irv Pl - Emergency Generator Upgrade (Central Eng)	1,413	-							
3rd Ave Yard - Main Building (new wireless system - NS)	42	25							
3rd Ave Yard - Main Building ($2,700,000 orig funded for 2008)	6,327								
	9,357	3,275	(B)	-	-	-	-	-	
CATEGORY A - Safety; Environmental; Regulatory; Etc.									
Ast PCB Shed - Install Secondary Containment (Deferred pending DEC)									
Rye HQ - FACP and Smoke Detectors Replacement	8								
Flatbush - Rear Loading Dock Heater Relocation	2								
WEA - GOSS Computer Rm Fire Protection	(14)								
Irv Pl - 21st fl Renovation/20th fl sprinkler	42	45							
Irv Pl - 7th fl Renovation for Security	1,712								
Irv Pl - 6th fl Renovation	6,974	5,000							
Irv Pl - LL 26 Fire Prot Tnk/25th, 27th fl & all Stages Sprinkler/Salvage Tnk/Crossover Pipe for Standpipe System	-	4,000		1,200					Comp 1
Irv Pl - 15th & ~~19th fl~~ (Basement & 23rd fl) Renovations		13,000							
Irv Pl - 3rd, 4th, 5th, 11th fl Renovations				22,000	22,000				Comp 2
Irv Pl - 7th, 8th fl Renovations						22,000			
Irv Pl - LL26 Renovations							22,000	33,000	
Flatbush Ave - 6th & 7th Fl Renovation (LL26 Space)	-	5,800		3,200					Comp 3
Van Nest - SPCC Plan Containment for Pad Mounted Transformers	208								
Van Nest 1601 - Renovate for Gas Eng & Use as Temp Space	-	1,155							
Van Nest S/C Bldg 1 - Renovate 2nd fl East & Middle Mezz Offices	-	4,143							
Van Nest - Cable Lab Safety/Alarm System High Voltage Testing Area	33	30							
Davis Ave - Lightning Arrestor ($190)	40	150							
Davis Ave - Cooling Tower Permanent Ladder System ($58)	67								
Flatbush - EDG Power Feeds to 419 Server Farm (IR Audit - $160)	103	60							
Cleveland St - Block Heaters Electric Feeds ($235)	-	235							
TLC - Green Roof	1,252								
28th St S/C - Haz/Non-Haz/PILC Storage Area – Canopy Replacement	107								
Eastview - Relocation of C&D and Storage Bin Area		575							Comp 4
Eastview - Employee Parking Crosswalk Improvements - deferred				-		100			
Various Locations - Backflow Preventer Devices	-	375		375					Comp 5
Various Locations - Emergency/Emerging Work	-	-		-	-	-	-		
(1) Victory Blvd - Reno for Relocation Underground/Apparatus Supers	55								
	10,589	34,568		26,775	22,000	22,100	22,000	33,000	
CATEGORY B - Critical Infrastructure									
Kissina/Jamaica Renovation	5								
Rockaway/Foster Ave Renovation	10								
Davis Ave - Chiller/Absorber Unit	57								
Irv Pl - Cooling Tower Electrical Upgrades	25								
Sherman Creel - Satellite WOL (budget increase by $300,000)	19								
Rye HQ - LAN Rm 205 AC	125								
Exterior St - Dock Rehabilitation	298								
Irv Pl - Cooling Towers 2,3,4 Jib Crane Structural Supports	40	50							
Irv Pl - Elevator Cab 13 Controls Upgrade	33								
WEA - E. Control Room Lights/Ceiling/Renovations & AC ($4,800)	921	3,800							
125th St - Relocation of CSR and Walk-in Center Areas (124th st Reno)		-							
16th St - 2nd Fl Muster Rm/3nd Fl Lockers for Electric Ops FOD	201	250							
TLC - 315 ton Chiller/Cooling Tower/Piping Replacement	1,479	700							
Astoria - MEG Power System	550	70							
Van Nest S/C Building 1 - Compressor modifications/replacement	1,608								
Eastview S/C - Storeroom Platform Rebuild	937			-					
Flatbush - 7th Fl Roof Replacement	803	-							
Davis Ave - Roof Replacement (New Building)	634	-							
Irv Pl - HVAC Chiller Piping Replacement	-	-		-	200	200	200		CI 1
Flatbush - Rm 520 UPS Upgrade		187							
Flatbush - Rm 520 LAN Rm A/C (tied in Voice Recog/UPS upgrade projects)	293	-							
Flatbush - 3rd fl LAN Rm Closet Ventilation (cancelled)		-							
Irv Pl - Conversion of 875-S from LAN rm to office space for Tech Services		-							
Irv Pl - LAN rm 1820 exhaust/transfer fan (cancelled)		-							
3rd Ave Yd - Paving/Parking/Building 2,3,4 Demo/Wall Preservation		1,000		1,000					CI 2
Flatbush - LAN Rm UPS Consolidation - Rms 312 ~~& 7th Fl~~ Telephone Rms				300					CI 3
Astoria Building 136 - LAN Room AC & IR Office Evaluation				150					CI 4
Astoria - Guard House #5 Roof Replacement ($150)	137			90					
Van Nest 21 - 2nd Fl AC - 4 & Boiler Removal				375					
Eastview - Concrete Slab for New Lifts for Transportation				25					
Van Nest Building 1 - Air Curtain Replacement				150					
Rye S/C Server Farm - UPS Upgrade for Relocation of TLC ISP Connection				100					
Irv Pl - Cascade Chemical Feed System Upgrade				75					
Irv Pl - 18th Fl Windows Replacement (cancelled)				-					
TLC - Critical LAN & UPS AC & Back-up Power				2,400					CI 5
28th St S/C - Roof Replacement ($1,460)	1,154					-			
28th St - Flush WWT Shed Replacement (deferred pending DOB)									
	9,635	6,057	(B)	4,665	200	200	200	-	
(B) Includes Multi-Year/Special Projects Associated w/Hurricane Hardening		10,657							
CATEGORY C - Programs									
PAVING/RESURFACING/PARKING/LOADING PLATFORMS									
Davis & VB - Transportation Garage Floor Resurfacing				-	130				
Bronx Garage - Flooring Resurfacing				-	125				
CPB - Paving/Resurfacing Program				-	250				
Astoria - Paving/Resurfacing Program (Continued)				-	-	600			
Astoria - Transformer Shop Parking Lot Paving				-		100			
Neptune Ave S/C - Parking Area Resurfacing				-		100			
Eastview S/C - Employee parking lot expansion						3,000			Prog 1
Rye HQ - Parking area resurfacing (lots 2,4,5,8,12,13)					-	110	300		
Various OWS - Replacement of Pneumatic with Electric Driven Pumps				-	150				

	2008 Actuals	2009 Budget	2010 Forecast	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	Workpaper number
Irv Place - Concrete Pads for Trash & Waste Containers	180		-	-				
Other locations (tbd)				-	-	-	300	
SIDEWALKS/GATES/FENCES/GARAGE DOORS								
Other locations (tbd)			-	-	-	-	400	
WINDOWS								
Irv Pl - Window Replacement			-	3,000	6,000	3,000		Prog 2
Davis Ave - Window & Lintel Replacements			-	300	460			
Other locations (tbd)				-	-	-	500	
OFFICE RENOVATIONS								
Irv Pl - Upgrade of Room 420				50				
Irv Pl - 1475 Office Renovation for Shared Services Admin Group								
Van Nest S/C Bldg 1601 - Facilities Office Renovation & Conference Rm								
Van Nest - Car Wash Building Conversion to Offices				700				Prog 3
Van Nest Building 1 - Room 100 Reconfiguration of Workstations				35				
Cleveland St - Testing Area for Draeger Gas Detectors				100				
Davis Ave - Call Center Renovation & Window Replacement			0		500			Prog 4
Victory Blvd - Renovation of Electric Ops Space			0		350			Prog 5
110th Street - Technology Upgrades to 2nd Fl Conf Rm			175					
110th St S/C - Conversion of Stores Areas to Office Space			-		100			
28th St - Elect Ops Move into Gas Area				100				
CPB - 2nd Fl Renovation				2,000	2,000			Prog 6
CPB - EQ Planners Office Renovation				30				Prog 7
CPB - 2nd Fl IH Ergonomic Improvements			350					
TLC - Cafeteria Sound System								
TLC - Redesign training areas 123 - 125a			-	1,500	1,500			Prog 8
Astoria - ChemLab Office renovation				300				Prog 9
QB - C/M Office Renovation				-	100			
Rye HQ - New Office for Cafeteria Manager			-		30			Prog 10
Other locations (tbd)				-	-	-		
BATHROOM/LOCKER ROOM/KITCHEN RENOVATIONS								
Van Nest S/C Bldg 1 - Renovate 1st fl Mezz Bathrooms/Locker rooms			-	500	300			
Van Nest S/C Bldg 1 - Renovate Shop fl Bathrooms/Locker rooms			-	500	500			
Van Nest - Transportation Garage Slop Sink			-		15			
Cleveland St S/C - Locker room/bathroom renovation (men's/ladies)			-	500				
Rye S/C - 2nd fl bathroom renovation			-		150			
Rye S/C - 3nd fl bathroom renovations (Men's/Ladies)			-		300			
WEA - Washroom Upgrades			-	200				
110 th St S/C - Locker room & Bathroom Renovations - 2009	-	325	-					
Victory Blvd S/C - Ladies bathroom/locker room renovation			-			250		
Flatbush Ave - 3rd fl bathroom renovation			-			150		
CPB S/C - 1st Fl Bathroom renovation			-					
TLC - Grease trap replacements			-		100	250		
Irv Pl - G Stairwell Washroom upgrades			-	600	-			
Astoria Building 136 - Expand men's & women's locker areas			-	-		200		
Other locations (tbd)				-	-	-	1000	
HVAC								
Irv Pl - Air Handler Replacement 6SW (included in 6th Floor Reno)	10	-						
Irv Pl - Air Handler Replacement 8SE - deferred do with floor renovation		-		-				
Irv Pl - Air Handler Replacement 13SE - deferred do with floor renovation			-			-		
Irv Pl - Air Handler Replacement 18NW - deferred do with floor renovation			-			-		
Irv Pl - Air Handler Replacement PA - 2			-		405			
Irv Pl - Air Handler Replacement PA - 4			-		250			
Irv Pl - Air Handler Replacement 20NW & 20NE				-	150			
Irv Pl DC 2 - 10 ton Typhoon clng units 5/6 Repl - deferred do with floor ren			-		-	-		
Irv Pl DC 1 - 10 ton Ed Pack clng unit 9 Repl - deferred do with floor renovati			-		-	-		
Irv Pl - Cooling Tower Condenser Water Valves Replace (expense)			-					
Irv Pl - Cooling Tower Vibration Sensors Replacement			50					
Irv Pl - BMS Upgrades - cancelled see LL26 tank proj		-						
Irv Pl - Rm 228 HVAC/PET Device Room Improved Ventilation			15			-		
Irv Pl - 1452-S Pressure Control Box Installation			25	25		-		
Irv Pl - 1360S HVAC Condensate Pump (Office Leak)								
Irv Pl - DC 1 HVAC Temp Variations - deferred do with floor renovation			-		-	-		
Irv Pl - HVAC Noise Concern in Conf Rm 1328 (ruled expense - $30K)								
Cleveland St S/C - Yazaki Absorption Unit Replacement			400					
Neptune Ave - 2nd Fl AC Unit Replacement			100					
Van Nest - Main Boiler Replacement			-	4,000	-			
Van Nest Building 1 - HVAC Replacement for 3rd Fl Offices			150					
Van Nest - Planning Office HVAC			150					
Bruckner - Transportation Garage Heating System Upgrade			250					
Bruckner - Yazaki Replacement			300					
Van Nest 21/21A - BMS For HVAC Systems			100					
Fordham Road Customer Payment Center - Vestibule Air Curtain			50			-		
TLC - Pavilion Ventilation			100			-		
TLC - LAN Rm AC (various tbd)			-					
CPB - Meter & Test Area HVAC			150					
WEA - W. Control Rm Chiller Replace			800					
WEA - SOCCS/UPS Liebert AC replacement			750					
WEA - BMS Upgrades			400					
WEA & 16th St Cooling Tower Make-up Water Meters			-	10				
28th St - Bathroom Ventilation Improvements			-		50			Prog 11
28th St - Bay #7 Exhaust Fan			-	25				Prog 12
28th St - SSC Office HVAC			100					
Other locations (tbd)				-	-	-	1500	
LIGHTING & ELECTRICAL UPGRADES								
Regional Storerooms Bronx - Lighting				100				
Irv Pl - Electrical Distribution Panel Upgrades			-	530				
Irv Pl - Cafeteria Neon Lighting Replacement				15				
Irv Pl - 16th Floor Board Room Lighting Replacement - deferred	-	-						
CPB Storerooms - Lighting upgrade				150				
TLC - Perimeter Lighting for Security Breach - deferred		-				50		
Other locations (tbd)				-	-	-	300	
ROOFS (tbd by roof inspection program)				-	-	-	1500	
SECURITY								
Van Nest - Turnstiles								
16th St S/C - Security relocation/consolidate			1100	-				
28th St S/C - Security (Deferred)				-	0			
110 th St S/C - Security			0	180	320			
Irv Pl - MECC Upgrades Associated with Corporate Security Audit			250					
TLC - Security Upgrades			-	480	520	-		
CPB - Security Upgrades			-	675	675			

	2008 Actuals	2009 Budget	2010 Forecast	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	Workpaper number
Neptune Ave - Security Upgrades			-	-	-	1,000		
Davis Ave - Security (Walk-in Center project $2,100)	52	-	2,100					Prog 13
Cleveland St - Security Upgrades				500				
3rd Ave Yd - Security Upgrades (Parent Project)								
Other locations (tbd)				-	-	-	1500	
EDG UPGRADES								
TLC - EDG CERC & Business continuity upgrades			-	-	-	5,550		
Van Nest Shop - EDG Upgrade (i.e. backup)			600	-				
Flatbush Ave - EDG Upgrade			-	500				
VB - PST Office EDG Back-up			-	-	300			
Rye HQ - EDG Upgrade (Possible Relocation from VN)			750	-				
MISCELLANEOUS								
Eastview - Automation of Chemical Water Treatment System			30	-		-		
Irv Pl - Stage G FP Tank Level Control Wiring Upgrade - defer			-	-				
	242	325	9,245	18,260	18,985	10,750	7,000	
CATEGORY D - User Requests								
Irv Pl - Pressure Switches for Chilled & Secondary Water Pumps			-	-	-	50		UR1
Irv Pl - Additional Points for Alarm Panel in Control Room			-		-	100		UR2
Irv Pl - Alarm for Glycol Systems					-	150		
CPB - Meter/Test Area HVAC				-	-	150		
Irv Pl - Alarm panel upgrades				-	-	100		
Flatbush Ave - Flood Control Improvements			-	-	-	300		
Victory Blvd - Main Bldg Exit ramp Rebuild				-	-	60		
CPB S/C - Addition LPG Storage				-	-	70		
16th St S/C - Enlarge Ave C gate for truck traffic				-	-	150		
TLC - Enclose gas pavilion for training				-	-	-	1500	
CPB S/C- Flush Truck Shed				-	-	1,500		
CPB S/C - Fencing barrier installation				-	-	100		
Eastview S/C - Create new bay in switch area				-	-	300		
Rye HQ - Cafeteria Proposal for New Wall/Doors				-	-	25		
Cleveland St S/C - Garage building - New shape-up room				-	-	300		
Astoria - Front park area refurbishment				-	-	300		
Astoria - Yard salt bins installation				-	-	350		
Astoria Building 136 Cafeteria - Dining area refurbishment				-	-	-	500	
TLC - Arcade area lighting replacement				-	-	150		
TLC - Employee/student notification system				-	-	300		
TLC - Building 1 & 2 assembly area				-	-	500		
WEA - HALON System Alternative Evaluation				-	-	1,500		UR 3
WEA - Renovate training area					-	350		
WEA - Kitchen Upgrade					-	100		
Van Nest - Building 1 Winter Shed					-	120		
Van Nest - Building 3 Garage Door				-	-	200		
Van Nest - Use of Paint Storage Building for Gasoline Storage Variance				-	-	175		
Van Nest 1601 HVAC - Additional Johnson Controls				-	-	80		
Bruckner Garage - Moisture/Condensation Issue				-	-	250		
	-	-	-	-	-	7,730	2,000	
GRAND TOTAL	32,528	44,225	40,685	40,460	41,285	40,680	42,000	
SPECIAL PROJECTS								
Flush Improvements	-	1,200	5,000	6,300	-	-	-	
Rye HQ - Emergency Operations Center	-	1,050	-	-	-	-	-	
Hurricane Building Hardening Projects	-	-	6,125	3,375	-	-	-	
Astoria A-11 & A-12 Dock Restoration	-	-	2,500	3,500	3,500	2,000	-	
PCB Shed Upgrade	-	-	450	650				
SPECIAL PROJECTS - ASSOCITED WITH HURRICANE								
Irv Pl - Cooling Tower Roof Replacement	438		-	-				
Irv Pl - Cafeteria/Auditorium/PA - 3 Fan Roof Replacement	540	300	-	-				
WEA - Roof Replacement over Bulk Power Room	-	1,025						
	978	1,325 (B)	-	-	-	-	-	
GRAND TOTAL (WITH SPECIAL PROJECTS)	33,506	47,800	54,760	54,285	44,785	42,680	42,000	

2010 Capital – Shared Services - Facilities

Project/Program Title	**Facilities - EH&S, Regulatory, Commitment Projects - Category A**
Status	**With Engineering**
Estimated Service Date	**Various**
Work Plan Category	Public and Employee Safety, Environmental, Regulatory

Work Description:

- Irv Pl - LL 26 Fire Protection Tank/25th, 27th fl & all Stages Sprinklering/22nd fl Salvage Tank Refurbishment- $4,000,000 in 2009 and $1,200,000 in 2010.
  This project is needed to meet the 15,000-gallon Fire Protection water storage requirements, which effectively requires that there be 30 minutes of available sprinkler water flow. Presently, the existing storage tank is 5,000 gallons which equates to approximately 10 minutes of water flow. To achieve the 15,000 gallon/30 minute water flow requirement, the existing Fire Protection and Salvage Water tanks that comprise the 20th Floor East Penthouse tank, will be tied together. New Booster pumps will now be needed to supply adequate water pressure to the various stage floors immediately below the building storage tanks and also to the floors, tower and stages above the East Penthouse Tank. This project must be completed before the building is completely sprinklered.
  As part of this project, the un-renovated 25th, 27th floors/mechanical rooms and all stages of the Irving Place tower will also be provided with the LL26 sprinklers/heating/heat tracing, as required, and the 22nd floor Salvage Water Tank will be refurbished/restored to service, as this will take the place of the salvage water function now provided by the 20th Floor East Penthouse.
  Engineering has been completed in 2009 and the schedule is to install this project in 2009/2010.

  LL 26 projects described in Testimony

- Irv Pl - 6th fl Renovations and LL26 Sprinkler. This project was begun in 2008 and requires $5,000,000 carry over into 2009 to compete unfinished work and punch-list items/system commissioning.
- Irv Pl - 15th & 23rd fl Renovations and Basement LL26 Sprinkler & Sprinklering of mechanical/electrical spaces of the 2nd, 9th, 10th floors - $13,000,000
  Engineering will be completed in 2009 and the schedule is to install this project in 2009.
- Irv Pl – 11th, 5th, 3rd, 4th floor Renovations - $44,000,000 scheduled for installation in 2010/2011, $22,000,000 each year, respectively.
- Irv Pl – 7th and 8th fl Renovations - $22,000,000 scheduled for installation in 2012.
- Flatbush Ave - 6th & 7th Fl Renovation (LL26 Temporary Space) - $9,000,000
  This project calls for renovation of the two floors at the Brooklyn/Queens Headquarters building and is needed to provide for personnel temporary space associated with the LL26 office renovation projects at Irving Place. This project was originally listed as Category C but is now Category A because of its association with the LL26 projects.
  Engineering will be completed in 2009 and the schedule is to install this project in 2009/2010 and spend $5,800,000 and $3,200,000, respectively.

2010 Capital – Shared Services - Facilities

- Eastview - Relocation of C&D and Storage Bin Area to avoid high tension transmission wires - $575,000
  At Eastview S/C there is a concern about safety during loading/unloading operations at the existing Construction & Debris (C & D) and Storage area (i.e. equipment may come in close proximity to the existing 345 kV transmission wires located directly above the storage bins.) Administrative controls such as warning signs and height indication wires are used to insure safe operations and compliance with Con Edison's (25 ft) and OSHA (20 ft) safe distance (clearance) from the high-voltage transmission lines but engineering controls are desirable. Transmission Operations requested the relocation of existing storage bins to another place in order to eliminate the possibility of overhead high-voltage lines contact and flashover hazard. This project relocates the existing storage containers, cable reels, concrete poles to a newly constructed C&D area. The new concrete bin walls will be 4ft high above ground and sized as follows: C & D debris storage bin – 38 ft x 30 ft; Asphalt storage bin – 30 ft x 30 ft; Gravel storage bin – 20 ft x 30 ft; Sand (Backfill Material) storage bin – 30 ft x 30 ft. Concrete footings for storage bins wall will be constructed at least 4 ft below grade and there will be no impervious floor to allow rainwater to drain into underlying soil. In addition a 120 ft x 15 ft asphalt pavement will be required between the new storage bins/existing roadway. Engineering has been completed in 2009 and the schedule is to install this project in 2009.

- Various Locations Backflow Preventer Devices - $750,000
  In accordance with the NYC Plumbing Codes, New York Department of Health Regulations and DEP Regulations, domestic water service installations must be provided with backflow prevention devices. The type of device, whether a double check valve or reduced pressure zone device, depends on the degree of hazard at the particular facility. Each facility has been analyzed and the type of device identified.
  Engineering will be completed in 2009 and the schedule is to install this project in 2009/2010, $375,000 each year, respectively.

- Miscelaneous 2008 carryover –
  Irv Pl - 21st fl Renovation/20th fl sprinkler - $45,000
  Davis Ave - Lightning Arrestor - $150,000
  Flatbush - EDG Power Feeds to 419 Server Farm - $60,000
  Cleveland St - Block Heaters Electric Feeds - $235,000

Justification:

These projects are strictly associated with correcting unsafe conditions, environmental issues, complying with local, state or federal regulatory requirements or building code and responding to various audit, Independent Monitor, Ombudsman commitments and have received the departments highest priority.

Estimated Completion Date:

These projects will take place over the course of the rate case years. It is the intent of the Facilities Capital Improvement Program to address and mitigate issues and concerns associated with projects identified as Category A as early as possible & reasonable. The thrust of the program is thus in 2009 but continues into 2010, 2011, 2012 and 2013; projects currently

identified as Category A in these latter years are associated with compliance with LL26 which requires full sprinklering of 4 Irving Place (the Corporate Headquarters) by 2019 and is thus part of a multi-year program.

Status:

The status of the above projects is provided in the work description section.

Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
10,087	18,071	25,903	24,931	22,651

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
34,568	26,775	22,000	22,100	22,000	127,443

2010 Capital – Shared Services - Facilities

Project/Program Title	**Facilities – Critical Infrastructure - Category B**
Status	**With Engineering**
Estimated Service Date	**Various**
Work Plan Category	System and Component Performance Improvement

Work Description:

These are projects have been initiated because they are deemed necessary to maintain the structural integrity of our buildings or to allow them to operate as designed or to protect critical equipment (e.g. failed roof, high maintenance HVAC or elevator equipment, deteriorated docks/piers, LAN Room AC Installations, etc.) Projects within this category would be evaluated and prioritized based on criticality to the facility and the corporation.

Examples of such projects are:

- WEA - E. Control Room Lights/Ceiling/Renovations & AC - $3,800,000. This project was originally budgeted for $2,470,000 in 2009 but was started in 11/08 instead of 10/08 due to operational requirements of the control room. Approximately $1,400,000 has been carried over into 2009, the year in which the project will be completed.
- 125th St - Relocation of CSR and Walk-in Center Areas – The building will be sold and the site relocated to 124th St. at a cost of approximately $6,800,000.
- Flatbush - Roof Replacement - $900,000. The 7th floor roof, originally scheduled for 2009, was accelerated and completed in 2008 for approximately $803,000.
- Davis Ave - Roof Replacement - $715,000. Originally scheduled for 2009, this project was accelerated and completed in 2008 for approximately $634,000.
- Irv Pl - HVAC Piping Replacement Program - $200,000/year (multi-year). All work identified thus far has been small repairs and is O&M. $0 spent in 2008.
- Flatbush Ave - Rm 520 LAN Rm A/C - $430,000. Originally scheduled for 2009, this project was accelerated and completed in 2008 for approximately $293,000.
- Flatbush Ave - UPS Upgrade Room 520 - $150,000
- 3rd Ave Yd - Paving/Parking/Building 2, 3, 4 Demo/Wall Preservation ~ $1,000,000 each year in 2009 and 2010. The cost has been reduced by approximately $1,000,000 as paving for parking will no longer be provided in this work scope.
- Astoria Building 136 – LAN Room AC - $150,000 in 2010.
- Van Nest 21 – 2nd Fl AC 4 and Boiler Removal – $375,000 in 2010.

Justification:

These projects are strictly associated with correcting critical infrastructure issues in the various buildings of Facilities. Note that most of the buildings of Facilities are fifteen to twenty years old with certain locations such as Cleveland Street and Rye Service Centers constructed over sixty years ago. Equipment associated with operating these facilities, along with its infrastructures, has aged and reached a point where it is no longer economical or practical to continue to repair. Heating, ventilating and air-conditioning (HVAC) equipment, in most cases, is close to twenty years old and has outlived it useful life. This equipment should be gradually replaced with more efficient systems that utilize more environmentally friendly refrigerants. Interior offices, in

2010 Capital – Shared Services - Facilities

certain cases, do not meet current space-use, NYC or Westchester Building Code or present day industry life-safety standards.

These projects address infrastructures issues in the Company headquarter buildings, work-out centers and yards and customer service centers that require almost an immediate response.

Estimated Completion Date:

These projects will take place over the course of the rate case years. It is the intent of the Facilities Capital Improvement Program to address and mitigate issues and concerns associated with projects identified as Category B as early as possible & reasonable, but after Category A projects are mostly addressed. The thrust of the program is thus in 2009 and 2010 but continues into 2011 and 2013; projects currently identified as Category B in these last two years are primarily associated with the Irving Place HVAC Piping Replacement Program.

Status:

At the moment, the Category B projects are being evaluated and engineered, where the scopes of work are defined.

Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
3,000	8,564	7,897	7,796	9,635

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
10,657	4,665	200	200	200	15,922

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Project/Program Title	**Facilities – Critical Infrastructure - Category C**
Status	**With Engineering**
Estimated Service Date	**Various**
Work Plan Category	System and Component Performance Improvement

Work Description:

These would be performed each year in order to maintain & improve on overall conditions at the facilities buildings & yards. The program may address efficiency improvements and/or equipment modernization or upgrades and projects are evaluated/prioritized based on facility assessments. These projects generally have to do with Yard Paving/Resurfacing, Roofs identified in the Roof Inspection Program, HVAC systems nearing the end of their normally useful life, general office renovations, elevator upgrades, etc.

Examples of such projects are:

- CPB - Paving/Resurfacing Program Phase 2 ~ $250,000
- Astoria - Paving/Resurfacing Program ~ $600,000
- Irv Pl - Window Replacement ~ $3,000,000 to $6,000,000/year (multi-year)
- Davis Ave - Window & Lintel Replacements ~ $300,000 to $460,000/year (multi-year)
- Van Nest S/C Bldg 1 and Shop- Renovate 1st fl Mezz Bathrooms/Locker rooms - $500,000/year (multi-year)
- Irv Pl - G Stairwell Washroom upgrades ~ $600,000
- Bruckner - Yazaki Replacement - $300,000
- Cleveland St S/C - Yazaki Absorption Unit Replacement - $400,000
- Regional Storerooms Bronx – Lighting -$100,000
- 16th St S/C - Security booth relocation/consolidate (Security Program) - $1,500,000
- Flatbush Ave – EDG Upgrade - $500,000/year (multi-year)
- Various Security Projects (dollars transferred from Security funding: $3,450,000 in 2010 & $1,835,000 in 2011). Typical projects cover Critical Headquarter Buildings and Service Centers.

Justification:

These projects are strictly associated with correcting critical infrastructure issues in the various buildings & yards of Facilities. Note that most of the buildings of Facilities are fifteen to twenty years old with certain locations such as Cleveland Street and Rye Service Centers constructed over sixty years ago. Equipment associated with operating these facilities, along with its infrastructures, has aged and reached a point where it is no longer economical or practical to continue to repair. Heating, ventilating and air-conditioning (HVAC) equipment, in most cases, is close to twenty years old and has outlived it useful life. This equipment should be gradually replaced with more efficient systems that utilize more environmentally friendly refrigerants. Interior offices, in certain cases, do not meet current space-use, NYC or Westchester Building Code or present day industry life-safety standards.

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These projects will programmatically modernize, upgrade, and improve various equipment and infrastructures associated with the Company headquarter buildings, work-out centers and yards and customer service centers.

Estimated Completion Date:

The thrust of the Facilities Capital Improvement Program is to address Category A, then B projects and then to gradually move from a compliance and emergency response related work to one that programmatically improves the working conditions of the buildings and yards. Therefore, a bulk of the Category C projects takes place in 2010, 2011, 2012 and 2013 with the intent that the majority of the compliance and emergency response work is accomplished by 2010.

Status:

At the moment, the Category C projects are being evaluated and engineered, where the scopes of work are defined.

Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
0	0	2,234	865	242

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
325	9,245	18,260	18,985	10,750	57,565

2010 Capital – Shared Services - Facilities

Project/Program Title	**Facilities – User Requests - Category D**
Status	**With Engineering**
Estimated Service Date	**Various**
Work Plan Category	System and Component Performance Improvement

Work Description:
Any projects which do not meet the criteria of category A, B or C and are strictly at the request of the user are deemed Category D. Each would be evaluated for need and prioritized on a "first-come-first-served" basis and budgeted/engineered/scheduled accordingly. Examples of such projects are:

- Irv Pl – Additional Pressure Switches for Chilled & Secondary Water Pumps - $50,000
- Irv Pl - Additional Points for Alarm Panel in Control Room - $100,000
- 16th St S/C - Enlarge Ave C gate for truck traffic - $150,000
- CPB S/C- New Flush Truck Shed - $1,500,000
- TLC - Enclose gas pavilion for training - $1,500,000
- TLC - Employee/student notification system - $300,000
- Bruckner Garage - Moisture/Condensation Issue - $250,000

Justification:

These projects are essentially extras that the various Facilities user organizations would like in order to better improve their operation or overall conditions. As mentioned above, these will be addressed as capital funds become available and on a "first-come-first-served" basis. They will be budgeted/engineered/scheduled accordingly.

Estimated Completion Date:

The thrust of the Facilities Capital Improvement Program is to address Category A, then B projects' then to gradually move from a compliance and emergency response related work to one that programmatically improves the working conditions of the buildings and yards (i.e. Category C) and then to Category D.

Category D will follow if and when capital funds become available.

Status:

These projects are on hold until when and if capital funds become available.

Current Working Estimate (if applicable):

Funding ($000):

Actual	Actual	Actual	Actual	Actual

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2004	2005	2006	2007	2008
0	0	703	0	0

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
0	0	0	0	7,730	7,730

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Project/Program Title	**Various - Hurricane Building Hardening Projects**
Status	**With Engineering**
Estimated Service Date	**Various**
Work Plan Category	Emergency Response Programs, Public and Employee Safety

Work Description:

Building Hurricane Hardening encompasses steps that the Company will take to strengthen and reinforce certain facilities in the event of a hurricane (various categories) to increase the likelihood that critical facilities be able to operate, so that the Company can continue its business as best as possible, during such an event. After the 2005 hurricanes in the Gulf region, the Company began studying the potential effect of hurricanes on its facilities. To date, several studies have been conducted in this effort.

Justification:

1st Thornton-Tomasetti (TT) Study – West End Avenue (WEA)

The Company hired Thornton-Tomasetti (TT) to perform a detailed structural evaluation of WEA based on drawing research/field observations; computer modeling/analysis of the building's steel frame structure; manual calculations for the masonry walls, roof mounted equipment anchorage, and roof deck, including debris impact; and qualitative evaluation of windows, doors, louvers, roofing systems, and transformer bay enclosures. The building was evaluated for current code requirements for wind loading associated with hurricane categories 2, 3 and 4. In addition, exploratory holes were also drilled into several of the [Concrete Masonry Units] ("CMU") walls to confirm that they are un-grouted and un-reinforced. Based on this exploratory information and the TT study, it was determined that the WEA building would need to be hardened.

Altran Solutions Study – Ability of critical regional facility locations to serve as Shelters

The Company hired Altran Solutions to perform a screening evaluation of 4 Irving Place, Buildings 21 and 21A at Van Nest, 1 Davis Avenue, 30 Flatbush Avenue and Rye Headquarters. This effort involved assessing the buildings for suitability as hurricane shelters (structural and flooding standpoint only) and assigning them numeric ratings. The screening criteria came from FEMA 361, the American Red Cross and additional information obtained from the state of Florida and addressed the following: flooding due to storm surge, building age and type of construction; categorizing and rating the building elements (main load resisting system, roof, floors, walls, cladding, windows, doors); debris hazards; et al. The evaluation did not involve any formal analysis but did result in the identification of building components that would need hardening and related "order of magnitude" costs. The screening relied on past performance of various buildings during historical hurricanes of all categories. As such, there was no distinction made of the hurricane category number in determining the rating. The Altran reports assessed the capability of the critical Con Edison buildings to resist major hurricanes and concluded that all buildings were rated below acceptable for use as shelters and would need to be hardened.

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Using the recommendations provided in the Altran study and information currently known, the estimated costs to harden 4 Irving Place, Buildings 21 and 21A at Van Nest, 1 Davis Avenue, 30 Flatbush Avenue and Rye Headquarters would be approximately $40,000,000. This includes measures such as replacing existing "unshuttered" windows with a hurricane resistant version; reinforcing windows with an anchored film; reinforcing exterior masonry walls; and replacing existing ballasted or lightweight metal decked roofs, anchoring poorly attached roof mounted equipment.

2nd Thornton-Tomasetti (TT) Study – 4 Irving Place, WEA and Buildings 21 and 21A at Van Nest

Because of this substantial cost indicated above, Engineering and the Coastal Storm Committee refined the parameters utilized in the TT and Altran studies mentioned above in order to limit the extent of hardening required and therefore cost. TT was again hired and evaluated methods for hardening not all but select locations, such as 4 Irving Place, WEA and Buildings 21 and 21A at Van Nest. In the cases of Irving Place and WEA, these buildings were analyzed so that certain floors/areas as opposed to the entire buildings could be utilized as shelters. Buildings 21 and 21A at Van Nest were analyzed as shelters and also to remain as operational facilities during a hurricane event.

These reports again indicated that significant and costly exterior hardening modifications would be needed for Van Nest Buildings 21 & 21A so that they can be used as shelters and operating facilities during a hurricane event. The modifications for creation of shelters at Irving Place and WEA appear to be slightly more feasible, although still very costly. A summary of the Capital Costs Estimates for these Hardening Sites is provided below:

- Van Nest 21/21A - $13,000,000 to $15,000,000 for exterior skin, impact resistant window/doors, interior and roof bracing, measures to secure roof-top equipment, EDG/HVAC enclosures. Hurricane resistant roof.
- Irving Place 3rd Floor Shelter for 350 Storm Riders - $4,000,000 to $5,000,000. New hardened interior walls around shelter perimeter. Impact resistant window/doors. Dedicated HVAC & EDG or harden existing EDG. Emergency lighting/exit signs, potable water & sanitation storage.
- Irving Place Data Centers & MECC Hardening - $4,000,000 to $5,000,000. Hurricane windows/steel support frames or hardened wall similar to shelter. Measures to protect electrical equipment in basement from flooding.
- WEA 2nd Floor Shelter for 15 persons – $5,000,000 to $6,000,000. Similar shelter measures as Irving Place. West exterior wall hardening of shelter area. Exterior/interior wall hardening measures to minimize damage to Bulk Power Control Room & supporting IR Rooms. Hurricane resistant roof, impact resistant window/doors.

3rd Thornton-Tomasetti (TT) Study – 4 Irving Place, WEA and Buildings 21 and 21A at Van Nest

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Since 2nd TT study determined that the probability of the lower bound of a Cat 3 hurricane is in the ~ 300 year Return Period range (~7000 year for upper bound) and the upper bound of a Cat 1 (95 mph) is in the 50 to 100 year Return Period range, it was felt that the Company should have a better understanding of what it would take to hardened the above facilities to the criteria with a more reasonable probability of occurrence. In this final study TT assessed the vulnerability of relevant portions of Irving Place, WEA, Van Nest 21/21A using design wind loads (98 mpg - 3 second gust) of the recently adapted NYC Building Code Standard (mid Category 1 range) and windborne debris criteria from FEMA & ASTM.

These four buildings were designed to the building code in place at the time, which may/may not have properly considered wind loads, but certainly did not consider damage from windborne debris or take into account new information gained over the years (e.g. based on experience of building behavior during a hurricane - swirling winds at building corners cause damage in these areas). If was felt that since shelter criteria (160 mph winds) would not be used, the necessary modifications could be substantially less. It appears from the draft TT reports that the hardening scope, although slightly less, is still significant and costly. A summary of the Capital Costs Estimates for these Hardening Sites is provided below:

- Irving Place 3rd Floor Hardened Area for 350 Storm Riders - $3,500,000 to $4,500,000. New hardened interior walls around perimeter. Impact resistant window/doors. Dedicated HVAC & EDG or harden existing EDG. Emergency lighting/exit signs, potable water & sanitation storage.
- Irving Place Data Centers & MECC Hardening - $4,000,000 to $5,000,000. Impact resistant window/doors. Measures to protect electrical equipment in basement from flooding.
- WEA 2nd Floor Hardened Area for 15 persons – $3,000,000 to $4,000,000 includes hardened interior walls around perimeter; hardened west exterior walls by connecting to concrete floor. Emergency lighting/exit signs, potable water & sanitation storage.
  Bulk Power Control Room & supporting IR Rooms - hardened exterior walls on 3rd & 4th floors. Install impact resistant windows & hurricane resistant roof.
- Van Nest 21/21A – harden exterior brick, interior bracing, install impact resistant window/doors & hurricane resistant roof, measures to secure roof-top equipment, EDG/HVAC enclosures. $13,000,000 to $14,000,000.

Estimated Completion Date:

As determined by the Coastal Storm Committee, several of the above critical Company locations may need to serve as shelter or both shelter and operating facility before, during and after a hurricane.

Status:

The Company's Senior Management has selected the work scope for the hardening of its facilities and is now moving towards the next phase of this plan, creating shelters for operating

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personnel at the Company's Energy Control Center ("ECC") and at Irving Place. A Request for Proposal (RFP) is was issued on January 29, 2009 to have an architectural engineering contractor prepare the necessary detailed design package and associated construction estimates. The scope of work and costs will be based on the Thornton Tomasetti hardening studies.

The Irving Place project will provide for a shelter on one of the floors at a cost currently estimated at approximately $5,000,000. 350 "Storm Riders," personnel of various operating organizations, who plan to support storm preparation efforts, will be able to have a safe location during the hurricane. The conceptual scope of work includes hardened interior walls around the shelter perimeter, impact resistant window/doors, dedicated HVAC & EDG systems, emergency lighting/exit signs, and potable water & sanitation storage systems. This project is expected to start in 2010 and be completed in 2011.

The ECC project will provide for a shelter for 15 employees at a cost currently estimated at approximately $4,500,000. This shelter will be similar to that at Irving Place and will be designed for personnel who plan to operate the electrical system leading up to the hurricane event and then require a safe location during the actual event. The conceptual scope of work consists of the installation of hardened interior walls around the shelter perimeter, exterior/interior wall hardening measures to minimize damage to Bulk Power and DO Control Rooms and supporting IR Rooms. This project is expected to start in 2010 and be completed in 2011.

This work is expected to start in 2010 and we request funding of $6,125,000 in that year, with the remaining amount of $3,375,000 in 2011.

Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
0	0	0	0	978

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
0	6,125	3,375	0	0	9,500

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Project/Program Title	**Astoria Site: A-11 Dock and A-12 Luyster Creek Bulkhead**
Status	**Waterfront Inspection Completed/Engineering in Progress**
Estimated Service Date	**Various**
Work Plan Category	Public and Employee Safety, Environmental, Regulatory

Work Description:
The Astoria 5-years waterfront inspection program identified various deteriorations and degradations of the A-11 Dock and A-12 Luyster Creek Bulkhead ranging from "Poor" to "Serious".
Below are descriptions of the identified deteriorated conditions and recommended repairs:

Astoria A-11 Dock and A-12 Luyster Creek Bulkhead Condition & Recommendations (Poor and Serious Conditions):

- A-11 Dock Area B, C and E Coating Repair of Steel Sheet Piling in Splash Zone - $50,000 (Immediate Corrective Action)
  Present condition: The protective coating in the splash zone is flaking off throughout the steel sheet pile bulkhead and up to ¼" of corrosion product covers the steel. *It is recommended to install new protective coating within the splash zone on the sheet pile bulkhead.*

- Astoria A-11 Dock, Area A and Area B Repairs - $1,958,000 (allow 1.5 factor for General Conditions, Construction Management Oversight, Corporate Overheads and Contingency) ~ $2,937,000
  Area A: the timber cribbing and timber bulkhead are in poor to serious condition due to advanced deterioration of the cribbing within the tidal zone, complete loss of connection hardware between transverse and longitudinal cribbing members, and evidence of marine borer activity.
  Area B: the intake area for Salt Water Fire Pump House is in poor condition: large area of grating in the outer screen is missing and silt build-up at the bottom of concrete intake enclosure. The outer screen is completely missing in the tidal zone due to corrosion.
  Recommendation: The inspection report recommends an over-sheeting bulkhead repair method and replacement of pump house intake grating.

- Astoria A-11 Dock, Area D Repairs - $3,215,000 (allow 1.5 factor for General Conditions, Construction Management Oversight, Corporate Overheads and Contingency) ~ $4,822,500
  Present condition: the timber cribbing and timber bulkhead are in poor to serious condition due to heavy deterioration of the cribbing timbers in the tidal zone, complete loss of connection hardware between transverse and longitudinal cribbing members, evidence of marine borer activity, loss of fill at the interface between the cribbing and each concrete mooring dolphin, and a completely failed timber fender system. Mooring bollards are in critical condition. Due to impact damage, the bollards will not safely support the mooring of any vessel. Concrete mooring dolphins are in poor condition due to spalling of the concrete at the corners; also concrete in the tidal zone is eroded and steel supports at the offshore face of each dolphin are deteriorated.

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Recommendation: The inspection report recommends Rip Rap Revetment repair method.

- Astoria A-12 Luyster Creek Bulkhead Repairs - $2,010,000 (allow 1.5 factor for General Conditions, Construction Management Oversight, Corporate Overheads and Contingency) ~ $3,015,000.
  Present condition: the timber cribbing is in poor to serious condition due to missing or heavy deteriorated timbers, evidence of fill loss, fallen concrete, complete loss of connection hardware between transverse and longitudinal timbers, and dilapidated vertical posts at the locations of some transverse timbers.
  Recommendation: The inspection report recommends Rip Rap Revetment repair method

Total Cost ~ 10,774,500 Say $11,500,000 which was 2009 Rate Case Value

Justification:

The corrective action repairs/recommendations will correct current conditions, prevent continuous deterioration of affected dock structures; and make these structures available for continuous Con Edison operations.

Estimated Completion Date:

This project can be completed in 2010 – 2013.

Status:
With Engineering. A contract was awarded to an outside engineering firm on 1/20/09 and the design package is expected to be completed in the 2nd quarter 2009. It is anticipated that with required permits, this project will begin construction in 2010.

Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
0	1,875	1,786	251	0

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
0	2,500 (A-11 dock sections A/B)	3,500 (A-11 dock sections B/D)	3,500 (A-11 dock section D & A-12 start)	2,000 (A-12)	11,500

2010 Capital – Shared Services - Facilities

Project/Program Title	Program to Improve Flush Facility Functionality and Reliability (Farrington Street Facility)
Status	Design Phase
Estimated Service Date	January 2012
Work Plan Category	Reliability and Environmental

Work Description:

- Enclose the Farrington Street (Queens) Flush Truck Facility unloading areas, bins, and associated basins to provide weather protection and ensure proper facility operation.
- Enclose the associated wastewater treatment systems in a building to provide complete weather protection for all components and ensure continuous system availability.
- Design and implement system redundancy through parallel installation of critical components including, but not limited to:

  - Transfer pump
  - Sand/Anthracite Filter
  - Particulate filter
  - Carbon filter backwash pump
  - Treated wastewater holdup tanks
  - Composite sampler

- Design and install water treatment controls to provide remote monitoring on a 24/7 basis.
- Investigate alternative technologies and state-of-the-art equipment for the wastewater treatment Systems to improve operation, minimize O&M costs, and ensure long-term availability.

Units per Year: In 2008, The Farrington Street Facility managed 3,643 tons of solid waste and treated 3,489,810 gallons of water for discharge to the NYCDEP sewer system.

Mandatory: This facility is a critical path element for nearly all work performed in underground electric distribution structures. Continuous facility availability and effective operation are critical to maximizing vactor truck availability for performing underground electric distribution cleanings in advance of routine work, emergency restorations, and inspection activities. Vactor trucks that must travel outside of their service region to unload are less available for cleaning activities. Further, the throughput increases at the other facilities due to loss of Farrington Street would be unmanageable during high activity periods.

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High-level schedule:

- Assign Project Manager and Project Engineer; create project team. (Complete)
- Review vendor conceptual and design proposals; finalize concept (09/2009)
- Release construction plan and file for permits (10/2010)
- Construct facility (12/2011)
- Commission facility (01/2012)

Justification:

Con Edison's inspection improvements for underground electric structures and the installation of new vented covers have yielded a significant flush waste generation increases since 2003 (see table presented below). Flush waste consists of debris accumulations that have been removed from underground electric structures to facilitate performing work safely, and in accordance with all applicable specifications for quality. Entering more structures, more frequently accounts for these substantial increases, challenging the physical assets designed to manage this material.

Solid debris and sediment regularly deposits in Con Edison's underground electric structures through street run-off, and in-leakage from sources such as water and sewer mains. Vactor trucks flush these materials from underground facilities prior to work, yielding a waste material that is transported to Con Edison's four Flush Facilities for management. Flush waste may generally be considered in terms of three waste streams upon unloading at the Flush Facilities: solid debris, sediment, and water.

At all four facilities (located in Bronx, Brooklyn, Manhattan, and Queens), vactor trucks empty their contents into drying bins, which retain the relatively more coarse material while water and finer solids, or sediment, drain into sub-grade collection structures. Upon sufficient drainage, the drying bins are unloaded into lined containers for transport and disposal. At three of the four facilities, the sediment settles while water is pumped through wastewater treatment systems for discharge to the New York City sewer system in accordance with permit conditions. The solid debris and sediment accumulations are removed periodically for transport and disposal. At the remaining facility, water and sediment accumulate in a sub-grade collection structure prior to removal and transport for disposal.

The flush truck facilities and associated wastewater treatment systems are located entirely outdoors. The environment severely impacts facility and equipment operation, especially during extreme weather events such as heavy rains and sub-freezing temperatures. The wastewater systems were originally constructed with an anticipated 18-month lifespan approximately 10 years ago, but have since become a critical and irreplaceable part of Con Edison's daily operations. System age, coupled with harsh environmental conditions, has prompted substantial maintenance and management efforts to ensure continuous availability. Sub-freezing temperatures also create potential personal safety issues for Con Edison employees. Operating personal must manage waste that contains a substantial amount of water, leading to ice formation on walking working surfaces in the unloading areas and around water treatment system components.

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Considering the necessity of these facilities in the performance of day-to-day work, ensuring continuous operation and long-term availability is absolutely critical. Any construction required to implement functionality and reliability improvement must be planned to minimize availability interruptions, as well as limit such interruptions to no more than one facility at any given time. The Farrington Street facility has been selected as the first stage for the program to improve flush facility functionality and reliability because the site configuration will accommodate operations and construction concurrently.

	Annual Flush Waste Generation					
Waste Stream	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**
Solid Debris (tons)	4538	5080	5683	6175	5873	6110
Sediment (tons)	4857	5130	6032	7045	7121	7668
***TOTAL SOLIDS** (tons)*	***9395***	***10,210***	***11,715***	***13,220***	***12,994***	***13,778***
Water (gallons)	8,337,229	9,668,357	11,164,803	12,183,336	10,942,849	11,292,546

- Alternatives:
  Operate existing facility to the point of system failure. Loss of the Farrington Street Facility would further stress capacity at the two other locations where unloading of Queens-generated flush waste is permissible. A NYSDEC permit restriction associated with the Bronx facility precludes unloading of Queens waste except with specific permission during system emergencies, and the anticipated trans-Hudson tunnel project will impact the Manhattan facility. Only the Brooklyn facility remains as a potential alternate unloading location for Queens vactors. The combined Queens/Brooklyn waste stream would be unmanageable at the Brooklyn facility during high activity periods.

- Risk of No Action:
  Water treatment system failure would result in loss of continuous facility availability.

  Summary of Financial Benefits and Costs: Loss of Farrington Street availability would necessitate travel to unload at other facilities. The associated travel time increases would reduce vactor availability for cleaning activities while increasing throughput at the remaining facilities.

- Non-financial Benefits (if applicable): NYSDEC approved Con Edison's Lead Stabilization Program in August 2008, allowing management of underground electric distribution structure cleaning waste as non-hazardous material. These materials were previously classified, and handled, as hazardous wastes. The approval was based on Con Edison's waste management practices in the field and at the flush facilities. That approval has resulted in substantial hazardous waste reduction for Con Edison, and for New York State overall. Beyond the operational benefits of improving facility conditions, this project helps signal ongoing commitment to a community-beneficial program.

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Estimated Completion Date:

Status: Engineering/Planning stages of project are underway.

Current Working Estimate (if applicable): An order of magnitude estimate was prepared based on a basic conceptual approach to replacement of the Farrington Street Flush Facility. The estimate assumed that the final design will include a building to house the unloading area and water treatment system, and includes supporting mechanical systems for such a building. Costs include outside engineering services to provide a final design and internal resources for appropriate project management. A spreadsheet presenting the order of magnitude estimate is provided as an attachment to this document.

Funding: ($000s)

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008	Approved 2009	Request 2010	Request 2011	Request 2012	Request 2013	Request/Approved 2009-2013 Total
					1,200	5,000	6,300			12,500

2010 Capital – Shared Services - Facilities

Project/Program Title	Astoria's Hazardous Waste Storage Facility Upgrades
Status	Pending EPA/DEC approval
Estimated Service Date	Last quarter 2012
Work Plan Category	Environmental

Work Description:

Upgrade Astoria Hazardous Waste Storage Facility

1. Upgrade and expand the existing steel canopy structure, which will involve adding 700 square feet of protected area with new gutters and leaders, improve the perimeter lighting, refurbish the existing roof and install sliding doors. This work is required to prevent rainwater from entering the proposed secondary containment area and impacting stored materials.
2. Upgrade the PCB Shed by installing insulation, improved lighting and heating to facilitate the storage of drums containing liquid.
3. Upgrade a secondary liquid drum storage area by installing new paving and improved perimeter lighting.
4. Install 180 linear feet of concrete secondary containment and the required ramps for access in the canopy area as required by DEC regulations. This work is contingent upon EPA and DEC approval of an EH&S Remediation project which involves the installation of approximately 120,000 square feet of concrete paving. The paving work must be completed in conjunction with the establishment of the secondary containment area.

Background: In 1994, the NYSDEC issued Con Edison a permit to store PCB-contaminated waste in Astoria. In addition, they also issued a consent order which required the company to complete a site investigation to determine if any soil or ground water contamination existed. The investigation was completed and found PCB contamination in the permitted area. This required a corrective measures study to be completed and determine how to remediate the contaminated area. The study was completed in 2001 and an action plan was developed to facilitate the remediation process.

Justification: In July 2008, the DEC issued Con Edison a revised permit to allow the Astoria facility to accept all the hazardous waste streams that the company generates. The proposed modifications listed above will improve the processes involved with managing these additional hazardous waste streams. The installation of the new pad and secondary containment area will also reduce the group's potential for impacting the environment. Once the new processes are fully implemented, the facility will accept an additional 2,000 to 3,000 drums/year which will result in future cost avoidance.

- Alternatives: Manage expanded waste streams under existing conditions
- Risk of No Action: Impacts the group's abilities to effectively handle the additional waste streams
- Summary of Financial Benefits and Costs: N/A
- Non-financial Benefits (if applicable): N/A

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- Technical Evaluation/Analysis: see attached ESR 2009-018
- Sensitivity Analysis (if applicable): N/A
- Project Relationships (if applicable): Associated with the EH&S Remediation project for this area

Estimated Completion Date:
Last quarter of 2012

Status: Planning Stage

Current Working Estimate (if applicable): $1.244 million

See attached ESR 2009-018

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	-

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
-	$450	$650	-	-	$1,100

Facilities - Corporate Headquarters (Irving Place)
($000's)

	Historic Year 12/31/2008	RYE 3/31/2011	RYE * 3/31/2012	RYE * 3/31/2013	2011-2013 Incremental Total
Indoor Air Quality Improvement Programs					
Duct cleaning	325	503	503	503	1,184
Induction unit drip tray inspection	0	32	32	32	96
Roof inspection and repairs	0	200	237	270	707
Piping inspection and replacement program	39	56	56	56	129
ACM insulation abatement and replacement program	135	110	110	110	195
	499	**901**	**938**	**971**	**2,311**
Local Law 10-11 Façade Repairs (4 Yr Program)	**0**	**2,488**	**488**	**0**	**2,976**
Flooring Upgrades Programs					
Replace carpeting on approximately two (2) floors annually	614	620	620	620	1,246
Seal/epoxy fan room floors	0	67	67	67	201
	614	**687**	**687**	**687**	**1,447**
Building Infrastructure Restoration Programs					
Cooling Towers Restoration and Maintenance Program	827	19	19	19	(770)
Valve replacement program (AHUs and PAs)	0	283	283	283	849
Lobby refurbishment					
restore marble	0	140	140	140	420
restore ceiling	80	173	26	26	145
replace turnstiles	0	45	45	45	135
window replacement	8	20	20	20	52
refurbish lobby door	0	75	75	75	225
parking lot re-furbishment	120	28	28	28	(36)
Window cleaning	0	153	153	153	459
Install new window treatment systems along 15th St	11	0	0	0	(11)
Seal double hung windows	5	30	30	30	85
	1,051	**966**	**819**	**819**	**1,553**
MAC					
Floor renovations (Rent)	102	2,340	2,340	2,340	6,918
Floor renovations	161	5,137	302	302	5,580
	263	**7,477**	**2,642**	**2,642**	**12,498**
Labor	**0**	**202**	**202**	**202**	**606**
Facilities Totals	**2,427**	**12,721**	**5,776**	**5,321**	**21,391**
Less Historic Year 2008		**(2,427)**	**(2,427)**		**(2,427)**
Incremental 2009 Less Program Changes 2010				**(455)**	**(455)**
Incremental 2010 Less Program Changes 2011					**(330)**
Incremental	**2,427**	**10,294**	**3,349**	**2,894**	**8,807**

* RYE = Rate Year Ending

2010 O&M – Shared Services - Facilities

Project/Program Title	**Indoor Air Quality Improvement Programs (4 Irving Place)**
Status	**Ongoing**
Estimated Service Date	**2013**
Work Plan Category	**Public & Employee Safety, Environmental (Category A)**

Work Description:

Programs that systematically address the quality of indoor air such as removing hazardous materials and improving HVAC operating equipment. Programs include, but are not limited to, HVAC duct cleaning and induction unit drip tray cleaning/inspections; inspection and repairs of roof and piping systems; and abatement and replacement of ACM insulation throughout the building.

Justification:

- Alternatives: None
- Risk of No Action: Employees will breathe poor quality air filled with contaminants, particles and dust. This could lead to increase in respiratory illnesses.
- Summary of Financial Benefits and Costs: NA
- Non-financial Benefits (if applicable): NA
- Technical Evaluation/Analysis: NA
- Sensitivity Analysis (if applicable): NA
- Project Relationships (if applicable): NA

Inspecting, cleaning and removal of hazardous materials associated with air and water distribution equipment and systems in the building will mitigate the spread of potential infectious diseases.

Estimated Completion Date: Ongoing

Status: Ongoing

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Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	$499

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
$924	$901	$938	$971	$2,810

2010 O&M – Shared Services - Facilities

Project/Program Title	Irving Place – Local Law 11 Repairs
Status	With Engineering
Estimated Service Date	2011
Work Plan Category	Regulatory (Category B) Critical Infrastructure

Work Description: Repair conditions identified as "safe with repair and maintenance program" (SWARMP) including re-caulking windows to correct building water infiltration problems per Cycle 6 Local Law 11 inspection report filed with NYC Dept. of Buildings.

The Company's 2009 Rate Case testimony indicated that its engineering department (through a hired outside consultant) had completed its report to the DOB on the LL11 Cycle 6 inspections, performed in 2006. This report identified no unsafe conditions but did indicate that several items identified as "safe with a repair and maintenance program" ("SWARMP") were discovered. These items include repairing cracked stone, replacing old masonry sealant, and sealing open masonry joints. In addition to normal façade and/or parapet repairs, the report also recommended replacing the caulking on all the building windows. The estimated cost for this work was $4,000,000. Recognizing that attempting to accomplish all the work in one year would be extremely intrusive to the building occupants and, due to the required sidewalk bridging surrounding the entire building, the neighborhood as well, it was decided to be accomplish it over a four year period and prior to the Cycle 7 LL 11 inspection required to be completed by February 2012. We thus proposed that the work be accomplished as a program addressing various sections of the Façade on an annual basis.

In July 2008, Facilities Engineering performed a comprehensive assessment of almost all the window assemblies at 4 Irving Place in to order to identify window deficiencies beyond caulking. The plan was to coordinate the 6th Cycle Local Law Report recommendations with those in this engineering study. The assessment revealed the following additional categories of defects and the associated cost estimate (see above):

- Defective/corroded metal window lintels
- Some defective caulking around the window perimeters both inside and outside.
- Cracked stone window sills
- Defective metal cladding due to water ingress
- Missing window weather-stripping causing drafts and heat loss
- Broken window panes allowing air/water infiltration and heat loss

We proposed that this work be accomplished in stages over a three year period (2009, 2010 & early 2011) and that it be completed prior to the Cycle 7 inspections which will be scheduled in mid 2011 so that the required inspection report can be filed by February 2012. Note that if the "SWARMP" repairs identified in the Cycle 6 inspection are not addressed by 2012, they will automatically be downgraded to "UNSAFE" and thus need to be completed immediately.

Justification: New York City Local Law 11 of 1998 requires that all buildings, 100 feet or taller, be inspected on a 5 year cycle by a licensed architect and an inspection report be filed on behalf of the building owner with NYC Dept. of Buildings. Cycle 6 Inspection was performed in 2006 and filed as per regulation in February 2007. All repairs must be completed prior to next cycle inspection in 2012.

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We believe that items identified in both the LL 11 Cycle 6 report and the latest engineering assessment report should be completed in the time frame indicated above as these corrective measures will help mitigate water infiltration into the building. As stated in previous testimony, water entering the building travels behind the façade stone and masonry and during cold months of the year, can freeze, which then expands against the back of the stone/masonry, resulting in cracked, loosened stone, masonry and mortar which has the potential to fall from the side of the building to the street below, creating a public safety concern.

Estimated Completion Date:

2009 through 2011.

Status:

Engineering phase.

Current Working Estimate (if applicable):

$4,000,000

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
0	0	0	335	0

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
$1,025	$2,488	$488	0	$2,976

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Project/Program Title	**Flooring Upgrades Program (4 Irving Place)**
Status	**Ongoing**
Estimated Service Date	**2013**
Work Plan Category	**Public & Employee Safety, Environmental (Category A)**

Work Description:

Units per Year: 2 Floors (5,335 sq. yd X 2 = 10,670)
Mandatory:
High-level schedule:
Replace carpeting on approximately two (2) floors annually and resurface approximately fifty four (54) fan room concrete floors with epoxy sealer.

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Justification:

- Alternatives: None
- Risk of No Action: Hazardous floor conditions will result in injuries.
- Summary of Financial Benefits and Costs: NA
- Non-financial Benefits (if applicable): NA
- Technical Evaluation/Analysis: NA
- Sensitivity Analysis (if applicable): NA
- Project Relationships (if applicable): NA

The normal wear, tear and stretching of floor carpeting results in dangerous tripping hazards. In addition, the carpeting has worn beyond any economic or reasonable cleaning method resulting with extremely dirty carpets. Resurfacing the fan room floors will eliminate any water seepage or leakage to lower elevations during any possible equipment failures.

Estimated Completion Date: 2013

Status: Ongoing

Current Working Estimate (if applicable):

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Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	$614

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
$687	$687	$687	$687	$2,061

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Project/Program Title	Building Infrastructure Restoration Programs (4 Irving Place)
Status	Ongoing
Estimated Service Date	2013
Work Plan Category	System & Component Performance Improvement (Category B- Critical Infrastructure)

Work Description:

Replace the outer casings and windwalls on Cooling Towers 4 & 5. In addition, sandblast, repair defects and recoat the Cooling Tower's structural steel and piping. These cooling towers, once the windwalls are completed, the maintenance of the indoor mechanicals and structure need annual repairs and maintenance. Other programs include restoration of equipment and systems that have surpassed the generally accepted life expectancies and require replacement or upgrading to ensure continual operation and/or existence. These various programs include, but are not limited to, restoration of wall, ceiling and turnstile systems, front doors and in extreme traffic areas such as the main lobby/corridors; replacing main steam and chill water stop valves for the building's air handling units (54); and sealing/cleaning of building windows.

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Justification:

- Alternatives: None
- Risk of No Action: Cooling towers will deteriorate and make tower inoperable and unsafe. If the cooling towers fail, the building will become inoperable in the warm months. The Lobby will continue to deteriorate due the heavy traffic of over 3,900 tenants and 600 visitors daily.
- Summary of Financial Benefits and Costs: NA
- Non-financial Benefits (if applicable): NA
- Technical Evaluation/Analysis: NA
- Sensitivity Analysis (if applicable): NA
- Project Relationships (if applicable): NA

The Cooling Towers are integral pieces of equipment in the building's Central Air Conditioning System at 4 Irving Place. The Cooling Towers are located on the roof of the building. The outer casings and windwalls on Cooling Towers 4 & 5 are deteriorating resulting with pieces breaking off and extensive water leakage. These conditions pose a public safety, negatively impact system efficiency and waste water. In addition, the existing coating on the structural steel and associated piping for both cooling towers has deteriorated resulting with numerous corroded

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areas. These corroded areas may eventually result with complete metal failures. Estimate based on actual costs for the refurbishment of cooling towers 2 and 3 and Facilities Engineering estimate of additional repairs needed on Cooling Towers 4 & 5. Other estimates cover the maintenance of all five cooling towers after the windwalls are completed.
Other programs are required since much of the building infrastructure is over 50 years old and has reached the end of its useful life. Failures create additional maintenance problems.

Estimated Completion Date: **2013**

Status: **Ongoing**

Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	$1,051

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
$1,288	$966	$819	$819	$2,604

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Project/Program Title	**MAC (Maintenance Associated with Capital) (4 Irving PL)**
Status	**Ongoing**
Estimated Service Date	**2019**
Work Plan Category	**Regulatory (Category A)**

Work Description:

Units per Year:
Mandatory:
High-level schedule: 2 full floors (100,000 sq. ft per year)

The Company has developed a plan to install required sprinkler systems in conjunction with the conversion of floors at 4 Irving Place to open-office plan arrangements (which in and of itself would require sprinkler systems). In order to meet LL26's 2019 deadline, the Company needs to accelerate its plans for open-office space arrangement. This, in turn, creates the need for additional space for temporary relocation of employees during the renovation. Currently, when the Company renovates a floor, it temporarily relocates the affected employees to another part of 4 Irving Place. This is because it is logistically difficult or practically impossible to maintain employees in their current work area during the renovation process. In order to meet the needs of this accelerated program, some of the affected personnel would need to be temporarily relocated out of 4 Irving Place because there is insufficient swing space currently in the building (i.e., currently less than one full floor of available swing space).

Note that since Flatbush $6^{th}/7^{th}$ floors will be renovated in 2009, 28,000 sq ft (6^{th} Fl) becomes available for temporary space by late 2009. The 7^{th} floor will be operable by midyear 2010. This reduces the total amount of temporary space required out side of the Company from 100,000 sq ft to 72,000 sq ft.

Justification:

- Alternatives: None
- Risk of No Action: Will result in non compliance of New York City Local Law 26 of 2004.
- Summary of Financial Benefits and Costs: NA
- Non-financial Benefits (if applicable): NA
- Technical Evaluation/Analysis: NA
- Sensitivity Analysis (if applicable): NA
- Project Relationships (if applicable): None

This approach 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

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be addressed. 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 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.

Estimated Completion Date: 2019

The sprinklering of Irving Place in accordance with LL26 is 2019. This is part of that long term effort.

Status:

Ongoing - In the Engineering stage for the floors currently selected for renovation.

Current Working Estimate (if applicable):

$16,919,000

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	$263

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
$7,655	$7,477	$2,642	$2,642	$12,761

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O&M Elements of Costs:

Note that since Flatbush 6th/7th floors will be renovated in 2009, 28,000 sq ft (6th Fl) becomes available for temporary space by late 2009 or early 2010. This reduces the total amount of temporary space required out side of the Company from 100,000 sq ft to 72,000 sq ft.

(1) Off site rent of 72,000 sq ft (for two full floors from Irv Pl – Flatbush 6th fl or 100,000 – 28,000) - 72,000 sq ft @ $60/sq ft = $4,320,000 (O&M)

(2) Off site rented space Area Fit-up Cost - for 72,000 sq ft @ $80/sq ft = $5,760,000 (O&M per Property Records).

(3) IR Drops for 500 people re-located temporarily off site - 500 drops @ $1,000 per drop = $500,000 for LAN/Data/Voice/Communication (O&M per Property Records)

(4) Fiber service for off site location - $600,000/3 = $200,000 per year

(5) Moving cost associated w/relocating 500 employees off site - 500 people @ $200/person = $100,000 (O&M)

(6) Irv Place cost associated w/internal moves of 75 people within building – 75 people @ $150/person = $11,250 (O&M)

(7) Irv Place area re-stacking cost associated internal moves within building - 15,000 square feet @ $ 40/sq ft = $ 600,000 (Capital) ...(note that $40, not $70 to $80/sq ft, is used because less restacking renovation required)

(8) Work stations - 500 @ $5,000 per workstation = $2,500,000 (XM Capital)

O&M Elements of Costs required in each Rate Case Year

2009 RY1 - RYE 3/2010 - Fit up of off site location begins 4th quarter 2009 and is completed by end of the 1st quarter 2010. Cost for fit-up, IR drops, rent for two quarters. ($5,760,000 + $500,000 + $4,320,000/2) = $8,420,000 then add $100,000 Flatbush moving costs. Total = $8,520,000

2010 RY2 - RYE 3/2011 - Irv Pl personnel re-located off site by 3rd quarter; Cost for full year rent, moving cost, re-stacking/internal moves required at Irv place to accommodate external moves. $4,320,000 + $200,000 + $100,000 + $11,250 = $4,631,250

2012 RY3 - RYE 3/2013 & 2013 RY4 - RYE 3/2014- Rent full year $4,631,250

Total Temporary Space (MAC) associated with LL26 fit-up/relocations in the 2009 Rate Case is ~ $5,876,000 less than the 2008 Rate case. This is offset by ~ $5,880,000 Capital being expended for the Flatbush 6th Fl Renovation which is contributing to the increase in Capital for 2009.

Note that the $3,000,000 (i.e. $1,00,000/year) temporary space/relocation costs associated with the regional facilities is not included in the 2009 Rate Case filing as there is no work currently identified. This makes the total MAC for the 2009 Rate Case $7,906,000 less than the 2008 Rate Case.

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Project/Program Title	**Engineering Hire – Mechanical, System or Electrical Engineer and Estimator/Operations Hire – Operating supervisor**
Status	**Job Posted**
Estimated Service Date	**6/09**
Work Plan Category	System and component performance improvement

Work Description:

Facilities Engineering prepares design packages in support of the Facilities Department Capital and O&M Budgets. Design packages require the preparation of conceptual drawings/sketches, documents to hire engineering consultants, specifications, drawings, estimates, appropriations (i.e. requests for funding), etc. Engineers are also involved in the purchasing bid and construction process, in system start-ups and commissioning and in the training of operations. They ensure that installed systems are operated and maintained per design basis.

Facilities Irving Place Operations & Maintenance section plans, directs and controls the maintenance of all building systems and the day-to-day building operations at the CECONY Corporate Headquarters. The Facilities O&M section ensures that all Fire and Life safety equipment are operational and that all emergency procedures are communicated to tenant organizations.

Justification:

Facilities Engineering:

The Facilities Capital Budget has increased from $3,000,000 in 2003 to approximately $50,000,000/year today (a ~ 16X increase). This has been handled with outside engineering consultants but the engineering staff must still oversee their work.

In 2003 the engineering staff was as follows (15):
Manager – 1
Admin Assist - 1
Mech Eng - 2
Elect Eng – 1
Stuct Eng – 1
Architects – 3
Estimators – 1
Designers – 5

In 2009 the engineering staff was as follows (18):
Manager – 1
Admin Assist - 1
Mech Eng - 2
Elect Eng – 2
Stuct Eng – 2
Architects – 4
Estimators – 1
System Eng - 2
Designers – 3

The NYC DOB Local Law 26 mandates that Irving Place be sprinklered by 2019 and this has created the need to gut renovate the entire building, which is architectural intensive work.

In 2008, the 4th Architect and 2nd Structural Eng were hired. Facilities Engineering now plans to hire one additional engineer and is evaluating the need for a Mechanical, System or Electrical Engineer.

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Going forward, in 2010 Engineering is looking to supplement its staff and will explain the reasoning below.

Facilities Engineering has minimal drafting capabilities (four designers have become three because of a 5/1/09 retirement) and almost all engineering design packages are prepared by outside consulting firms. However, the in-house Facilities Engineering staff is needed to oversee the work of the engineering consulting firms. For example, Facilities Engineering identifies the scope of work for the project, writes the request for proposal/evaluates and awards the bid to hire an outside firm, secures funding by reviewing the consultant's estimate & then appropriating, works with the Permitting Section to obtain proper project construction and use permits, works with Purchasing during the contract bidding stage and works with Constrcution Management ("C/M") during the project's construction stage. Engineering also tests and commissions all new projects/systems.

Thus, the consulting firms only generate the engineering packages while Facilities Engineering does all the other tasks mentioned above (i.e. the outside firms supplement our drafting/design effort but do not take the place of the entire engineering/project process.)

Several key engineering packages were late in 2008/2009 (e.g. Flatbush 6th/7th floor renovation, Irv Place LL26 Tank Storage, 15th/23rd Renovations) because there was not sufficient Facilities Engineering personnel to perform the above oversight and respond to other emerging projects (e.g. 125th Street Relocation, Flatbush Wall, WEA EDG#3).

Facilities Irving Place Operations & Maintenance:

In 2009 the Fac. IP O&M Management staff is as follows (14):
Section Manager - 1
Manager - 1
Sr. Specialists - 2
Specialist - 1
Shift Supervisors - 5
Operating Supervisors - 4

Going forward, in 2010 Facilities IP Operation & Maintenance is looking to supplement its staff and will explain the reasoning below.

The NYC DOB Local Law 26 mandates that Irving Place be sprinklered by 2019. It also mandated that Irving Place develop an Emergency Action Plan (EAP) separate from the Fire Departments' Fire Safety Plan. The increasing maintenance needs of the aging facility, the need to support the renovation of the floors, progressively increasing compliance inspections, additional Fire/EAP drills and managing the associated training of wardens has created a need for an additional operating supervisor.

Status:

Job Posted for one Mechanical Engineer and one Operating Supervisor.

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	-

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
-	$202	$202	$202	$606

Facilities Operation and Maintenance (Regions)

($000's)

2009 Electric Rate Case	Historic Year 12/31/2008	RYE 3/31/2011	RYE * 3/31/2012	RYE * 3/31/2013	2011-2013 Incremental Total
Indoor Air Quality Improvement Programs					
Duct Cleaning - Periodic inspection of duct interior by inserting video camera for the purpose of identifying conditions that require attention. Once identified repairs are then scheduled on a priority basis.	$148	$50	$50	$50	$2
Air Conditioning Charcoal Filter Replacement Use of more effiiecinet Carbon Filters to improve air quality at 16th Street	$36	$70	$70	$70	$174
HVAC balancing at The Learning Center	$3	$60	$65	$65	$187
Program Total	$187	$180	$185	$185	$363
Flooring Upgrades					
Carpeting - 6,000 SY annually includes furniture moving. Programatic approach to address aging carpet throughout the varous locations including funding to move furniture in occupied areas. Annual inspection to result in highest priority carpet replacement annually.	$122	$417	$425	$425	$1,145
Program Total	$122	$417	$425	$425	$1,145
Structural Inspections & Repairs Includes facades, sidewalks, parapets, brick repointing, re-caulking, waterproofing, roof repair, leaders and gutters. Repointing is a major expense especially at many of our older brick structures in Astoria and in the Bronx.					
Roof Inspection & repair (including parapets, leaders & gutters)	$363	$534	$557	$557	$1,285
Facades and brick re-pointing at various locations.	$348	$854	$854	$854	$2,214
Program Total	$711	$1,388	$1,411	$1,411	$3,499
Building Infrastructure Restoration Programs					
Yard Resurfacing Resources required at multiple locations to address resurfacing issues for extending the life span and making better use of our properties	$321	$90	$90	$90	-$51
Painting and wall treatment repair/restoration Programatic approach similar to carpet program where all locations are walked down annually and required painting is scheduled on a priority basis.	$227	$500	$500	$500	$1,273
Environmental - Asbestos (ACM) Funding to cover asbestos survey investigations - (ACM)	$60	$100	$100	$100	$240
Program Total	$608	$690	$690	$690	$1,462
Sherman Creek (new location)					
Additional guard (security officer) post required for the new location	$87	$100	$100	$100	$213
Additional maintenance items required for new site: custodial contracts, repairs, materials and supplies.	$21	$84	$84	$84	$231
Program Total	$108	$184	$184	$184	$444
3rd Ave Yard (new building)					
Additional Emergency Action Plan Director (security officer) (required for all Class E buildings in the City of New York) for the new building at 3rd Avenue	$31	$120	$120	$120	$329
Additional cleaning services	$69	$31	$31	$31	$24
Program Total	$100	$151	$151	$151	$353
Exterior Street (new work out location)					
Guard Service, snow removal, electricity used, rubbish removal	$0	$186	$186	$186	$558
Program Total	$0	$186	$186	$186	$558
Waterside Dock Repair					
Costs to repair dock to return property back to owner	$0	$3,800	$0	$0	$3,800
Program Total	$0	$3,800	$0	$0	$3,800
Contractual Rent & Tax Increases	$7,971	$8,441	$8,774	$8,647	$17,891
Grand Total Facilities Regions (O&M)	$9,807	$15,437	$12,006	$11,879	$29,515
Less Historic Year 2008		(9,807)	(9,807)		(9,807)
Incremental 2010 Less Program Changes 2011				(127)	(127)
Incremental 2011 Less Program Changes 2012					5,095
Incremental	$9,807	$5,630	$2,199	$2,072	$11,438

Note: RYE = Rate Year Ending

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Project/Program Title	**Indoor Air Quality Improvement Programs (Regions)**
Status	**Ongoing**
Estimated Service Date	**2013**
Work Plan Category	**Public & Employee Safety, Environmental (Category A)**

Work Description:

Programs that systematically address the quality of indoor air such as removing hazardous materials and improving HVAC operating equipment. Programs include but are not limited to periodic inspection & cleaning of HVAC duct systems, charcoal/carbon filter replacement at 16th Street and HVAC balancing at The Learning Center.

Justification:

- Alternatives: **None**
- Risk of No Action: **Employees will breathe poor quality air filled with contaminants, particles and dust. This could lead to increase in respiratory illnesses.**
- Summary of Financial Benefits and Costs: **n/a**
- Non-financial Benefits (if applicable): **n/a**
- Technical Evaluation/Analysis: **n/a**
- Sensitivity Analysis (if applicable): **n/a**
- Project Relationships (if applicable):

  Inspecting, cleaning and removal of hazardous materials associated with air ductwork distribution systems in the buildings will mitigate the spread of potential infectious diseases. Charcoal/carbon filter replacement (a manufacturer specification) and HVAC balancing will prolong the life of the equipment and improve the air quality within the buildings.

Estimated Completion Date: **2013**

Status: **Ongoing**

Current Working Estimate (if applicable):

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Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	$187

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
$145	$180	$185	$185	$550

2010 O&M – Shared Services - Facilities

Project/Program Title	**Flooring Upgrades Program (Regions)**
Status	
Estimated Service Date	**2013**
Work Plan Category	**Public & Employee Safety, Environmental (Category A)**

Work Description:

Carpeting upgrade – 6,000 square yards of carpeting replacement annually and also includes moving furniture so carpeting can be installed. 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.

Justification:

- Alternatives: **None**
- Risk of No Action: **Tripping Hazards**
- Summary of Financial Benefits and Costs: **n/a**
- Non-financial Benefits (if applicable): **n/a**
- Technical Evaluation/Analysis: **n/a**
- Sensitivity Analysis (if applicable): **n/a**
- Project Relationships (if applicable):

  Normal wear and stretching of floor carpeting creates tripping hazards. In addition, the carpeting has worn beyond any economic or reasonable cleaning method resulting with torn, rolled and extremely dirty carpets.

Estimated Completion Date: 2013

Status: Ongoing

Current Working Estimate (if applicable):

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Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	$964	$122

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
$810	$417	$425	$425	$1,267

2010 O&M – Shared Services - Facilities

Project/Program Title	**Structural Inspections and Repairs (Regions)**
Status	**Ongoing**
Estimated Service Date	**2013**
Work Plan Category	**System & Component Performance Improvement (Category B- Critical Infrastructure)**

Work Description:

Includes facades, parapets, brick re-pointing, re-caulking, waterproofing, roof repair, leaders and gutters. Re-pointing is a major expense especially at many of our older brick structures in Astoria and in the Bronx.

Justification:

- Alternatives: **None**
- Risk of No Action: **Deterioration of exterior façade, water infiltration, mold, lack of structural Integrity (steel corrosion, concrete spalling, efflorescence, open mortar joints Cracked brickwork)**
- Summary of Financial Benefits and Costs: **n/a**
- Non-financial Benefits (if applicable): **n/a**
- Technical Evaluation/Analysis: **n/a**
- Sensitivity Analysis (if applicable): **n/a**
- Project Relationships (if applicable):

  Work will prolong the life of the facilities' facades and roofs and prevent damage from infiltration, freeze-thaw cycles, etc.

Estimated Completion Date: 2013

Status: Ongoing

Current Working Estimate (if applicable):

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Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	$162	$711

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
$2,000	$1,388	$1,411	$1,411	$4,210

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Project/Program Title	**Building Infrastructure Restoration Programs (Regions)**
Status	**Ongoing**
Estimated Service Date	**2013**
Work Plan Category	**System & Component Performance Improvement (Category C)**

Work Description:

Programs include the following at multiple locations: Yard re-surfacing, striping and drainage to address re-surfacing issues, repaint worn striping to more efficiently utilize space and prevent freezing pooled water conditions thereby extending the service life span and making better use of our properties. Painting & wall treatment repair/restoration - programmatic approach similar to carpet program where all locations are inspected annually and required painting is scheduled on a priority basis. Environmental (Asbestos - ACM) funding to cover asbestos surveys and investigations.

Justification:

- Alternatives: **None**
- Risk of No Action: **Inadequate maintenance/ repair of aging infrastructure is problematic and Further delays in repair will result in a greater escalation of costs**
- Summary of Financial Benefits and Costs: **n/a**
- Non-financial Benefits (if applicable): **n/a**
- Technical Evaluation/Analysis: **n/a**
- Sensitivity Analysis (if applicable): **n/a**
- Project Relationships (if applicable):

  Many of the building infrastructures are old and have reached the end of their service life.

Estimated Completion Date:

Ongoing

Status: Ongoing

Current Working Estimate (if applicable):

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Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	$17	$608

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
$1,300	$690	$690	$690	$2,070

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Project/Program Title	**Sherman Creek (new location) (Regions)**
Status	**Ongoing**
Estimated Service Date	**2013**
Work Plan Category	**System & Component Performance Improvement (Category C)**

Work Description:

Sherman Creek is a three lot piece of property that once housed a generating station (now demolished) is currently being used by Electric Operations as a work out location for Cable Operations. There are several trailers on site that require the need for a guard post and maintenance items: custodial contracts, repairs, materials & supplies.

Justification:

- Alternatives: **None**
- Risk of No Action: **Robbery, loss of assets, inability to service customers efficiently**
- Summary of Financial Benefits and Costs: **n/a**
- Non-financial Benefits (if applicable): **n/a**
- Technical Evaluation/Analysis: **n/a**
- Sensitivity Analysis (if applicable): **n/a**
- Project Relationships (if applicable):

Guards required at this new locations for employee safety and to protect company property. Also, maintenance items required to maintain new site in a clean and efficient manner.

Estimated Completion Date: Ongoing

Status: Ongoing

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Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	$108

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
$171	$184	$184	$184	$552

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Project/Program Title	**3rd Avenue Yard (new building) (Regions)**
Status	**Ongoing**
Estimated Service Date	**2013**
Work Plan Category	**System & Component Performance Improvement (Category C)**

Work Description:

A new building located at 320 4th Avenue, Brooklyn, NY is required to have on duty Emergency Action Plan Directors (required at all Class "E" buildings by the New York City Fire Department). The Emergency Action Plan Directors (EAPD) will also act as security guards. Also, a custodial contract is needed to clean the building and will be required at the new site.

Justification:

- Alternatives: **None**
- Risk of No Action: **Violation of the NYPD Title 3 Rules of NY, EAP Industry Notice 9**
- Summary of Financial Benefits and Costs: **n/a**
- Non-financial Benefits (if applicable): **n/a**
- Technical Evaluation/Analysis: **n/a**
- Sensitivity Analysis (if applicable): **n/a**
- Project Relationships (if applicable):

  Guards are required at this new location by the New York City Fire Department, Title 3 of the Rules of the City of New York, EAP industry notice #9. Custodial contract is required to maintain the new site in a clean and efficient manner.

Estimated Completion Date: Ongoing

Status:

Ongoing

Current Working Estimate (if applicable):

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Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	$100

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
$57	$151	$151	$151	$453

2010 O&M – Shared Services - Facilities

Project/Program Title	**Exterior Street (new work out location)**
Status	
Estimated Service Date	**2013**
Work Plan Category	**System & Component Performance Improvement (Category C)**

Work Description:

The site at Exterior Street has been selected for use as a satellite parking area for different field groups within Electric Operations. Previously, the site exhibited deteriorated asphalt and concrete paving, as well as a crushed stone surface left over from a previous demolition of existing structures. The site has been renovated so it can be utilized as a year round, all weather parking facility.

Justification:

- Alternatives: **None**
- Risk of No Action: **Inability to serve our local customers quickly and efficiently.**
- Summary of Financial Benefits and Costs: **n/a**
- Non-financial Benefits (if applicable): **n/a**
- Technical Evaluation/Analysis: **n/a**
- Sensitivity Analysis (if applicable): **n/a**
- Project Relationships (if applicable):

Guards required at this new locations for employee safety and to protect company property. Also, maintenance items required to maintain new site in a clean and efficient manner.

Estimated Completion Date: Ongoing

Status:

Ongoing

Current Working Estimate (if applicable):

2010 O&M – Shared Services - Facilities

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	-

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	ForecastTotal 2011-2013
-	$186	$186	$186	$558

2010 O&M – Shared Services - Facilities

Project/Program Title	**Contractual Rent & Tax Increases (Regions)**
Status	**Ongoing**
Estimated Service Date	**2013**
Work Plan Category	**Regulatory**

Work Description:

Rent increases at the following locations: 30 Flatbush Ave., Queens Blvd., Foster Avenue Van Dam Street, and 165th Street Jamaica. Taxes have increased at 30 Flatbush Avenue.

Justification:

- Alternatives: **None**
- Risk of No Action: **Violation of Contractual/Regulatory Requirements**
- Summary of Financial Benefits and Costs: **n/a**
- Non-financial Benefits (if applicable): **n/a**
- Technical Evaluation/Analysis: **n/a**
- Sensitivity Analysis (if applicable): **n/a**
- Project Relationships (if applicable):

  Contractual / Regulatory

Estimated Completion Date:
Ongoing

Status:

Ongoing

Current Working Estimate (if applicable):

Funding ($000):

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Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
$6,879	$6,896	$6,905	$7,085	$7,971

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
$8,038	$8,441	$8,774	$8,647	$25,862

2010 O&M – Shared Services - Facilities

Project/Program Title	**Waterside Dock Repair**
Status	**Dock Inspection Completed/Engineering in Progress**
Estimated Service Date	**Various**
Work Plan Category	**Regulatory compliance/Environmental**

Work Description:

The Waterside Dock is a high-level relieving platform structure adjacent to former Con Edison Waterside generating station and bordered by FDR Drive, E38th and E41st Street with East River on the eastern edge of the dock. The structure was inspected as a part of 5-years waterfront inspection program in November 2008.
Overall the structure can be characterized into two portions by their present deteriorated conditions. The "south portion" is approximately 473 ft long and is overall **"Fair"** condition. The "north portion" is approximately 362 ft long and is in overall **"Critical"** condition.

1. **Inspection Findings:**
   - Lost of support at concrete platform/deck "drop beams" in north portion of the dock due to severe damage of timber pile caps by marine borers.
   - Lost of support at the dock structure south-east corner (Sta. 4+72) and north –east corner (Sta. 8+35) due to damaged or missing timber piles and pile cap beams.
   - Various damages of exterior and interior timber piles.
   - Missing support at most of the dock structure east edge due to missing/deteriorated north-south timber cap beams.
   - Many of dock's fender timber members are loose and deteriorated and about to fall into the river. This represents a hazard to river navigation and also environmental concern.
   - Concrete deck damages: spalls at concrete deck soffit surfaces, exposed and corroded concrete reinforcement, cracks, efflorescence, top surface wear, etc.

2. **Inspection Recommendations:**

   - Repair critical members of dock's north portion to insure structural stability and integrity of the dock. Deteriorated timber cap beams and parts of deteriorated timber piles will be repaired by replacement with new timber.
   - Restrict vehicular access to north portion of the dock and to entire eastern edge of the dock structure by installation of guardrail barrier.
   - Remove loose and deteriorated timber fender system and timber edging along entire eastern edge of the dock.

Order of Magnitude cost estimate – $2,710,000 (with 10% contingency).

Allow 1.4 factor for General Conditions, Construction Management Oversight and Corporate Overheads – $3,800,000

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Justification:

The repairs and corrective actions are recommended by the Inspection Report to address present critical condition of key Waterside Dock's structure members and East River safe navigation concern.
These repairs are recommended to be carried out on a high-priority basis with urgency.

Estimated Completion Date:

This project can be completed in 2010 or ASAP.

Status:

With Engineering. A contract was awarded to an outside engineering firm on 9/18/08 for conducting of Waterside Dock inspection and preparation of design repair package. The design repair package is expected to be completed in April 2009.

Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
NA	NA	NA	NA	NA

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
$0	**$3,800**	**$0**	**$0**	**$3,800**

2010 O&M – Shared Services - Facilities

Project/Program Title	Replacement Work Out Location for West 28 Street
Status	Ongoing
Estimated Service Date	2009 - 2014
Work Plan Category	Reliability

- **Work Description**: West 28th Street Work-Out Service Center which is currently located at the site planned for portions of the new Transit Tunnel which will run from New Jersey to New York Penn Station. The project is named New Jersey Transit's ("NJT") Access to the Region's Core ("ARC") Project. At this time the plans for this tunnel have not been finalized but the Company may need to vacate part of the site to make room for the tunnel and its associated systems (e.g. main ventilation tower) and construction laydown areas. The current plan would be to rent a site equivalent to the yard area for West 28 Street for Cable and Vehicle parking. In addition, the Company will need to retain consultants on zoning and traffic issues for any move from the current location. The Company would seek to have the cost of rental of property and consultants off-set by reimbursements from the Port Authority of NY and NJ ("PANYNJ") and NJT. The PANYNJ manages the bulk of the bi-state transportation system between New York and New Jersey and has taken the lead on construction for NJT. The Company has been meeting with the Port Authority to negotiate our position. The Company would seek to defer the relocations costs pending reimbursement from PANYNJ and NJT. The Company would seek reimbursement for any remaining balance in future rate proceedings.

Justification: The location of the West 28 Street Work-Out Location ("WOL") is a critical to the support of Electric Operations for the West side of Manhattan. This site is the only WOL located on the west side of Manhattan. The yard, which is located at 28th Street and 11 Avenue in Manhattan, right next to the West Side Highway, currently houses about 500 employees and 200 vehicles. Various company operations, including electric, gas, steam, environmental and emergency operations use this yard as their headquarters on a 24 by 7 basis. The yard's proximity to the West Side Highway is critical to the Company's ability to respond quickly to emergency situations, especially because of the very large vehicles housed in the WOL for all structure cleaning and most of the cable removal and installation for the borough of Manhattan. The Company needs to keep a West Side site to provide for response time in emergencies and the loss of productivity if some amount of electric crews are forced to work out of an east side location. Please note that there is no alternate east side location identified or available at this time.

Estimated Completion Date:

Based on present projections by PANYNJ and NJT the site as a lay down yard would be needed in the last-quarter 2009. The Company has been in negotiations with PANYNJ and NJT to provide a workable solution for both organizations.

Status: On-going

Current Working Estimate (if applicable):

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Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	-

2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	ForecastTotal 2011-2013
-	-	-	-	-

2010 O&M – Shared Services - Facilities

Project/Program Title	Properties held for Future Use Sub-Stations Ops. (SSO)
Status	Ongoing
Estimated Service Date	2009 - 2012
Work Plan Category	Customer Demand

Work Description: Cost associated with maintaining properties held for future substation use. In some cases, we have purchased tenanted locations and have to maintain the lease obligations until the lease expires.

Justification: The strategic location of substations supports the Company effort to provide reliable electric power. Advance purchases of properties are required to meet the anticipated load growth on the Con Edison system. This allows for the orderly construction of additional substations, as required. Costs include: guard service (when required), maintenance of building (heating, lighting, plumbing, and structures), maintenance of yards (landscaping, exterminating, snow removal, sidewalks). The maintenance costs of following properties are included in our request: Gowanus (29th), Queens (Brinkerhoff) and Nevins Street.

- Alternatives:
- Risk of No Action:
- Summary of Financial Benefits and Costs:
- Non-financial Benefits (if applicable):
- Technical Evaluation/Analysis:
- Sensitivity Analysis (if applicable):
- Project Relationships (if applicable):

Estimated Completion Date: 2009-2012

Status: Ongoing

Current Working Estimate (if applicable):

2010 O&M – Shared Services - Facilities

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	$148

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	ForecastTotal 2011-2013
$396	$235	$235	$235	$705

2010 Capital – Shared Services - Purchasing

Project/Program Title	Single Entry Point Ordering System Phase 2
Status	Planning
Estimated Service Date	3/15/2011
Work Plan Category	Efficiency and process improvement

Work Description:

In 2005, a project was initiated to install a Single Point Entry procurement system for Con Edison materials. This enabled a single front end process for most of the Company's purchases of materials – including stock and non-stock materials. It was deployed during the third quarter of 2007 and the functionality will be upgraded in 2009 as part of this project.

The vendor product on which the system is based will need to be upgraded to the new version. This will entail determining what new functionality Con Edison wishes to implement, re-engineering the system interfaces to A/P, FDA/Care, PCards, MMS, and Accruals. At this time, the computer servers should be replaced as well as the Oracle Database software. The Computer Based Training modules will also be updated to reflect the new user interface and any changes in business processes.

Justification:

- Alternatives: Hire very skilled Ariba trained contractors to support the existing version until the planned Finance and Supply Chain ERP project is completed in 2012.
- Risk of No Action: Extended system outages with the risk of loss of information that would require manual re-entry.
- Summary of Financial Benefits and Costs:
- Non-financial Benefits (if applicable):
  In order to maintain quality vendor support, Con Edison needs to use the current of the vendor's software. Currently we are using version 8. Ariba announced plans to release version 9 in 2008. Ariba will terminate version 8 support December 2010.
- Technical Evaluation/Analysis: Con Edison's estimates were confirmed by the Ariba implementers. They considered the amount customization and configurations performed.
- Sensitivity Analysis (if applicable):
  Contractor labor is the main price determinate.
- Project Relationships (if applicable):
  Not applicable

Estimated Completion Date:

03/15/2011

2010 Capital – Shared Services - Purchasing

Status:

Planned

Current Working Estimate (if applicable):

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	-

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
$5,200	$1,100	$475	-	-	$6,775

- **Authorization - $16,220**
- **Appropriation - $16,220**

2010 O&M – Shared Services – Energy Management

Project/Program Title	NYISO Transmission Owner Data Reporting System
Status	Planning
Estimated Service Date	2010
Work Plan Category	Regulatory

Work Description:
The Company is planning to develop a new Energy Reconciliation system to increase transparency in the system, correct issues within the current system, and prepare for NYISO weekly billing. This project will involve multiple departments of the Company, such as Information Resources and Energy Management, as well as an external consultant to determine the steps needed to redesign and improve the current system in order to better support new internal systems and provide transparency in the energy reconciliation process for the current and future users of the system.

Justification:
This project will result in the need for a consultant to work with Con Edison employees to develop a new system as well as the need for a new hire in the Company to handle the job functions associated with the Energy Reconciliation function. The new hire is required in Energy Management to handle the job functions associated with Energy Reconciliation, especially to accommodate the increased volume of transactions associated with the new weekly settlement process associated with weekly billing by the NYISO.

Planning and Budgeting:
The employee is scheduled to be hired in 1Q 2010.

Status:
This project has not yet started

Addendum
The NYISO is developing a new invoice settlement process that would shorten the invoice statement cycle from monthly to weekly. Weekly billing would require a new Energy Reconciliation system that could handle a weekly true-up instead of a monthly true-up. An ideal system would have the capability to true-up based on a monthly, bi-monthly, and weekly schedule in the event the NYISO changes the billing cycle based on economic climate, seasonal variations, or other reason.

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	-

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	Forecast Total 2011-2013
-	$90	$90	$9	$270

- Authorization – This project has not yet been authorized
- Appropriation – This project has not yet been appropriated

2010 Capital – Shared Services – Energy Management

Project/Program Title	NYISO Transmission Owner Data Reporting System
Status	Planning
Estimated Service Date	2010
Work Plan Category	Regulatory

Work Description:
Analyze the Company's existing NYISO Capacity (ICAP) and Energy Reconciliation (ISO RECON) programs for the purpose of determining the enhancements and revisions necessary to replace the current NYISO Transmission Owner Data Reporting system. This project will involve multiple departments of the Company, such as Information Resources and Energy Management, as well as an external consultant to determine the steps needed to redesign and improve the current system in order to better support new internal systems and provide transparency in the energy reconciliation process for the current and future users of the system.

Justification:
The existing ISO RECON programs retrieve data and supporting information from several programs, some of which are being modified or changed. Information Resources imports actual billing data from the Customer Operations systems and NYISO posted load (aka MLOAD file) into the Energy Reconciliation System. The Energy Reconciliation System aggregates actual metered values by Load Serving Entity (LSE), distributes the load through each hour during a month, and the values are "trued up" to the zonal level. Energy Management reviews and analyzes the data in the system and makes adjustments when necessary. If no adjustment is required, Energy Management notifies IR that the TOL file is acceptable for release. If the file needs to be adjusted, Energy Management sends the adjusted file to IR for release to the NYISO. This process is completed each month in order to satisfy requirements set forth by the NYISO.

When the original program was developed, the market was not clearly defined. The NYISO markets for Energy and Installed Capacity (ICAP) have changed since these programs were first designed. Over the years, the programs have been updated using program patches and by increasing the manual effort of Company employees. Some examples of changes that have occurred in the market that affected the system are: the NYISO shortened settlement cycle, resulting in less time and transparency in the system to account for changes to customers bills; and Station Power accounts could no longer be allocated losses and unaccounted for energy during Load Forecast and Transmission Owner Load reporting, resulting in a time-consuming manual process to separate these accounts during ICAP and energy reconciliation processes. The patches and manual processes developed have created issues due to increased program complexity and "black box" type calculations and that are dependent on individual knowledge and memory to maintain system integrity, which makes the process less transparent.

In order to revise the existing programs, a complete review of the program code would need to be completed and documented. Next, a plan would need to be developed to modify the existing, out-dated program language. Developing a new NYISO Transmission Owner Data Reporting system using a modern programming language and tools is a much more efficient use of the available resources.

A new system will improve efficiency, oversight and reliability of the reporting process. It will allow the Company to adapt the reporting process to suit the needs of the market and participating Energy Supply Companies. This, in turn, will benefit the Company by creating a more efficient and effective system and it will benefit the ESCO's since transactions will be more transparent and allow for Company personnel to discuss more about the process. A new system may benefit customers in one way by avoiding

2010 Capital – Shared Services – Energy Management

monetary sanctions that can result from failure to meet NYISO Market Services Tariff reporting requirements from system failures.

Options:

Although the recommendation is to pursue a new system, there are three options available at this point in time:

(1) Create a new Energy Reconciliation system that is capable of utilizing information from all internal systems, provides transparency of the calculations, and corrects issues that exists in the current system;
(2) Modify the Energy Reconciliation System to allow it to perform the functions needed to use information from updated systems within the Company and corrects issues;
(3) Keep the system unchanged.

Gap Analysis:

The differences that exist between items (1) and (3) describe what could be done if a new system is put into place and what is currently done with the existing system:

A new system could provide the following needed changes to the system:

- A new system could automatically process ICAP tags for accounts in the Mandatory Hourly Pricing (MHP) program;
- ICAP tag adjustments as a result of NYPA allocation changes could be recorded based on the effective date of the change and not the date the change was entered into the system as is currently done;
- The method for allocating load lost due to departing customers could be made consistent with the NYISO tariff;
- Provisions could be created for analyzing Unaccounted for Energy (UFE);
- Provisions could be made for reporting allocation errors;
- Issues with negative UFE could be addressed and corrected; and
- A simpler data extraction tool could be utilized to retrieve required data. This would allow the implementation of the business rules without having to have detailed knowledge of the IR computer language to implement them and allow for greater transparency and greater flexibility as the market and systems change.

The differences that exist between items (1) and (2) describe what could be done if a new system is put into place and what could be done if the current system is modified:

- Modify the system to automatically process ICAP tags for accounts in the Mandatory Hourly Pricing (MHP) program;
- Modify the system to make ICAP tag adjustments as a result of NYPA allocation changes based on the effective date of the change and not the date the change was entered into the system as is currently done;
- Modify the system to make the method for allocating load lost due to departing customers consistent with the NYISO tariff;
- Modify the system so it has provisions for analyzing Unaccounted for Energy (UFE);
- Modify the system so there are provisions for reporting on allocation errors;
- Modify the system to correct issues with negative UFE;

2010 Capital – Shared Services – Energy Management

- Modify the system so it utilizes a simpler data extraction tool to retrieve required data so the business rules can be implemented without having to have detailed knowledge of the IR computer language, allowing for greater transparency and greater flexibility as the market and systems change.

The differences that exist between items (2) and (3) describe what could be done with a modified system and what would be missing if the system is left alone

The issues described in Scenario 2 still exist if the current system is not modified with the changes proposed.

Estimated Completion* Dates:

3Q 2009:
Phase 1 – Review of current system and processes to determine the steps needed to replace the current system. Lay out plan of action and define all parties involved.

3Q 2010:
Phase 2 – Development of re-designed system

4Q 2010:
Phase 3 – Test new system prior to launch

4Q 2011:
Phase 4 – Launch new system

* Phases are estimated to be completed, not started, by dates shown

Planning and Budgeting:
These systems modifications are required due to the changes taking place within the market, new systems being put into place that provide information to the Energy Reconciliation system, the correction of issues taking place within the system, and the likely switch to weekly billing by the NYISO.

The systems modification review is scheduled to begin in 3Q 2009.

Status:
This project has not yet started

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	-	-

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
-	$1,000	$1,040	$525	-	$2,565

- Authorization – This project has not yet been authorized
- Appropriation – This project has not yet been appropriated