Q. Please state your names, employer and business addresses.

A. Victor E. Mullin, 4 Irving Place, New York, NY 10003 and Thomas E. Poirier, East River Generating Station, New York, New York. We are employed by Consolidated Edison Company of New York, Inc. ("Con Edison" or the "Company") and are testifying jointly as the Electric Production Panel.

Q. In what capacity are you employed?

A. (**Mullin**) I am the Chief Civil/Mechanical Engineer.
(**Poirier**) I am the Plant Manager of the East River Generating Station ("East River").

Q. How long have you been employed by Con Edison and what positions have you held?

A. (**Mullin**) I have been with Con Edison for approximately 27 years. I was employed by Con Edison in February 1982 and have held various engineering and management positions in Central Operations, Nuclear Power, Substations, and Gas Operations. In April 2005, I was assigned to Gas Operations as the Chief Gas Transmission Engineer. Since December 2008, I have been the Chief Civil/Mechanical Engineer.
(**Poirier**) I joined Con Edison as a Management Intern in 1983. Since then, I have held various management

positions of increasing responsibility in the Company. I briefly left Con Edison in September 2001 when the Company divested the Indian Point 2 Generating Station. I returned to the Company in September 2002 as the Commissioning Manager for the East River Repowering Project and subsequently assumed my present position.

Q. Please discuss your educational background.

A. (**Mullin**) I received a Bachelors of Nuclear Science Degree from SUNY Maritime College in 1978. I also received a Masters of Management Science from Pace University in 1994 and completed the Public Utility Executive Program in July 1995 at Michigan University.

(**Poirier**) I graduated from Worcester Polytechnic Institute in 1983 with a Bachelor of Science degree in Mechanical Engineering.

Q. What are your current responsibilities?

A. (**Mullin**) My primary responsibility is to provide engineering leadership and oversight to ensure the safe and sustained operation and maintenance of specific systems within their design criteria. These systems include: portions of the electric system and transmission operations infrastructure, the steam distribution and transmission systems, and the mechanical and structural systems and equipment that

support both the steam and electric generating stations.

(**Poirier**) I am responsible for the management of all activities required to safely and reliably produce electricity and steam at East River. This includes managing the annual operation and maintenance ("O&M") and capital budgets for East River and developing forecasts for future expenditures required to maintain and improve station performance.

Q. Please briefly describe the purpose of the Panel's testimony.

A. Our testimony addresses the Company's planned O&M and capital spending for its Electric Production facilities. In total, we project to spend $39.7 million in capital in 2010. For O&M, we project to spend $56.1 million in the rate year.

CAPITAL CONSTRUCTION PROGRAM

Q. Please describe the Electric Production Capital Construction Program.

A. The Electric Production Capital Construction Program ("Program") establishes the Company's capital spending projections for the safe, efficient and reliable operations of East River's electric generating Units 6 and 7 and the six gas turbine electric generators

located at the Company's E74th Street, W59th Street and Hudson Avenue power plants. The capital expenditures for all these units are grouped into a comprehensive set of ten functional programs as follows: 1) Environment, Health and Safety ("EH&S"); 2) Boilers; 3) Steam turbines; 4) Mechanical equipment; 5) Electrical equipment; 6) Control systems; 7) Structures; 8) Waterfront; 9) Roofs; and 10) Security.

Q. Please continue.

A. The Program is a five-year systematic capital expenditure plan to rehabilitate and improve structures, systems and components as age and conditions warrant and as may be required by governmental regulations. The Program's objective is to effect capital improvements to provide continuous safe and reliable service at the lowest reasonable cost. For the Program, the Company proposes to spend approximately $39.7 million in 2010, $35.8 million in 2011, $39.3 million in 2012 and $37.5 million in 2013. The Company's projected capital spending for 2010-2012 is the same as the projected capital funding for this purpose in the Company's last electric case for the same period. This level of expenditure is below the average capital expenditure of approximately

$42 million annually over the average of the last four years of spending for 2005-2008.

Q. How is the Program developed?

A. The Program identifies specific improvements to East River Units 6 and 7 and the gas turbines' equipment, structures, systems and components based on the most current information as to the severity of condition, and relative importance to regulatory compliance, safety, environmental protection, and reliability. The timing of the projects is planned and undertaken considering annual capital expenditure levels, long lead time for equipment procurement, construction duration, concurrent projects, and current schedules for equipment and station outages.

Q. How is the condition of the equipment and structures determined?

A. The condition of the equipment and structures is identified on an on-going basis during routine plant operations, inspections, system assessments or as a result of equipment failure or malfunction. Also, because we are operating facilities and equipment that are, in many cases, over 50 years old, upgrades are anticipated based on length of operation, obsolescence, industry practice and evolving regulatory requirements.

The Program identifies and plans improvements to prevent potential equipment failures and to address conditions that could result in unanticipated plant outages.

Q. How are the costs projected?

A. Cost projections for the Program are based on preliminary engineering, evaluations of alternatives, and inspection of existing conditions that need to be corrected, past experience with similar projects and consultation with vendors and contractors. These cost projections are used for planning. For 2010, the scope of the projects has been defined and preliminary cost estimates prepared. More detailed cost estimates are prepared as the project scopes are finalized, equipment is selected, and detailed engineering and design is developed.

Q. What measures does the Company apply to implement these projects at reasonable cost?

A. Prior to moving forward with a specific project, the Company prepares detailed cost estimates that are the basis for senior management approval to proceed with the capital expenditure. Higher levels of senior management approvals are required depending on the level of expenditure. Construction services and

equipment are procured via a formal bidding process that a) verifies the technical qualifications of the bidders to perform the work per Company specifications; and b) for construction work, confirms the quoted price via an in-house independent bid check estimate. The lowest cost qualified bidders are selected. For construction, the bidders' prices have to be within 10% of the bid check estimate to be acceptable, otherwise further fact finding and negotiations are required before a contract is awarded. As construction progresses, the actual expenses are evaluated as compared to the budget to verify that the project is proceeding as planned. The Company's Infrastructure Investment Panel also discusses the Company's project management and contract bidding processes. Similar practices are followed for electric production.

Q. Does the Company plan for unexpected plant conditions?

A. Yes. Capital improvement projects to address conditions that may affect reliability, compliance with regulatory requirements and environmental health and safety are prioritized and included in the Program based on current information and their relative importance to improved operations. However, the Company recognizes that plant operations and associated

areas that need improvement are dynamic, and changing plant conditions and operational constraints result in uncertainties that often require reallocation of resources to address more immediate, higher priority projects, e.g., equipment malfunctions or conditions that pose higher risks to personnel and public safety, the environment, plant reliability or are required to comply with regulations. Accordingly, the Company: a) allocates capital funding in the Program for emergent projects; and b) adjusts the Program to reallocate funding when higher priority needs arise.

Q. How are emergent issues managed?

A. Emergent issues are addressed by adjusting the Program and rescheduling projects with an emphasis of meeting the immediate needs of continuing plant operations safely and reliably. These adjustments do not invalidate the needs of previously planned improvements, but rather allow the Company the flexibility to allocate capital expenditures where it is needed most to provide continued safe and reliable in-City electric generation. Simply put, the timing of the projects and corresponding capital expenditures are rescheduled to address unforeseen needs, but with the exception of extraordinary events, the Company

maintains its projected level of capital expenditures.

Q. Can you provide an example of an emergent or major unanticipated project that required a shift in expected expenditures?

A. Yes. In 2008, an inspection was performed on the East River Turbine Building crane to address cracked or broken clips, bolts and welds. The Turbine Building crane is an 80-year-old overhead type gantry crane with a 200 ton-capacity that runs on two rails on each side of the building. The inspection concluded that the crane requires significant upgrades and cannot be used as designed in its current condition. As a result, temporary repairs were made, and significant limitations have been imposed on the use of the crane until the permanent repairs are completed. The projected capital cost of this project is approximately $1.2 million. Because this crane is a critical component and is required to lift major components during routine maintenance and construction associated with East River Units 6 and 7, the Program had to be adjusted to implement this unanticipated crane project in 2009. Additional improvements for this crane are also scheduled in 2010, as noted below.

Q. What are some current issues with particular

uncertainty?

A. We are aware of two potential emergent issues that may arise for which we have not requested any rate relief in this proceeding. First, the New York State Department of Environmental Conservation ("NYSDEC") has raised concerns regarding Con Edison's wastewater discharges under its East River State Pollutant Discharge Elimination System ("SPDES") permit. Based on discussions with the NYSDEC regarding these concerns, the Company is evaluating the need to install wastewater treatment systems. The projected cost of such systems is about $5.0 million.

Second, the NYSDEC recently adopted environmental regulations (Title 6 Parts 200, 201 and 231) under the New Source Review ("NSR") program of the Clean Air Act. These regulatory requirements may result in additional capital projects or increased costs of existing projects.

Q. Will you provide updated information to reflect additional capital expenditures to address these two issues?

A. If additional information becomes available during the course of this proceeding, we will.

Q. What is the Company's position regarding continuation

of the one-way downward-only reconciliation of Electric Production capital expenditures?

A. Company witness Rasmussen addresses the continuation of downward reconciliation of all capital expenses, including those for Electric Production.

Q. Has the Panel prepared an exhibit entitled "CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. - ELECTRIC PRODUCTION CONSTRUCTION PROGRAM, ESTIMATED 2009-2013" that shows the Company's Electric Production Capital Program?

A. Yes.

MARK FOR IDENTIFICATION AS EXHIBIT ___ (EPP-1)

Q. Please describe this Exhibit.

A. This Exhibit summarizes Con Edison's projected capital funding requirements for the Program from 2009 through 2013 for each functional program. While there has been some shift in funding among functional programs, overall, the Company's projected capital spending levels for electric production for each year 2010-2012 is the same as presented for this purpose in the Company's last electric rate case. The expenditure projections for 2013 had not been previously provided.

Q. Please describe what is covered in the EH&S functional program.

A. There are two general types of projects covered under this category. First, implementation of the Company's continuous commitment to personnel safety and environmental protection requires capital expenditures to address and correct plant conditions that may pose EH&S risks. To address these conditions, usually identified during routine plant operations, capital improvement projects are identified and planned for implementation in the EH&S functional program. Second, this functional program includes capital improvement projects needed for compliance with applicable regulatory requirements.

Q. Please discuss recent EH&S projects.

A. Examples of recent EH&S projects include: (1) modifications to comply with SPDES permits; (2) the installation of an oily water separator and egress lighting at East River; and (3) the installation of a fire suppression system for the Gas Turbines at the Hudson Avenue Station. An example of an on-going regulatory related project is the Fish Life Preservation required by the NYSDEC.

Q. What are the projected expenditures for the EH&S functional program?

A. During 2010, the Company's Program includes

approximately $4.0 million for EH&S related projects as follows:

- Continuation of the Fish Life Preservation project at East River -- required by NYSDEC Consent Order R2-2985-90-04 -- is being implemented in phases over several years at a total estimated cost of $14.0 million. Prototype testing of screens started in 2008. The projected expenditure for 2010 is approximately $3.5 million which is higher than the $2.5 million projected in the last rate case. The higher expenditure is based on the anticipation that installation would start earlier than expected. However, the Company has submitted a plan to the NYSDEC to perform additional prototype testing of the new equipment and verify the technology prior to full implementation of the project, and to minimize the impact on plant operations. If approved by the NYSDEC, the cash flow projection for this project for the period of 2010-2013 may be modified. As of 2008, approximately $227,000 has been spent on this project.
- $500,000 to cover emergent projects, that is, projects to address changing and unforeseen plant

conditions that may affect safety and the environment that cannot be specified at this time but can be reasonably anticipated to occur during the rate year based upon historical experience. This amount was exceeded in 2008 due to EH&S emergent projects to comply with the SPDES permit, which totaled approximately $625,000. Additionally, as noted above, there may be a need to increase the expenditures in this category in 2010 due to emergent projects to install additional wastewater treatment systems associated with the SPDES permits.

In 2008, the Company spent approximately $1.5 million on EH&S related projects.

Q. Please describe the capital expenditure requirements for the Boilers and Steam Turbines functional programs.

A. The main electric generating equipment at East River Units 6 and 7 are boilers and steam turbines. The steam turbine takes the steam from the boiler and spins a generator at high speeds to generate electricity. These components, as well as the gas turbine generators, degrade over time due to age, length of operation and normal wear and tear. Excessive wear may affect the ability of the units to generate electric

power. To avoid the likelihood of potential derating or unit shutdowns, overhauls to replace and refurbish major equipment components of boilers and turbines are systematically planned based on manufacturers' and industry guidelines, actual length of operation, unit performance and engineering assessments. These projects are needed for reliable operation of the units and to minimize the potential reduction to in-City electric generation, to which Con Edison's retained net generation contributes approximately 800 mW. In addition, some of these capital improvements result in boiler or overall unit cycle efficiency improvements, resulting in future fuel savings that will be reflected in MAC and/or MSC charges lower than they otherwise would be; these include the Unit 70 air preheater basket replacements, Unit 70 boiler casing and insulation upgrades, which are scheduled for 2009 installation. The Company plans expenditures of approximately $4.380 million for the Boilers functional program in 2010 to replace the East River Unit 70 Boiler burners. The funding for this program was reduced from $5.350 million in the last case because a) upon further evaluation, a project to upgrade the Unit 70 induced draft and forced draft dampers at a

projected cost of $0.750 million has been deemed lower priority at this time and postponed; and b) the projected cost of the Unit 70 boiler burner upgrade project was reduced by $0.220 million based on a more detailed cost estimate. In 2008, the Company spent approximately $2.8 million on these two programs.

Q. Please describe the expenditure requirements for the Mechanical Equipment Replacement, Electrical Equipment, and Control Systems functional programs.

A. These programs include projects to replace and improve equipment and systems in the above three key functional areas of the station. These equipment replacements and improvements are required to address age-induced degradation, equipment obsolescence, equipment malfunction, and failures that could potentially lead to unreliable operations and contribute to plant unavailability. In addition, these programs include projects to upgrade equipment and systems using new technologies. New technologies can expand the capability and efficiency of plant systems, improve response time, and enhance the reliability of the electric supply to our customers.

Q. What is equipment obsolescence?

A. Equipment obsolescence occurs when the equipment in use

is no longer supported by the original equipment manufacturer, spare parts are no longer available, or equipment does not operate efficiently due to length of service and normal wear and tear. East River Units 6 and 7 are over 50 years old, and much of the equipment is operating beyond its estimated and designed service life. Consequently, the Program consists of a systematic replacement of obsolete equipment to improve the reliability of the electric generating Units and minimize the potential of unplanned interruption of in-City electric generation, particularly during peak demand periods. In addition, some of these capital improvements result in boiler or overall unit cycle efficiency improvements, resulting in future fuel savings that will be reflected in MAC and/or MSC charges lower than they otherwise would be; these include feedwater heater replacements listed below and the Unit 7 steam traps and condensate recovery system, which are scheduled for 2009 and 2010 installation.

Q. What are the planned expenditures for the Mechanical Equipment Replacement program?

A. In general, this program includes the replacement and improvement of mechanical equipment, such as pumps, valves, piping, heat exchangers, air compressors,

tanks, fire protection, heating and air conditioning. Capital expenditures for the Mechanical Equipment functional program for 2010 are projected to be approximately $11.3 million. The 2010 funding level for this program is higher than the $7.970 million projected in the last case to fund higher priority mechanical equipment projects required at East River as follows:

- Replacement of feedwater heater 77W - $1.5 million;
- Upgrade of Unit 70 - Upgrade LP and HP feedwater heater controls - $1.350 million;
- High Pressure Building Jib Crane replacement - $1.750 million;
- Installation of Low Pressure Loading Well Gantry Crane - $1.555 million.

These increased costs were offset by reductions in the Electrical Equipment program described below, and postponement of some projects to later years. Other mechanical projects currently planned for 2010 at East River include building vent fans at a projected cost of approximately $0.9 million; replacement of the tank farm oil heaters at a projected cost of approximately $1.5 million; and feedwater heater 64N at a projected

cost of approximately $3.0 million. In 2008, the Company spent approximately $8.8 million on mechanical projects.

Q. What are the planned expenditures for the Electrical Equipment program?

A. The electrical system provides power to run equipment and systems throughout East River, such as pump motors, valves, fans, controls, lighting, fire suppression, air, water, and fuel supply systems. Proper operation and dependability of the electrical supply systems is a cornerstone to East River's overall reliability and performance. Failures of electrical system components would result in forced station outages and deratings. Consequently, due to obsolescence, the age of the equipment and current conditions, the Program includes the systematic replacement of East River's major electrical supply equipment over the next several years. The equipment replacement projects are prioritized and sequenced based on condition assessments, lead time of equipment purchases, and other major projects. In 2010, the capital expenditure requirement for the Electric Equipment functional program is projected to be $13.0 million. The 2010 funding for this program was decreased from

approximately $17.0 million in the last case because of the following changes made to the projects planned for East River: a) upgrades to the 72 and 73 Boiler Feed Pump Switchgears ($6.8 million), the Induced Draft and Forced Draft Fan Motors ($2.0 million) and the 61 and 62 Circulator Motor Operated Valve Controls and 6CP Switchgear ($1.9 million) have been deemed lower priority at this time and have been postponed; and b) reprioritization of the projects listed below due to the relative condition of the equipment, long lead time of equipment purchases, and outage schedules, etc. The Electrical Equipment functional program projects currently planned for East River in 2010 are as follows:

- 71 Boiler Feed Pump Switchgear Refurbishment- $3.0 million;
- Continuation of the Light & Power bus switchgear upgrades - $3.5 million;
- Replacement of TA-71 and TA-72 transformers - $2.0 million;
- TA-52 and 5 Circulating Pump switchgear upgrades $3.9 million.

In 2008, the Company spent approximately $0.4 million for this functional program.

Q. Are there other benefits associated with the systematic replacement of electrical equipment?

A. Yes. As with any new equipment, designs and capabilities have improved significantly when compared to some of the existing 50 year old components. Thus, in addition to improved reliability, other benefits of upgrading equipment include increased electrical capacity to supply the station components, improved personnel safety, enhanced status monitoring, better operator control features and energy efficiency. For example, new equipment design is compatible with East River's digital controls and provides the capability for remote monitoring and/or control of important parameters from the main control room.

Q. What are the expenditure requirements for the Controls Systems program?

A. The Control System functional program expenditure level planned for 2010 is approximately $4.5 million. This program generally includes the replacement and upgrade of control systems throughout East River, e.g., transmitters, digital control systems, control panels and terminals, monitoring instrumentation, and wiring. In addition to replacing obsolete equipment, these control system projects provide new capabilities not

previously available with the old technology, such as automatic operation of critical components, monitoring of additional important parameters to aid plant operators, and faster response times. All of these significantly improve the operation of East River, especially during critical periods such as times of peak load demands. Some of the projects planned for 2010 include upgrades of the Unit 6 and 7 control room at a projected cost of approximately $2.4 million, and a sequence of events recorder upgrade at a projected cost of approximately $1.0 million. The latter equipment collects critical data during abnormal operating conditions, such as plant trips, and facilitates the troubleshooting and correction of operational problems promptly. Controls and instrumentation are replaced with currently available digital and computerized equipment that is vastly different than existing hardware, requiring significant upgrades to control rooms, conduits and cables, and electric power systems. As a result, these projects are labor intensive, costly and difficult to implement due to extensive equipment and station outage requirements, and lengthy startup functional testing needs. In 2008, the Company spent approximately

$12.0 million on control systems projects.

Q. Please describe what is included in the construction program under the Structural, Waterfront, and Roofs functional programs.

A. The Structural program includes projects for the general and specific improvements to the East River structures, such as steel and concrete, masonry, facades, foundations, walls, floors, stacks, bridges, and utility tunnels. The Waterfront program specifically addresses improvements to piers, docks, water intake and discharge tunnels and related facilities and systems. Similarly, the Roofs functional program includes projects to replace and refurbish roofs and roof drains. East River was originally constructed in 1926 and needs to be maintained and refurbished for the safety of personnel, integrity of the building structures and reliability of the operating equipment. Also, inspections and repairs of some of these structures are required to meet regulatory requirements. The Company periodically inspects structures, such as building roofs, facades, concrete and steel, stacks, and docks, to assess their condition and determine the scope of refurbishment. Based on the degree of degradation, facility

refurbishment projects are planned to provide for the safety of employees and the public, protection of our assets, compliance with applicable regulations, and continuous reliable operation.

Q. How much does the Company plan to spend on these programs?

A. The expenditure forecast for the Structures functional program in 2010 is approximately $2.5 million. The 2010 funding level for this program was increased from approximately $1.5 million noted in the last case because additional improvements to the Turbine Building Crane discussed above are needed at a projected cost of $1.5 million. An additional project planned for 2010 is the continuation of the exit and egress enhancements project at a projected cost of approximately $1.0 million. This project consists of the construction of new staircases, platforms, signage and defined pathways in certain areas of East River and will significantly improve access to plant areas and equipment and, should it become necessary, the safe and efficient evacuation of plant personnel. In 2008, the Company spent approximately $7.3 million on structural related projects. There are no roof or waterfront projects planned in 2010. In 2008, the Company spent

approximately $1.2 million and $0.4 million in Roof Waterfront projects, respectively.

Q. Please describe the Security program.

A. Upgrading the security at East River has been an ongoing project over the past several years. Additional capital projects are not planned for 2010. In 2008, the Company spent approximately $1.7 million on Security projects.

OPERATION AND MAINTENANCE EXPENSES

Q. Did the Panel supervise the preparation of a schedule entitled "CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. - ELECTRIC OPERATIONS - SUMMARY OF ELECTRIC PRODUCTION EXPENSES FOR THE RATE YEAR ENDING MARCH 31, 2011?"

A. Yes, we did.

MARK FOR IDENTIFICATION AS EXHIBIT___(EPP-2)

Q. Please describe this Exhibit.

A. Exhibit___(EPP-2) details the rate year electric plant O&M expense forecast for various elements of expense. Each element is shown at the historic year level with normalizing adjustments and program changes. In total, we expect to spend approximately $56.1 million in the rate year, an increase of approximately $2.4 million from the historic year. As explained below, the increase is generally attributable to two program

changes. The first is an expected increase in City water rates for City water used in the production of electricity. The second program change in Scheduled Overhauls is East River Unit 6 high pressure turbine overhaul, which will be completed in the course of a scheduled outage in the last quarter of 2010. We would note that this Exhibit does not reflect any escalation to calculate the total rate year forecasts for each item. The escalation for electric plant expenses other than Water costs is calculated by the Accounting Panel in Exhibit___(AP-5). The escalation for Water costs is discussed below.

Q. Please explain the element of expense referred to as Water.

A. The Water expense at East River is based on the cubic feet of water used to generate a kilowatt hour. The quantity of water required can be derived by applying the water used per kilowatt hour in the historic year to the projected rate year electric generation forecast for East River. Water costs for the rate year were derived by multiplying the projected quantity of water required for generation by $29.50 per MCF of water. This expense is offset partially by the portion of

water costs attributable to the rate year steam sendout from East River.

Q. Please explain the program change increase of $336,000 for Water.

A. Based on the above calculations for water at East River, the requirement for water in the rate year is an increase of $838,000, offset partially by an increase in the steam processing charge of $502,000, for a net increase for water of $336,000. This increase is attributable to an increase in the projected rate year generation level for East River Units 6 and 7, amounting to $91,000, and a 13.0 percent annual escalation for 2009 and 2010 in the water rate, amounting to $747,000.

Q. Please explain the basis for the 13.0 percent annual escalation factor.

A. The current water rate of $23.10 per MCF became effective July 1, 2008, at the start of the New York City fiscal year. We applied 13.0 percent increases to that rate for 2009 and 2010 to develop the projected rate of $29.50 per MCF for the rate year. The 13.0 percent is the average of the 2007 and 2008 increases, which were 11.5 percent and 14.5 percent, respectively.

Q. Why are you projecting such a large increase?

A. In June 2007, the City Comptroller testified before the New York City Water Board on a proposal to limit future debt for the Water Board. In this testimony (included in Exhibit___(EPP-2), Pages 5 - 7 attached), which occurred several weeks after the approval of the 11.5 percent increase in water rates discussed above for 2007, the Comptroller pointed to the 23 percent growth in the Water Board's 10-Year Capital Strategy and the predictions of double-digit increases from 2009 through 2011. Additionally, in a statement from the New York City Department of Environmental Protection ("DEP") Commissioner Emily Lloyd regarding the 14.5 percent increase in water rates for 2008 (included in Exhibit___(EPP-2), Page 8 attached), she indicated that, while the DEP has implemented a variety of measures to keep the increases as low as possible, the 2008 increase was higher than originally estimated due to significant increases in non-discretionary O&M costs, such as larger debt service payments on Federally-mandated capital projects and other infrastructure projects. Thus, it is reasonable to expect that increases in water rates will continue annually at a level comparable to recent increases.

Q. Have there been any recent developments regarding Water rate increases?

A. The NYC Water Board has posted notices of public hearings to be held at the end of April 2009 concerning a proposed increase to be effective July 1, 2009. Any proposed increase will be voted on by the NYC Water Board in May 2009, another indication of anticipated increases.

Q. Will you update your testimony to reflect increases in Water expenses?

A. Yes, we will. We expect that the rates will be known before the end of May 2009.

Q. Please explain the program change increase of $2.270 million for Scheduled Overhauls.

A. This program change of $2.270 million (before consideration of the normalization for Scheduled Overhauls of $230,000 discussed below) reflects the costs related to the completion of a turbine overhaul for the East River Unit 6 high pressure turbine. This turbine overhaul will be completed in the course of a scheduled outage in the last quarter of 2010 and is needed to ensure the reliable and safe operations of East River Unit 6 high pressure turbine as a result of

age, recommendations from the equipment manufacturer and hours of operation.

The Company's procedures require a turbine overhaul to be completed every 50,000 service hours. A turbine overhaul is necessary to correct internal mechanical deficiencies. A standard inspection will include a rotor material analysis as well as an inspection of all blading, rotating equipment and stationary equipment, and will allow the technical staff to perform a unit analysis to identify problems that can be addressed to ensure long-term reliability and safe operation of the equipment.

Additionally, the generator's Original Equipment Manufacturer ("OEM") issued a technical letter recommending that all generator rotors similar to those in this unit be inspected for cracking at the next availability. OEM issued the technical letter because fretting fatigue cracking has been discovered in the dovetail slots containing metallic wedges which secure the copper into the rotors in other units. Failure to comply with the recommendations of the equipment manufacturer may result in reduced reliability and safety.

Q. In addition to the changes discussed above, do you have any other adjustments to the historic year O&M expenses to discuss?

A. Yes. There is a normalizing adjustment amounting to a decrease of $230,000 reflected in our rate year expenses to reduce Scheduled Overhauls.

Q. Please explain the normalizing adjustment that decreases Scheduled Overhauls by $230,000.

A. During the historic year, the Company incurred these costs to complete the East River Unit 6 low pressure turbine overhaul that commenced in the last quarter of 2007. These costs included vendor services related to hydro testing two lube oil coolers and eight hydrogen coolers, cold end basket repairs, main stop valve modifications and insulation. This adjustment eliminates from the historic year the costs related to the Unit 6 low pressure turbine overhaul.

Q. Please describe the long-term major maintenance strategy for the gas turbines at East River Units 1 and 2.

A. The maintenance of the gas turbines at East River is focused on maintaining the Hot Gas Path Parts, or those items in the Combustion Section and Turbine Section exposed to high temperature gases, and the Auxiliary

Systems, including control devices, fuel metering equipment, generator and excitation systems, and other auxiliary systems. The Hot Gas Path Parts are removed from the unit at scheduled operating intervals, and either refurbished or replaced based on guidelines established by General Electric, the OEM. The maintenance of the Auxiliary Systems is performed in accordance with OEM guidelines, industry standards, and Con Edison procedures.

The major maintenance program is comprised of the following five categories: 1) Parts Replacement, 2) Parts Refurbishment, 3) Outage Services, 4) Additional Maintenance, and 5) Unplanned Maintenance, each of which is described as follows:

- Parts Replacement - The Company has purchased Hot Gas Path Parts from the OEM to store as inventory to facilitate scheduled maintenance and support forced outages, if necessary. As the operating time of the units increases and the Hot Gas Path Parts require replacement, we will purchase Parts through a competitive bid process or, where required, directly from the OEM to replace any parts taken from inventory to complete required maintenance to maintain the availability of parts

for scheduled maintenance or forced outages.

- Parts Refurbishment - Refurbishments will be sent off-site for repair after each inspection to one of several qualified vendors through a competitive bid process. Refurbished parts are then returned to the Company and held in inventory for use as needed during the completion of maintenance on these turbines.
- Outage Services - East River Units 1 and 2 maintenance expenses vary significantly each year based on the required inspections in that year. Scheduled overhauls are divided into three categories: 1) Combustion Inspections, 2) Hot Gas Path Inspections, and 3) Major Inspections. Major maintenance on the gas turbines is based on specific operating intervals of 12,000 (combustion inspection), 24,000 (hot gas path inspection), and 48,000 (major inspection) factored fired hours. These intervals occur, on average, every 18, 36, and 72 months of operation, respectively. However, the actual timing of when these intervals are achieved is variable. For example, they may be impacted by weather, unit trips and other unpredictable factors. When these intervals are

reached, the machine is disassembled and the major gas turbine components are inspected and repaired and/or replaced. These overhauls will be performed by Company construction personnel, with technical oversight provided by the OEM or a qualified third party.

- Additional Maintenance - Company personnel or third party vendors will perform maintenance associated with the gas turbine and generator auxiliaries. The decision to use Company personnel or a vendor will be based on the scope of work and the associated cost. If specialized training or knowledge is required, the appropriate OEM or vendor will be used for this maintenance.
- Unplanned Maintenance - Corrective maintenance and unscheduled outages will be performed by either Company personnel or third party vendors, based on cost, scope and availability.

Q. When do you project these costs will be incurred?

A. The Company will continue to incur maintenance costs, but we estimate higher levels of costs in the latter half of the 12-year maintenance cycle, based on both the aging of the equipment and increases in the cost of labor and materials over the period of the maintenance

cycle. At the start of the rate year, April 2010, we will be approximately five years into this 12-year cycle because the units commenced operations in April 2005. The costs will increase progressively over time as the equipment ages and require more extensive repairs and, ultimately, reach their replacement interval. As each of the major parts reaches the end of its useful life, they will need to be replaced, at a significant cost. For example, a full set of combustion parts is approximately $8 million, whereas hot gas path parts are approximately $16 million. The fact that these repair and/or replacement expenses are incurred in the same year as the major overhauls, which are scheduled to occur in the same rate period on both units, contributes further to the variation in the annual O&M expenses.

Q. What are the estimated costs for this major maintenance?

A. The expected costs vary between $7.3 million and $14.1 million in each rate year, for an estimated total of approximately $50.8 million over the next five years (for the rate years ending March 31, 2011 through March 31, 2015, the estimated costs are $8.1 million, $14.0 million, $7.3 million, $14.1 million and

$7.3 million, respectively). The actual costs in any one rate year may increase significantly based on unit operation and equipment condition in the event that an outage must be performed in a different year than originally forecasted. In the rate year ending March 31, 2011, this maintenance is expected to total approximately $8.1 million, or $3.3 million lower than the historic year expenditures.

Q. What is the estimated level of expenditures for these maintenance costs for the current rate year (the year ending March 31, 2010)?

A. During the current rate year, the Company projects to spend approximately $7.3 million for the maintenance of these units, but will collect from customers $7.5 million based on the rates established in Case 07-E-0523, effectively resulting in a revenue overcollection of approximately $200,000 for the rate year. However, Case 07-E-0523 allowed the Company to retain funds previously collected from customers for this purpose instead of refunding the amount and recollecting it from customers. As of March 31, 2009, the reserve set aside for these major maintenance costs totaled $4.4 million, which the Company will use to offset these additional maintenance costs above the level

allowed in rates. If the costs are incurred as currently projected, there will be approximately $4.1 million remaining in the reserve at the end of the rate year ending March 31, 2011 for future maintenance expenditures. Once this reserve is depleted, which we estimate will occur in the 12-month period ending March 31, 2012, rates will need to increase by a commensurate amount to reflect the total maintenance costs. We would note that our request for this work in the rate year is slightly higher than the amount the Commission allowed in rates in Case 07-E-0523.

Q. Does this complete the Panel's testimony?

A. Yes, it does.

Consolidated Edison Company of New York, Inc.
Electric Production Construction Program
Estimated 2009 -2013 ($1000)

FUNCTIONAL PROGRAM	2009	2010	2011	2012	2013	TOTALS 2009 -2012
EH&S (See Exhibit EPP-1, Page 2 of 21)	**3,034**	**3,950**	**4,800**	**6,500**	**500**	**18,784**
Boilers (See Exhibit EPP-1, Page 4 of 21)	**5,870**	**4,380**	**1,600**	**-**	**6,450**	**18,300**
Steam Turbines (See Exhibit EPP-1, Page 6 of 21)	**-**	**-**	**2,000**	**-**	**-**	**2,000**
Mechanical Equipment (See Exhibit EPP-1, Page 8 of 21)	**7,117**	**11,275**	**11,700**	**6,400**	**3,550**	**40,042**
Electrical Equipment (See Exhibit EPP-1, Page 10 of 21)	**5,789**	**13,000**	**11,950**	**20,000**	**17,400**	**68,139**
Control Systems (See Exhibit EPP-1, Page 12 of 21)	**12,010**	**4,500**	**1,600**	**1,600**	**600**	**20,310**
Structures (See Exhibit EPP-1, Page 14 of 21)	**4,275**	**2,545**	**2,100**	**-**	**7,000**	**15,920**
Waterfront (See Exhibit EPP-1, Page 16 of 21)	**-**	**-**	**-**	**4,800**	**2,000**	**6,800**
Roofs (See Exhibit EPP-11, Page 18 of 21)	**1,255**	**-**	**-**	**-**	**-**	**1,255**
Security (See Exhibit EPP-1, Page 20 of 21)	**350**	**-**	**-**	**-**	**-**	**350**
TOTALS	**39,700**	**39,650**	**35,750**	**39,300**	**37,500**	**191,900**

Project/Program Title	Environmental Health and Safety (EH&S)
Priority Number	N/A
Project Manager	Various
Project Engineer	Various
Budget Reference	Various
Project Number	Various
Status	Ongoing
Estimated Service Date	Various
Work Plan Category	Environmental, Regulatory
ERM Addressed	Significant Oil Spill into waterways

Work Description:
This program is designed to address environmental, health and safety issues (EH&S) that are identified during routine operation of the East River generating station and the Gas Turbine electric production facilities. Also included in this program are projects to address regulatory requirements.

Projected replacements and upgrades in the 2010 to 2013 capital forecast include:

- East River Fish Life Preservation project – Required by the NY Department of Environmental Conservation.
- EH&S improvements identified during routine plant operations

Justification:

- Alternatives: The Implementation of the Fish Life Presentation Project, Con Edison was required to perform studies to select the best technology available. Consequently, several alternatives were evaluated and the most cost effective alternative that meets the regulatory requirement has been recommended to the NYSDEC. The selected alternative is undergoing operational testing at the Station and must receive NYDEC approval prior to full implementation.

- Risk of No Action: Non Compliance with regulatory requirements.

- Summary of Financial Benefits and Costs: Project proposed is the most cost effective option that meets regulatory requirements.

- Non-financial Benefits (if applicable): Compliance with regulatory requirements and enhance environmental protection of fish life.

- Technical Evaluation/Analysis: N/A

- Sensitivity Analysis (if applicable): N/A

- Project Relationships (if applicable): N/A

Estimated Completion Date: Various

Status: Ongoing

Current Working Estimate (if applicable): N/A

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
32	205	396	256	1,473

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
3,034	3,950	4,800	6,500	500	18,784

- **Authorization - $8,000**
- **Appropriation – $200**

Project/Program Title	Boilers
Priority Number	N/A
Project Manager	Various
Project Engineer	Various
Budget Reference	Various
Project Number	Various
Status	Ongoing
Estimated Service Date	Various
Work Plan Category	System and Component Performance Improvement
ERM Addressed	We lose a major component at the East River Complex

Work Description:
This program is required to replace and improve boiler pressure parts and associated equipment at East River generating station electric production units and includes, but is not limited to, boiler tubes, headers, refractory, burners, air-preheater baskets, forced draft (FD) and induced draft (ID) fans, and boiler ducts.

Sample replacement and upgrades projects planned in our 2010 to 2013 capital forecast include:

- East River - No. 70 Burners, Rear Wall with Inlet Headers and Riser Tube Replacement including BRILC and Boiler 70 Extended Surface Riser Tubes including BRILC.
- East River - No. 60 Air Preheater basket replacement with high efficiency baskets
- East River 60 Boiler Convection Pass Rear Wall Supply Tube Replacement

Justification:
The boilers and associated equipment for power plants such as the East River Station are the key components that produce steam and electric power for our customers. East River Station's boilers 60 and 70 are more than 50 years old and need to be upgraded to ensure reliable operation. Boiler condition assessments and inspections are routinely done to determine the condition of pressure parts, refractory / casing, air preheaters and associated boiler equipment. These assessments include non-destructive testing and metallurgical analysis of headers, tubing and other pressure parts to determine thicknesses and metallurgy compared to code requirements. It's normal for certain pressure components to deteriorate over time due to effects of age, cycling, corrosion, long term high temperatures and stresses. Similar factors can also affect the other non-pressure parts and boiler equipment such as burners, refractory, dampers, ducts, etc. Also, certain components, such as air preheater baskets have a finite life and need to be periodically replaced to maintain boiler operating efficiencies.

- Alternatives: None. Major boiler upgrades are required to maintain the unit's design basis.
- Risk of No Action: Unreliable operation of boilers and potential interruption of steam and electric generation.
- Summary of Financial Benefits and Costs: Major boiler upgrades are implemented in a cost effective manner to ensure the units operate safely, reliably and efficiently. Failure of key components such as boilers could cause station outages and interruption of in-city electric generation. Corrective repairs and upgrades to failed components during forced outages are much more expensive as compared to proactive and systematic upgrades based on technical and operational assessments.
- Non-financial Benefits (if applicable): Reliable boiler operation.
- Technical Evaluation/Analysis: See above.

- Sensitivity Analysis (if applicable): N/A

- Project Relationships (if applicable): Boiler upgrades are typically installed during a longer than usual unit outage. As a result, other projects that require a long unit/component outage for installation such as steam turbine upgrades are also scheduled during the same period.

Estimated Completion Date: Various

Status: Ongoing

Current Working Estimate (if applicable): N/A

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
98	16,374	5,611	130	49

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
5,870	4,380	1,600	0	6,450	18,300

- **Authorization – 6,000**
- **Appropriation - None**

Project/Program Title	Steam Turbines
Priority Number	N/A
Project Manager	Various
Project Engineer	Various
Budget Reference	Various
Project Number	Various
Status	Ongoing
Estimated Service Date	Various
Work Plan Category	System and Component Performance Improvement
ERM Addressed	We lose a major component at the East River Complex

Work Description:
This program is designed to replace major components and perform required improvements of steam turbine systems at the East River generating station. These improvements include, but are not limited to, the replacement of steam path components such as turbine blades, nozzle blocks, emergency stop valves and steam emission valves. Replacement of the East River Unit 7 Low Pressure Turbine Stationary component is planned for 2011.

Justification:
Along with the Boilers, the Steam Turbines are needed to generate the electric output of the station. ER steam turbines units 6 and 7 are more than 50 years old and need to be upgraded to maintain their design basis and ensure reliable and safe in-city generation of electric power. Steam turbines rotating and stationary steam path components wear over time due to effects of age, cycling, corrosion, long term high temperatures and stresses. Deterioration of Steam Turbines could result in both reduced electric capacity output as well as higher unit heat rates, i.e., reduce efficiency. Condition assessments that are performed periodically include non destructive visual and metallurgical examination of key turbine system components to assure their safe and efficient performance. Major overhauls are planned based on running hours per manufacturer's recommendations, industry practice and results of these condition assessments.

- Alternatives: None. Major steam turbines upgrades are required to maintain the unit's design basis and ensure safe and reliable operations.

- Risk of No Action: Unreliable operation of steam turbines and potential interruption of in-city electric generation.

- Summary of Financial Benefits and Costs: Major steam generators upgrades are implemented in a cost effective manner to ensure the units operate, safely, reliably and efficiently. Failure of key components such as steam turbines could cause station force outages and interruption of in-city electric generation. Corrective repairs and upgrades of failed components during forced outages are much more expensive as compared to proactive and systematic upgrades based on technical and operational assessments.

- Non-financial Benefits (if applicable): Reliable in-city electric generation

- Technical Evaluation/Analysis: See above

- Sensitivity Analysis (if applicable): N/A

- Project Relationships (if applicable): Steam Turbines upgrades are typically installed during a longer than usual unit outage. As a result, other projects that require a long unit/component outage for installation such as boiler upgrades are also scheduled during the same period.

Estimated Completion Date: 2011

Status: Planning

Current Working Estimate (if applicable): N/A

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	-	2,100	2,726

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
-	-	2,000	-	-	2,000

- **Authorization – None**
- **Appropriation - None**

Project/Program Title	Mechanical Equipment
Priority Number	N/A
Project Manager	Various
Project Engineer	Various
Budget Reference	Various
Project Number	Various
Status	Ongoing
Estimated Service Date	Various
Work Plan Category	System and Component Performance Improvement
ERM Addressed	We lose a major component at the River Complex

Work Description:
This program includes improvements to mechanical systems at East River Generating Station and the Gas Turbine electric production facilities. Upgrades /replacements of mechanical equipment and systems include but are not limited to: pumps, valves, tanks, HVAC equipment, piping, feedwater heaters, and heat exchangers.

Sample replacements and upgrade projects planned in the 2010 to 2013 capital forecast include:

- East River feedwater heater 64N, 77W replacements and Tank Farm Oil heaters replacement.
- East River Building Vent Fans upgrade, Unit 7 HP Deaerator Water Box Replacement
- East River –Unit 7 East and West Condensate Storage Tank piping replacement, flood control system upgrades, installation of N2 Layup System, Replacement of Hot Reheat Piping.
- HP and LP Building jib and gantry crane upgrades, Unit 6 EHC Skid replacement
- Emerging issues that require a timely resolution to ensure continued safe and reliable operation of the electric production facilities. This work is associated with unanticipated failures of control, mechanical, and electrical system and equipment.

Justification:
Operating equipment and associated systems replacement/ upgrades are required due to deterioration of equipment, system design basis changes, new systems, or needed replacement of obsolete equipment / components. For example, feedwater heater tube failures usually progress linearly over time until approximately 15% of the tubes in the feedwater heater are plugged and then the failure rate increases exponentially This program replaces feedwater heaters as they approach the end of their useful life. Feedwater heaters improve the generating unit's heat rate which is a measure of the unit's efficiency. Systematic replacement and upgrade of equipment is needed to ensure efficiency and reliability of our electric production facilities.

- Alternatives: Mechanical equipment upgrades are needed to maintain the existing system and components operating safely and reliably. The upgrades take into consideration many aspects such as system and components design basis requirements, latest technology available, equipment reliability, compatibility with other equipment, etc., along with cost to select the most cost effective solutions.

- Risk of No Action: Unreliable plant operation leading to force outages and interruption of steam and/or in-city electric generation.

- Summary of Financial Benefits and Costs: Failure of key mechanical components may cause station force outages and interruption of in-city electric generation. Corrective repairs and upgrades of failed components during forced outages are much more expensive as compared to proactive and systematic upgrades based on technical and operational assessments.

- Non-financial Benefits (if applicable): Safe, reliable plant operations in accordance with regulatory requirements and industry standards.

- Technical Evaluation/Analysis: See Above

- Sensitivity Analysis (if applicable): N/A

- Project Relationships (if applicable): N/A

Estimated Completion Date: Various

Status: Ongoing

Current Working Estimate (if applicable): N/A

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
3,088	3,651	5,235	15,341-	8,857

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
7,117	11,275	11,700	6,400	3,550	40,042

- **Authorization – 15,000**
- **Appropriation - None**

Project/Program Title	Electrical Equipment
Priority Number	N/A
Project Manager	Various
Project Engineer	Various
Budget Reference	Various
Project Number	Various
Status	Ongoing
Estimated Service Date	Various
Work Plan Category	System and Component Performance Improvement
ERM Addressed	We lose a major component at the East River Complex

Work Description:

This program includes replacement and improvement to electrical systems at electric production facilities. The electric production facilities include East River generating station Units 6 & 7 and the gas turbine facilities. Upgrades /replacements of electrical equipment and systems include replacements of: transformers, switchgear, breakers, motors, exciters, diesel generators, conduit, tray, cable and bus-work.

Sample replacement and upgrades projects planned in the 2010 to 2013 capital forecast include:

- Replacement of transformer / switchgear: Light & Power Busses 1, 2 &3 Switchgear, feeders and Transformers, 71, 72 & 73 Boiler Feedpump Switchgears and transformers, 70IDE &70IDW Switchgear and Transformers, TA-71 and TA-72 transformers, 60FDE &60 FDW Switchgears and 71 & 72 Circulators Switchgear and Transformers.
- Units 6 & 7 Generator Feeder Protection upgrade and substation data link to DCS
- Emerging issues that require a timely resolution to ensure continued safe and reliable operation of the electric production facilities. This work is associated with unanticipated failures of control, mechanical, and electrical system and equipment.

Justification:

East River Units 6 and 7 are over 50 years old. Electrical equipment and associated systems replacement and upgrades are required due to obsolescence and age induced deterioration and increase electrical demand requirements to supply new equipment. Systematic replacement of electrical equipment is necessary for reliable and safe operation of the station. Recent failures in the light and power buses have resulted in station outages.

- Alternatives: Electrical equipment upgrades are needed to maintain the existing system and components operating safely and reliably. The upgrades take into consideration many aspects such as system and components design basis requirements, latest technology available, equipment availability, compatibility with other equipment, etc., along with cost to select the most cost effective solutions.

- Risk of No Action: Unreliable plant operation leading to force outage and interruption of steam and/or in-city electric generation.

- Summary of Financial Benefits and Costs: Failure electrical supply systems and components have caused station force outages and interruption of steam and/or in-city electric generation. Corrective repairs and upgrades of failed components during forced outages are much more expensive as compared to proactive and systematic upgrades based on technical and operational assessments. For example, interim repairs may be needed due to equipment unavailability or damage and to promptly return the unit to operation.

- Non-financial Benefits (if applicable): Safe, reliable plant operations in accordance with regulatory requirements and industry standards.
- Technical Evaluation/Analysis: See above
- Sensitivity Analysis (if applicable): N/A
- Project Relationships (if applicable): N/A

Estimated Completion Date: Various

Status: On-going

Current Working Estimate (if applicable): N/A

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
4,393	8,318	1,274	7,212	383

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
5,789	13,000	11,950	20,000	17,400	68,139

- **Authorization – 25,000**
- **Appropriation - None**

Project/Program Title	Control Systems
Priority Number	N/A
Project Manager	Various
Project Engineer	Various
Budget Reference	Various
Project Number	Various
Status	Ongoing
Estimated Service Date	Various
Work Plan Category	System and Component Performance Improvement
ERM Addressed	We lose a major component at the Ease River Complex

Work Description:
This program is required to improve control systems at East River Generating Station and the Gas Turbine electric production facilities. The Control Systems program consists of upgrades/replacements of outdated pneumatic, relay based and other obsolete controls control equipment. These system and components are no longer supported by the OEMs; spare parts are scarce and malfunction due to age, and normal wear and tear. The new control systems include state of the art equipment with full diagnostic, networking and many other capabilities that significantly improve and facilitate the operation of the station system and components. Additionally, these upgrades provide more technical and operational information to operators on the status of the station. The instrumentation and control systems are the nerve center of the station and provide the interface between the operators and all station components and systems such as boilers, steam turbine-generators, water treatment systems, gas turbine-generators, and many other auxiliary systems. The instrumentation and control systems are also being integrated in the Operations and Planning departments work management systems, using the diagnostic and networking information to provide equipment condition assessments and preventative maintenance recommendations. Effective instrumentation and controls are essential to the safe and efficient operation of the station.

Projected replacements and upgrades that included in our 2010 to 2013 capital forecast include:

- Units 6 & 7 – Distributed Controls Systems (DCS) Windows upgrade and WDPF system upgrades
- East River Control Room Upgrade and migration, upgrade U6/7 the sequence of events recorders.
- Control Room / Operator Training Simulators: ER Unit 6 and 7 Simulator.
- Emerging issues that require a timely resolution to ensure continued safe and reliable operation of the electric production facilities. This work is associated with unanticipated failures of control, mechanical, and electrical system and equipment.

Justification:
East River Units 6 and 7 are over 50 years old. Consequently, control system upgrades are required due to obsolescence and equipment deterioration due to age. Monitoring system improvements and control system enhancements will increase operator awareness of equipment status as well as assessment of plant and operator performance.

- Alternatives: Control Systems upgrades are needed to maintain the existing system and components operating safely and reliably. The upgrades take into consideration many aspects such as system and components design basis requirements, latest technology available, equipment availability, compatibility with other equipment, etc., along with cost to select the most cost effective solutions.

- Risk of No Action: Unreliable plant operation leading to force outage and interruption of steam and/or in-city electric generation.

- Summary of Financial Benefits and Costs: Failure control systems and components have caused station derates and force outages and interruption of steam and/or in-city electric generation. Corrective repairs and upgrades of failed components during forced outages are much more expensive as compared to proactive and systematic upgrades based on technical and operational assessments. For example, interim repairs may be needed due to equipment unavailability or damage and to promptly return the unit to operation. In the case of control systems, repairs may be lengthy and costly due to their inert complexity difficulty with troubleshooting.

- Non-financial Benefits (if applicable): Safe, reliable and efficient plant operations in accordance with regulatory requirements and industry standards.

- Technical Evaluation/Analysis: See above

- Sensitivity Analysis (if applicable): None

- Project Relationships (if applicable): Control systems have a wide impact on may systems and projects which are taken into consideration during engineering, design and construction.

Estimated Completion Date: Various

Status: Ongoing

Current Working Estimate (if applicable): N/A

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
4,552	12,352	16,050	3,158	12,145

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
12,010	4,500	1,600	1,600	600	20,310

- **Authorization – 12,000**
- **Appropriation - None**

Project/Program Title	Structures
Priority Number	N/A
Project Manager	Various
Project Engineer	Various
Budget Reference	Various
Project Number	Various
Status	Ongoing
Estimated Service Date	Various
Work Plan Category	System and Component Performance Improvement
ERM Addressed	We lose a major component at the East River Complex

Work Description:

This is an ongoing program to replace or improve structures at East River generating station and our Gas Turbine electric production facilities. The type of work covered in this program includes: replacements and improvements to correct deficiencies found from our inspection programs for steel and concrete, masonry, building façades (Local Law 11), bridges, utility tunnels and stacks. Structural refurbishments also include those to interior masonry walls, floors, foundations and stairs.

Each of the inspection and improvement programs is described below:

Steel & Concrete

These inspections include the structural components of a building such as: steel beams, columns, bracing, connections, welds, bolts, masonry walls, platforms, concrete beams, floors and ceilings. They are performed on a 5-year frequency based on good engineering practice and industry standards.

Stacks

The interior and exterior inspections include the components of the stack (typically steel, reinforced concrete or masonry shell), interior lining, exterior coating, and all appurtenances. Inspections of operating stacks are scheduled on a 5-year cycle during unit outages. There are two stacks at the East River Station associated with electric production. Both stacks are planned were inspected in 2008.

Building Facades (Local Law 11)

These inspections of the exterior walls are required by the City of New York. They are critical examinations of the exterior walls in compliance with Section 27-129 of the New York City Administrative Code and Section 32-03 of the Rules and Regulations of the City of New York for the periodic examination of exterior walls and appurtenances commonly referred to as Local Law 11. Inspection frequency is 5 years.

Bridges

These inspections are required by the City of New York every two years. Bridges directly over public streets require an inspection to comply with the Uniform Code of Bridge Inspection. There are three bridges and one utility tunnel at the East River station under this program. Two other bridges are covered under the Steel and Concrete program.

Exit Egress Enhancements

These projects at the East River generating station electric production facility are to address egress issues. Egress components include: evacuation and exit signage, doors, travel paths and staircases.

Per the programs described above some structural upgrades planned in the 2010 to 2013 capital forecast include: Bridge refurbishments, Exit Egress Enhancements phases 3, Steel and Concrete Miscellaneous structures, Turbine Crane update and Stack #3 Relining.

Justification:

The station's facilities are over 50 years old and need to be maintained to ensure the safety of personnel, integrity of the building structure and reliability of operating equipment. The inspection programs and structural improvements described above are designed to identify and correct potential risks in a systematic and fiscally responsible manner.

- Alternatives: None. Structural deficiencies need to be addressed and corrected to ensure the safe and reliable operation of the station.
- Risk of No Action: Potentially unsafe conditions may occur due to ongoing deterioration which may result in non-compliance with regulatory requirements. Deficient and unsafe structures may affect operating equipment leading to force outage and interruption of steam and/or in-city electric generation.
- Summary of Financial Benefits and Costs: Structural upgrades are implemented in a cost effective manner to ensure structures are properly maintain and in compliance with regulatory requirements.
- Non-financial Benefits (if applicable): Safe, reliable and efficient plant operations in accordance with regulatory requirements and industry standards.
- Technical Evaluation/Analysis: See above.
- Sensitivity Analysis (if applicable): None
- Project Relationships (if applicable): None

Estimated Completion Date: Various

Status: Ongoing

Current Working Estimate (if applicable): N/A

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
7,338	7,520	4,073	6,737	7,342

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
4,275	2,545	2,100	0	7,000	15,920

- **Authorization – None**
- **Appropriation - None**

Project/Program Title	Waterfront
Priority Number	N/A
Project Manager	Various
Project Engineer	Various
Budget Reference	Various
Project Number	Various
Status	Ongoing
Estimated Service Date	Various
Work Plan Category	System and Component Performance Improvement
ERM Addressed	We lose a major component at the East River Complex

Work Description:
This is an ongoing program to replace or improve waterfront structures at the East River generating station. The type of work covered in this program includes replacements and improvements to correct deficiencies found as a result of our inspection program for waterfront facilities.

These inspections include: docks, wharves, relieving structures, bulkheads, tunnels and slope stabilizations. Items included in the inspections are: steel and timber support piles, fender piles, fender systems, sheet piling, concrete slabs and walls, timber cribbing, mooring hardware, cathodic protection system, cleats, bollards, silt profiles, and depth soundings. In addition, calculations may be performed to identify the live load capacity of docks or relieving platforms, the estimated remaining useful life of the structure, and vessel berthing capacity. Laboratory tests of timber piles and components to check their internal condition and the degree of marine borer infestation are also performed. The inspections cycle is generally 5 years based on industry standard practice. Waterfront related construction projects planned in for 2010 – 2013 include dock screen house refurbishment.

Justification:
The integrity and reliability of station operating equipment and safety to the public and workers are compromised by deterioration of waterfront structures. The Company's lease agreement with the City requires maintenance of the dock.

- Alternatives: None. Waterfront structures need to be maintained in and deficiencies need to be addressed and corrected to ensure the safe and reliable operation of the station.

- Risk of No Action: Potentially unsafe conditions may occur due to ongoing deterioration which may result in non-compliance with the Company's lease agreements with the City and regulatory requirements. Waterfront structures are an alternate means receiving fuel supply to the station in case normal means are not available.

- Summary of Financial Benefits and Costs: Upgrades to waterfront structures are implemented in a cost effective manner to ensure structures are properly maintain and in compliance with regulatory requirements.

- Non-financial Benefits (if applicable): Safe, reliable and efficient plant operations in accordance with regulatory requirements and industry standards.

- Technical Evaluation/Analysis: See above

- Sensitivity Analysis (if applicable): N/A

- Project Relationships (if applicable): N/A

Estimated Completion Date: N/A

Status: N/A

Current Working Estimate (if applicable): N/A

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	270	1,038	5,052	366

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
-	-	-	4,800	2,000	6,800

- **Authorization - None**
- **Appropriation - None**

Project/Program Title	Roofs
Priority Number	N/A
Project Manager	Various
Project Engineer	Various
Budget Reference	Various
Project Number	Various
Status	Ongoing
Estimated Service Date	Various
Work Plan Category	System and Component Performance Improvement
ERM Addressed	We lose a major component at the East River Complex

Work Description:
This is an ongoing program to replace roofs, replace/repair roof decks and slabs, and roof support/drainage systems at the East River generating station and Gas Turbine electric production facilities.

The roof inspection cycle is based on the industry standard practice of five-years. The work identified is a result of the inspections and typically covers roof replacement, drainage upgrade, and deck or slab repair/replacement.

Roof related construction projects are not planned in for 2010 – 2013

Justification:
Due to leaks through roofing systems corrugated metal decking, precast and reinforced concrete roof slabs deteriorate over time. To prevent further deterioration that could adversely affect the integrity of the underlying structure, these metal decks and concrete slabs will need to be repaired or replaced. Roof drainage systems also deteriorate over time and require replacement.

- Alternatives: N/A
- Risk of No Action: N/A
- 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):

Estimated Completion Date: N/A

Status: N/A

Current Working Estimate (if applicable): N/A

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
1,131	185	2,644	2,832	1,191

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
1,255	-	-	-	-	1,255

- **Authorization - None**
- **Appropriation - None**

Project/Program Title	Security
Priority Number	N/A
Project Manager	Various
Project Engineer	Various
Budget Reference	Various
Project Number	Various
Status	Ongoing
Estimated Service Date	Various
Work Plan Category	Regulatory
ERM Addressed	We lose a major component at the East River Complex

Work Description:
The type of work covered in this program includes perimeter surveillance and access control to the East River facility. The surveillance systems consist of new cameras, video monitors, card readers, turnstiles, vehicle barrier surveillance, and door status monitoring in and around the facility.

Security related construction projects are not planned in for 2010 – 2013

Justification:

East River generating station and substation complex has the FDR Drive on the east, Avenue C on the west, 15th street on the north, and 13th street on the south. The facility consists of the generating station, a multimillion gallon oil tank farm and two substations making it vital for Con Edison and New York City. After the World Trade Center terrorist attacks in 2001, the New York City Police Department issued a report recommending the closure of street entrances to the facility to prevent any potential terrorist attack.

- Alternatives: None.
- Risk of No Action: None
- Summary of Financial Benefits and Costs: Capital projects would increase the security of the station.
- Non-financial Benefits (if applicable): Additional perimeter protection would protect the station from a potential malicious breach with the intent of damaging and/disrupting in-city electric generation.
- Technical Evaluation/Analysis: None
- Sensitivity Analysis (if applicable): None
- Project Relationships (if applicable): None

Estimated Completion Date: 2011

Status: Planning

Current Working Estimate (if applicable): **N/A**

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
-	-	580	1,507	1,666

Approved 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	Forecast/Approved Total 2009-2013
350	0	0	0	0	350

- **Authorization - None**
- **Appropriation - None**

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.
ELECTRIC OPERATIONS
SUMMARY OF ELECTRIC OPERATIONS EXPENSES FOR THE RATE YEAR ENDING MARCH 31, 2011
($ in thousands)

Element of Expense	Exhibit Page Reference	12 Months Ended December 31, 2008	Normalizing Adjustments	Program Changes	12 Months Ending March 31, 2011
Company Labor		$ 22,036	$ -	$ -	$ 22,036
Manhour Expense		557	-	-	557
Material & Supplies		1,371	-	-	1,371
Preventive Maintenance		1,868	-	-	1,868
Communications		273	-	-	273
Building Service		622	-	-	622
Water	Page 2 of 8	317	-	336	653
Water Chemicals		644	-	-	644
Other (Fossil)		1,858	-	-	1,858
Environmental Programs		1,182	-	-	1,182
Boiler Cleaning		1,036	-	-	1,036
Plant Component Upgrade		227	-	-	227
Corrective Maintenance		4,712	-	-	4,712
Consultants		3	-	-	3
Contract Labor		6	-	-	6
EDP Equipment Rentals & Maintenance		75	-	-	75
Guard Service		908	-	-	908
Asbestos Removal and Abatement		37	-	-	37
Major Maintenance - East River Units 1/2		11,371	-	-	11,371
Scheduled Overhauls	Pages 3, 4 of 8	233	(230)	2,270	2,273
Gas Turbines		2,833	-	-	2,833
Facilities Maintenance		1,601	-	-	1,601
Total Electric Operations Expenses		$ 53,770	$ (230)	$ 2,606	$ 56,146

NOTE: These amounts, other than Water, exclude the impact of labor and non-labor escalation. Labor escalation is calculated and reflected in Exhibit __ (AP-5), Schedule 2. Non-labor escalation for expenses other than Water is calculated and reflected in Exhibit __ (AP-5), Schedule 9. The program change for Water is escalated as noted in the Electric Production Panel's testimony and in the Electric Production Panel's workpapers.

2010 O&M – Electric Production

Project/Program Title	Water
Status	On-going
Estimated Service Date	On-going
Work Plan Category	Reliable Service at a Reasonable Cost
ERM Addressed	Lose a Major Component at the East River Complex

Work Description:

City water used in East River boilers 60/70 in the production of electricity.

Justification:

- Alternatives:

  None. Water is required in the production process. This program change increase is attributable to both an increase in rate year generation for East River and anticipated City water rate annual increases based on City Water Board estimates.

Estimated Completion Date:

On-going.

Funding ($000):

Actual 2004	Actual 2005	Actual 2006	Actual 2007	Actual 2008
285	341	341	370	317

Approved 2009	Forecast RYE 2011	Forecast RYE 2012	Forecast RYE 2013	ForecastTotal 2011-2013
479	653	653	653	1,959

2010 O&M – Electric Production

Project/Program Title	East River Unit 6 High Pressure Turbine Overhaul
Status	To be completed during Fall 2010 outage
Estimated Service Date	December 2010
Work Plan Category	Reliable Service at a Reasonable Cost
ERM Addressed	Lose a Major Component at the East River Complex

Work Description:

Complete a turbine overhaul for East River Unit 6. This project includes such activities, as follows:

- Engineering services
- Disassembly/reassembly of high pressure generator
- High pressure generator rotor inspection
- Gland casing repairs
- Sand blasting
- Diaphragm extraction/overhaul/repair
- NDE inspection

Justification:

- Alternatives:

  COP 6-4-1 requires a turbine overhaul to be performed every 50,000 service hours. This unit is due for overhaul by the last quarter of 2010.

- Risk of No Action:

  Risks associated with inaction include reduced equipment reliability and efficiency, in addition to potentially impacting the safety of employees at the plant.

- Summary of Financial Benefits and Costs:

  A turbine overhaul will increase turbine efficiency, reducing fuel and other operating costs.

- Non-financial Benefits (if applicable):

  A turbine overhaul will ensure a more reliable unit, decreasing operating risks and potential accidents.

- Technical Evaluation/Analysis:

  A turbine overhaul is a necessity since it will correct internal mechanical deficiencies that normally cannot be identified externally. A standard inspection will include a rotor material analysis as well as an inspection of all blading, rotating equipment and stationary equipment. A turbine inspection will allow the technical staff to perform a unit analysis to identify problems that can be addressed in a timely manner to ensure long-term reliable operations.

  Additionally, the generator original equipment manufacturer has issued a Technical Information letter, 1292-2R2, recommending that all generator rotors similar to this unit be inspected for cracking at the next availability. Fretting fatigue cracking has been discovered in the dovetail slots containing

metallic wedges which secure the copper into the rotors. Failure to comply with the recommendations may result in reduced reliability and safety.

Estimated Completion Date:

December 2010

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
-	2,270	-	2,500	4,770

TESTIMONY BY
NYC COMPTROLLER WILLIAM C. THOMPSON, JR.

NEW YORK WATER BOARD
ON PLAN TO LOWER RATES
AND LIMIT FUTURE DEBT

ST. JOHN'S UNIVERSITY

TUESDAY, JUNE 19, 2007

Good morning, Chairman Tripp and members of the Board.

I appreciate very much your giving me the opportunity to appear before you today to discuss several issues relating to the financial pressures leading to the recent decision by the Water Board to raise water rates in New York City.

Before I begin, I want to draw your attention to the Power Point presentation that my staff has prepared, which you should all have and which tracks with my remarks. It contains several helpful charts that will clarify some of the points I will be making so I encourage you to follow along as I speak.

The new rate hike points to a challenge we now face: how to expand our water capital program while at the same time reducing the burden on rate payers and minimizing debt service.

My office has come up with an innovative plan that could achieve those important goals. The timing could not be more fitting for such an initiative.

As you all know the DEP Capital Program for 2008 to 2017 is some $19.5 billion. Among other causes, the size of that figure relates to a more rigorous regulatory environment, the rising costs of labor and material, and new needs.

Debt service on the capital program will exceed $1.5 billion by 2011 – a 70 percent increase over 2007. Operations and maintenance costs are expected to climb some 20 percent over the same period to $1.2 billion.

The growing debt service obligations are driving a large escalation in rental payments by the Water Authority to the City over the next decade.

The current rent formula was established in 1985. One can argue that the formula used at that time did not anticipate the shifting regulatory and economic environments we face currently.

As you know, that formula stipulates that the rental payment equals either the cost of debt service on General Obligation bonds issued for water purposes OR 15 percent of Water Authority debt service – whichever is greater.

If you look at the chart on page 5 of the Power Point presentation, you'll see that from 1986 to 2004, this formula led to rental payments by the Water Authority in the amount of GO debt service.

Starting in 2005, however, there began to be a growing disparity between rental payments and GO debt service....Rental payments are expected to increase 70 percent between 2007 and

2011 from $136 million to $232 million, while GO debt service is expected to decrease to $57 million.

For the purposes of discussion, we have chosen to call that disparity "excess rent." This excess rent, as I've suggested, stems from growing costs related to the Water Authority's capital program and goes directly into the operating budget of the City to use as it sees fit.

In the chart on page 5, we have run out estimates for the total excess rent over thirty years, using a conservative estimate of 3 percent annual growth between fiscal years 2012 and 2036 – the years following the Mayor's current four-year budget forecast.

As you will see on page 6, by those estimates, over the next thirty years, excess rent is expected to reach close to $9 billion.

The Water Board is mandated to set water rates to cover the costs of its rental payments, as well as debt service, operations and maintenance.

Due in part to the escalating costs of the City's water capital program, an 11.5 percent rate increase was approved last month and double digit increases are expected from 2009 to 2011.

These increases will have a significant impact on renters and small home owners. In the current economic climate, the housing market has already tightened and as we all know the availability of good, affordable housing is quickly diminishing in our city.

That places a special burden on the City's leaders to find ways to protect our superior credit ratings while alleviating pressure on renters and homeowners. My office has come up with a proposal designed to do just that.

If you look at page 8 of our Power Point presentation, you will see the broad outlines of our plan, which seeks to rebate excess rent to the Water Board to be spent in equal measure on the goals of rate payer relief and pay-go capital spending.

Because excess rent is realized at the end of the fiscal year and applied to the following year, the impact on rate payers is estimated for Fiscal Years 2009 to 2012.

During that period we anticipate that our proposal could free up some $278 million in cumulative Water Board operating expenses that would no longer need to be raised from rate payers.

The next two slides show the impact on rates in the initial years as the use of excess rent is ramping up. Savings will continue to grow.

At the same time, our proposal would generate an additional $248 million for pay-go capital between Fiscal Years 2008 and 2011, thereby reducing borrowing and saving money.

My plan doubles the commitment to pay-go spending between 2008 and 2017, with a total pay-go outlay of $914 million over that period.

As you will see on page 11 of our presentation, we estimate that based on 30-year amortization on Water Authority bonds, the use of pay-go funds through 2036 would save the Authority $9.7 billion in debt service.

Over the 10-year Capital Strategy, my plan would double pay-go capital spending

We have also developed an alternative scenario that applies 100 percent of excess rent to rate relief. As you can see on pages 13 and 14 of our presentation, this application of excess rent would save rate payers an estimated $496 million between fiscal years 2009 and 2012.

Whether or not you choose to consider one of the scenarios I have laid out today, I firmly believe that the Water Board should open discussions with the City to renegotiate its lease rental formula. Why now? As I said at the top of my remarks, the timing could not be more opportune. We are enjoying the largest surplus in the City's history.

At the same time, the Water Authority has the highest ratings it has ever experienced. The use of additional pay-go spending as I have proposed today will further protect those ratings.

Finally, at a time when middle class New Yorkers are being increasingly squeezed, we need a rate structure that gives average taxpayers in our City some breathing room.

I urge you to act now to reduce the water rate burden on New York City property owners.

In addition to keeping costs to taxpayers down, you will decrease our debt service, protect Water Authority credit ratings, and lessen the cost of borrowing while making needed improvements to our capital program.

I appreciate this opportunity to share my views and now I would be happy to answer any questions.

FOR IMMEDIATE RELEASE0 8-13
May 16, 2008
CONTACT:
Michael Saucier / Mercedes Padilla (718) 595-6600

Statement from DEP Commissioner Emily Lloyd on FY '09 Water Rate Proposal

"This morning the Water Board voted in favor of a 14.5% water rate increase, which will take effect July 1. Last year at this time, Water Board rate projections indicated the likely need for a double digit increase of 11.5% in FY '09. A few key factors, however, have contributed to the need for an '09 increase of 14.5%, or three points higher than predicted.

"Even though the growing cost of building and maintaining infrastructure is well known, DEP recognizes that any rate increase will be significant for our customers, particularly now. DEP has implemented a variety of measures to help keep the increase as low as possible.

"These measures include:

The Payment Incentive Program (PIP) for delinquent customers has brought in close to $63 million in this fiscal year and will generate a large amount of additional revenue in the upcoming four years, as a result of payment agreements;

The residential service shut off program for non-payment, now entering its eighth week, has maintained a 95% pre-termination payment rate;

The first stand alone water lien sale will take place on May 19.

Automated Meter Reading, a technology which helps other cities achieve near perfect collection rates, will be installed in New York City beginning this summer; and

DEP has also cut its own agency expenses.

"These strategies, as well as significant customer service improvements were undertaken as part of the overall transformation of DEP's Bureau of Customer Services (BCS). Also, in conjunction with its new enforcement efforts, DEP has created a Safety Net program for the most vulnerable New Yorkers. Already, close to 500 people have opted into the Safety Net program, which connects customers with a range of assistance programs, including budgetary counseling and emergency grants and/or loans.

"But even though we are very pleased with the results of our enforcement and revenue collections strategies, and with the positive impact they will have on our future collections, costs have grown in other areas. We have seen a more than $118 million increase in non-discretionary operations and maintenance costs, such as a dramatic growth in the cost of fuel and energy; increases in collective bargaining and health care costs: larger debt service payments on the Federally mandated projects that constitute two thirds of DEP's capital budget, and also on other critical infrastructure projects, such as the Third Water Tunnel and the Delaware Aqueduct.

"Under the new rate proposal, the average single family homeowner will pay $200 a quarter next year as opposed to $175 a quarter this year. This is approximately $5 a quarter more than was projected last year. Average annual costs for the rate per dwelling unit in multi-family dwellings will go from $594 per year to $680 per year."