RANDOLPH S. PRICE - GAS

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WITNESS INTRODUCTION

Q. Please state your name and business address.

A. Randolph S. Price, 4 Irving Place, New York, NY 10003.

Q. By whom are you employed and in what capacity?

A. I have been employed by Consolidated Edison Company of New York, Inc. ("Con Edison" or the "Company") since August 2001 as Vice President for Environment, Health and Safety ("EH&S").

Q. By whom were you employed prior to joining Con Edison, and what positions did you hold?

A. From 1982 until 1994, I worked for the DuPont Company. I started as a plant environmental coordinator and subsequently worked in various positions of increasing responsibility before leaving DuPont in 1994. In 1994, I joined J.M. Huber Corp. as Corporate Director of Environment, Health and Safety, where I stayed until 1996, when I joined Allied Signal (now known as Honeywell International) as Director of Environmental Affairs & Six Sigma.

Q. Please describe your educational background.

A. I received a Bachelor of Science Degree in Biology from the State University of New York at Cortland in

1975, and a Master of Science degree in Sanitary Science from Syracuse University in 1982.

Q. Do you belong to any professional organizations?

A. Yes. I am one of Con Edison's representatives to the Edison Electric Institute ("EEI"), serving as a member of EEI's Environment Executive Advisory Committee.

Q. Have you previously submitted testimony to the New York State Public Service Commission ("Commission")?

A. Yes. I have submitted testimony or testified in various Con Edison electric, gas and steam rate cases, as well as presented on behalf of the utilities in the Commission's Site Investigation and Remediation Costs Proceeding (Case 11-M-0034).

SUMMARY OF TESTIMONY

Q. Please summarize your testimony.

A. My testimony focuses on the following EH&S-related activities and their projected costs during the Rate Year, January 1, 2014 through December 31, 2014:

- Remediation Program activities that are mandated by agreements, regulations, consent orders, or permit

requirements. In particular, I describe Con Edison's program for the investigation and remediation of former manufactured gas plant and manufactured gas storage holder sites ("MGP Sites"). I also discuss Superfund sites for which Con Edison is responsible, as well as the requirements of the Appendix B section of the November 1994 Consent Order between Con Edison and the New York State Department of Environmental Conservation ("DEC"), as modified by the December 2006 Consolidated Consent Order ("Appendix B"). In addition, I address the Resource Conservation and Recovery Act ("RCRA") corrective action requirements of the hazardous waste management facility operating permit that was initially issued by the DEC in May 1994 and subsequently renewed in March 2001 and July 2008 for the Company's PCB/Hazardous Waste Storage Facility at its Astoria Site. I discuss underground storage tank ("UST") sites, which the Company must address under Federal and New York State regulations. I also discuss other sites with known or potential contamination that Con Edison is addressing. In total, we expect to spend approximately $28.3 million

for these site environmental investigation and remediation activities ("SIR Program") during the Rate Year. I explain the steps the Company takes to control and mitigate its SIR Program costs, and I detail the process for site investigation and remediation, including the development of work plans, Company and contractor staffing for the Company's SIR Program, and the Company's internal controls. In addition to addressing the SIR program and costs for the Astoria Site, my testimony for that site includes a discussion of capital and retirement costs that will be incurred to complete improvements that are required for the Astoria Site's storm sewer systems under a consent order with the DEC. I also address the Company's compliance with the rate case filing requirements recently adopted by the Commission.

SIR PROGRAM

Q. Please provide an overview of Con Edison's SIR Program.

A. Con Edison has a comprehensive on-going program for managing its SIR sites and verifying that required

remedial response measures (investigations followed by any necessary remedial action) are properly performed for sites that have been contaminated by past releases of petroleum products, hazardous wastes, and hazardous substances from Con Edison's and its predecessor companies' facilities and/or operations. This program encompasses the following types of sites, each of which is discussed more fully below: (1) MGP Sites; (2) Superfund Sites; (3) oil and dielectric fluid spill sites subject to the investigation and cleanup requirements of Appendix B; (4) the areas of the Astoria Site subject to the RCRA corrective action requirements imposed under the DEC's hazardous waste management facility operating permit for the Company's PCB/Hazardous Waste Storage Facility at that site; (5) UST Sites; and (6) other sites with known or potential contamination that Con Edison is addressing and that do not fall under the aforementioned five programs.

Q. Please describe the Company's SIR programs and projects.

A. The Company's SIR programs and projects are described in the sections of my testimony concerning MGP Sites,

Superfund Sites, Appendix B Sites, Astoria PCB/Hazardous Waste Storage Facility, UST Sites, and Other Sites.

Q. Are the costs and schedules presented in your testimony and exhibits for the Company's SIR programs subject to change?

A. Yes. They are projections based upon the best information available to the Company at the time they were made regarding the extent of the investigation and remediation likely to be required for the Company's SIR sites. As is the case for any projection, the SIR-related costs and schedules presented in my testimony and exhibits are subject to change due to various types of contingencies, including: variation between anticipated and actual remedial investigation results; the discovery of different or more extensive contamination during pre-design investigations or remedy implementation; delays in applicable regulatory review/approval processes; changes to anticipated remedies due to regulatory agency, community, or affected landowner concerns; delays in obtaining required local agency permits for

remedy implementation; access and cooperation issues with affected property owners for the implementation of investigation or remediation activities; and unanticipated field conditions and/or force majeure events. The Company's projected schedules for its SIR programs are reviewed and evaluated internally at least annually and more frequently for active projects. The Company's SIR cost projections are reviewed internally at least quarterly.

MGP SITES

Q. Before turning to Con Edison's investigation and remediation efforts for its MGP Sites, please provide a brief background on Con Edison's and its predecessor companies' former manufactured gas plants ("MGPs") and manufactured gas storage holder facilities.

A. MGPs provided energy in the form of combustible gases of varying composition to municipal street lighting systems and to homes and businesses in cities and towns across the more densely populated regions of the United States. In the case of the areas served by Con

Edison and its predecessor companies, MGPs operated from the late 1820s through the early 1960s. The earliest of these plants produced illuminating gases from whale oil and/or rosin. The plants constructed during and after the 1830s converted coal (oven gas) or a combination of coke or coal, oil and water in the form of steam (carbureted water gas) into a gas product that could be used for lighting, cooking, and heating. There were more than 200 MGPs in New York State and an estimated 3,000 to 5,000 in the United States, mostly in the Northeast and Midwest, prior to these plants becoming obsolete due to the construction of natural gas pipelines and large electric generating stations. Holder stations were used for the storage of manufactured gas that had been produced at MGPs. They consisted of large storage tanks (holders) of varying composition and design.

Q. What are the present environmental concerns related to MGP Sites?

A. Manufactured gas production was a complex process that entailed the handling and storage of significant quantities of feedstock materials, by-products, and

residuals that contain organic and inorganic chemical constituents that are now considered to be hazardous substances under federal and New York State laws and regulations and that, when released to soil, groundwater, or waterways, may pose a threat to human health or the environment. The materials of primary concern at MGP Sites include carbureting oils, scrubber oils, coal tar, coal tar-related emulsions and sludges, and gas purification wastes. At manufactured gas storage holder sites, these materials include oils (which were used in hydraulic systems as lubricants or to maintain airtight seals between holder tank bases, bellows and shells) and coal tar (which at times condensed out of stored manufactured gas or was used to maintain airtight seals between holder tank bases, bellows, and shells).

Q. Has the DEC increased its activities regarding MGP Sites?

A. Yes. The DEC has pressured New York State's investor-owned utilities to investigate and, when necessary to protect human health and the environment, to undertake remedial response actions for the sites of their

former manufactured gas plants. Most New York State utilities have entered into administrative consent orders ("ACOs") or cleanup agreements with the DEC under which the utilities have agreed to address their MGP Sites. In some cases (such as Con Edison), these ACOs or cleanup agreements cover multiple sites. Under the DEC's MGP program, investigations and/or remedial action work have been undertaken or are planned at more than 190 former MGP sites across the State. DEC's MGP program is grounded in a federal initiative to ensure that former MGP sites are addressed throughout the country. The New York State Department of Health ("DOH"), which works with the DEC in evaluating the results of MGP site investigations and determining the need for remedial response actions for them, views the primary goal of these investigations as assessing potential human exposure to MGP-related contaminants.

Q. Turning to Con Edison's MGP Site investigation and remediation program, can you please provide the background for the program?

A. Yes. Con Edison and its predecessor companies formerly manufactured gas and maintained storage holders for manufactured gas at 51 MGP Sites located throughout Manhattan, the Bronx, Westchester County, and western Queens, New York. Many of these sites are now owned by parties other than Con Edison and have been redeveloped by their new owners for other uses, including schools, residential and commercial developments, public parks, and hospitals. The DEC requires the Company to investigate and, if necessary, develop and implement DEC and DOH-approved remedial action plans for all of its and its predecessor companies' confirmed MGP Sites, which presently include 34 manufactured gas plant sites and 17 storage holder sites. Of these 51 sites, only 16 are still owned in whole or in part by the Company. In addition, most of the sites have been subdivided into separate properties, with different owners. As a result the 51 sites currently comprise more than 150 different properties.

Q. Has a listing been prepared of the sites of the former MGPs and manufactured gas storage holder facilities

that DEC is requiring Con Edison to investigate and, if deemed necessary by DEC and/or the DOH, to implement remedial action plans?

A. Yes. The table entitled "CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. 2013 GAS RATE CASE: MGP SITE LISTING" provides a listing of those sites and the required investigation and remediation activities that have been completed for them as of June 30, 2012.

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

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT __ (RSP-1)

Q. What has contributed to the significant increase in the level of activity in the Company's MGP Program during the last several years?

A. On August 15, 2002, Con Edison entered into a cleanup agreement ("MGP Agreement") with the DEC to conduct investigations and, if necessary, DEC/DOH-approved remediation at 45 of the 51 MGP Sites listed in Exhibit ___ (RSP-1). Of the remaining six sites listed in that exhibit, five are covered by either individual cleanup agreements with the DEC (the

Tarrytown and White Plains Gas Works Sites), DEC consent orders (the East 14th Street Gas Works and Farrington Street Holder Station Sites), or the RCRA corrective action requirements of the previously discussed DEC hazardous waste management facility operating permit (the Astoria Site). The sixth site, the Hastings-on-Hudson Gas Works Site, was identified after the Company had entered into the MGP Agreement. The Company and DEC modified the MGP Agreement in September 2007 to add this site to the initial list of 45 MGP and manufactured gas holder station sites that Con Edison is obligated to investigate and, if deemed necessary by DEC and/or the DOH, remediate under the MGP Agreement.

Con Edison's execution of the MGP Agreement began a period of significant increased activity in the Company's MGP Program. Due to the large number of sites covered by the MGP Agreement, the DEC and the Company agreed on a prioritization strategy under which MGP sites that are now the location of schools or residential properties would be investigated first. Other priority sites besides schools and residential

properties can and have surfaced primarily as a result of proposed redevelopment projects by present property owners (West 45th Street and Pemart Avenue Gas Works Sites, West 58th Street Holder Station Site) or subsurface construction activities, such as the installation of storm sewers by the NYS Department of Transportation, that have unearthed MGP-related contamination (East 173rd Street Gas Works Site).

Q. What is the current status of Con Edison's MGP Program?

A. The status of each of Con Edison's MGP Sites as of June 30, 2012 is summarized in Exhibit ___ (RSP-1). As indicated in that exhibit, Con Edison has made significant progress in investigating and, when found to be necessary, remediating its MGP Sites. To date, based on investigations performed and, as necessary, remediation, the Company has received "No Further Action" determinations from the DEC for 19 of the Company's 51 MGP sites.

The investigation of the remaining 32 former MGP sites (which encompass 106 separate properties), will take several years to complete. Through the end of

June 2012, at a minimum, a site characterization study ("SCS") or remedial investigation ("RI") work plan, covering all or portions of these remaining MGP Sites has been submitted to the DEC. Remediation work at sites where such action is deemed necessary by the DEC and DOH based on the results of the investigation work performed, will take longer to complete. (At some sites, the remediation may not be completed until after the buildings and structures present on the sites are demolished).

The status of the required SIR activities for the 106 properties encompassing the remaining 32 sites is as follows: (1) remediation is currently required at 11 properties and pre-design investigations and design activities for these properties are ongoing;(2) investigations are ongoing at 76 properties; and, (3) investigations are pending negotiation of access agreements with current property owners at 19 of these properties. As I indicated above, Exhibit ____ (RSP-1) provides a summary of the status of required investigation and remediation activities that have

been completed for each of Con Edison's MGP Sites as of June 30, 2012.

Q. What are the costs included in the Rate Year for MGP Sites?

A. The estimated costs for the Rate Year are approximately $10.2 million.

Q. What specific MGP Site investigation and remediation activities does the Company expect to conduct during the Rate Year?

A. During the Rate Year, the Company plans to: (1) conduct supplemental investigations at several sites where additional information is required to characterize and delineate MGP-related or gas holder station-related contamination, (2) proceed into the remediation phase for those sites where investigations have found that remedial action is warranted and sufficient information exists to determine the appropriate remedy, and (3) initiate or continue site characterization studies at several sites where such investigations have not yet been completed. At the Pelham Works site, in addition to continuing the required ongoing coal tar collection and groundwater

treatment programs for that site, the Company expects to commence work on a required corrective action during the Linking Period, the period from July 1, 2012 through December 31, 2013, and to complete the corrective action work during the Rate Year. Additionally, remedial action planning activities are expected to be conducted for several other sites.

Q. Do you expect the Company to continue to conduct similar MGP Site investigation and remediation activities over the next five years?

A. Yes, but the number of sites being investigated will decrease during that period and the number of sites for which remedial planning/design activities or remediation work is performed will increase.

Q. What role does the DEC play in decisions relating to the scheduling of investigation and remediation activities for Con Edison's MGP sites?

A. Under the terms of its MGP Agreement with the DEC, the Company is required to submit by November 15th of each calendar year for the DEC approval a proposed schedule for the development and filing of draft investigation and remediation work plans during the following

calendar year. Although not required under the MGP Agreement, the Company also submits to the DEC three-year site-specific projections of its planned activities for each of its MGP sites, including the MGP sites covered by the MGP Agreement. The projected schedule for the first year is presented on a quarterly basis. The projected schedule for the second and third years is presented for the entire year. These projections are presented by work task type, such as: site characterization, remedial investigation, remedial planning, and remedial action implementation. The purpose of these projections is two-fold. First, they serve as a critical planning tool for the Company to ensure that it proceeds with its required SIR activities in an orderly manner and makes appropriate provision for the services and resources it needs to meet its obligations under the MGP Agreement. Second, it provides the DEC with a workflow estimate that allows the DEC to best manage its resources.

Q. Has Con Edison submitted its proposed schedule of 2013 work plan submissions and its projected schedule of

MGP site activities to the DEC for the period 2013 - 2015?

A. Yes. A copy of this submittal is provided as an exhibit entitled, "CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. 2013 GAS RATE CASE: PROPOSED SCHEDULE OF 2013 WORK PLAN SUBMISSIONS AND PROJECTION OF MGP SITE ACTIVITIES AS OF 12/01/12".

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

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT __ (RSP-2)

Q. When was this submittal made to the DEC?

A. December 4, 2012.

Q. Why was the submittal date after the November 15th date specified in the MGP Agreement?

A. Because of Superstorm Sandy, Con Edison requested and the DEC approved a one month extension for this submittal.

Q. Are the Company's yearly projected schedules periodically reviewed and evaluated?

A. Yes. They are reviewed and evaluated at least annually and more frequently for active projects. They are subject to revision due to contingencies, such as those discussed above in my testimony.

Q. Has the Company prepared a table comparing the projected calendar year 2012 MGP site activities specified in its November 2011 submittal to the DEC under the MGP Agreement to the MGP Site activities actually performed in 2012?

A. Yes. A copy of this table is provided as an exhibit entitled, "CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. 2013 GAS RATE CASE: PROJECTION OF 2012 MGP SITE ACTIVITIES AND DIFFERENCES FROM PROJECTIONS".

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

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT __ (RSP-3)

Q. What does this exhibit show?

A. Exhibit ___ (RSP-3) shows for each active MGP site covered in the projected schedule the Company submitted to the DEC for calendar year 2012 the

investigation/remediation activities projected in the schedule, whether there was any variation from the projected schedule (yes or no), and, if there was a variation, the reason(s) for the variation.

Q. What were the primary reasons for the variations between the projected activities and the activities actually completed during calendar year 2012?

A. Except for the Pelham Gas Works site, differences were due to the need to obtain access to the affected properties and delays in the DEC review/approval process for the work plans or reports filed with the DEC. For the Pelham site, the competitive bids initially submitted by potential remediation contractors far exceeded our consulting engineer's estimated cost of the work. As a result, the remediation project was re-designed to address issues that caused the relatively high initial bids, and the remediation work was re-bid.

Q. Has the Company discussed the schedule variations identified in Exhibit ___ (RSP-3)with DEC?

A. Yes. Based upon discussions with the DEC, it is my understanding that the DEC is satisfied with the

progress Con Edison has made implementing the SIR activities required for its MGP Sites under the MGP Agreement. Of course, the DEC may comment on or recommend changes to our projected activities table, in which case Con Edison would evaluate the DEC's comments and recommendations and make any appropriate changes. As indicated previously in my testimony, the table of site-specific projected activities is submitted voluntarily and is not required by the MGP Agreement.

SUPERFUND SITES

Q. What types of sites are covered by Con Edison's Superfund Site investigation and remediation program?

A. Con Edison's Superfund Program covers the following categories of sites:

- Third party-owned sites to which Con Edison shipped hazardous substances for treatment, storage, or disposal and for which Con Edison has been designated a potentially responsible party ("PRP") for the investigation and remediation of site contamination by the United States Environmental Protection Agency

("EPA"), DEC, or another government environmental agency pursuant to the federal Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") or to comparable state statutes, including statutes that impose liability for the costs of investigating and cleaning up oil spills;

- Sites formerly owned by Con Edison and for which the current site owners assert claims against Con Edison for investigation and remediation costs pursuant to CERCLA or comparable state statutes; and
- Sites (whether or not owned by Con Edison) at which Con Edison is required to conduct cleanup work because of releases of oil, dielectric fluid, PCBs, or other hazardous substances from its or its predecessor companies' equipment, facilities, or operations.

Q. What are the costs included in the Rate Year for Superfund Sites?

A. The expected costs for the Rate Year are approximately $4.8 million.

Q. Please discuss the Company's anticipated investigation and remediation activities during the Rate Year for its Superfund Sites.

A. The following activities are anticipated during the Rate Year at the Company's Superfund Sites:

1. Curcio Scrap Metal, Inc. Site - Saddle Brook, NJ: Con Edison's ACO with the EPA was amended on April 27, 2005, to require Con Edison to continue implementing this site's groundwater monitoring program for an additional five years. As required by the ACO, Con Edison petitioned the New Jersey Department of Environmental Protection ("NJDEP") to establish and impose local groundwater use restrictions for the site and the off-site area affected by the site's groundwater plume. The NJDEP approved Con Edison's petition in 2008. In April 2011, the ACO was amended to require groundwater monitoring and reporting for another five years, although less frequently (biannually) and for fewer parameters. During the Rate Year, Con Edison expects to perform groundwater monitoring and to prepare and submit to the EPA a groundwater monitoring results report.

2. Cortese Landfill Site - Tusten, NY: Con Edison is a member of a PRP steering committee that is obligated

under its judicially-approved consent decree with EPA to design and implement EPA's selected remedy for this site. The steering committee has completed the drum removal, landfill capping, and other remedial construction elements of EPA's selected site remedy. Based upon extensive analyses conducted by the steering committee, EPA has amended its site remedy to replace the expensive and protracted groundwater treatment program that EPA initially selected with a cost-effective program that includes innovative technology and is expected to achieve EPA's cleanup objectives in substantially less time than the initial program. EPA and the steering committee have entered into an ACO under which the steering committee is designing the new EPA-approved alternative site groundwater treatment program. It is anticipated that remedial design and construction of the groundwater treatment system will be completed during the Linking Period and that operation of the treatment system will commence during the Rate Year. Periodic inspection and required maintenance for the Site's containment cap

and erosion controls will be performed during the Linking Period and Rate Year.

3. Maxey Flats Site - Morehead, Kentucky: Con Edison is a member of a PRP steering committee that is required to implement the first phase of EPA's selected remedy for this former low-level radiological waste land burial facility under a consent decree with the United States Department of Justice ("DOJ"). The remedial construction elements of the phase one remedy have been completed. During the Linking Period, the steering committee will complete implementing the site's required ten-year, post-remedial construction monitoring program.

4. Metal Bank Superfund Site - Philadelphia: Con Edison is a member of a PRP steering committee comprised of electric utilities that shipped scrap transformers to this site during the late 1960's and 1970's. EPA issued Unilateral Administrative Orders ("UAO") compelling Con Edison, most of the other steering committee members, and the current and former site owners and operators to design and implement EPA's selected remedy for the site and the PCB-

contaminated sediment in the area of the Delaware River along the site's waterfront. EPA's selected remedy was challenged by the current and former site owners and operators in the U.S. District Court for the Northern District of Pennsylvania in the context of litigation in which the government sought recovery of its past site response costs from them. The members of the steering committee also sought contribution from the current and former site owners and operators. After years of negotiations, settlements resolving all claims, and consent decrees embodying the settlements were approved and entered by the district court in 2006. Under their judicially-approved consent decree with the government, the steering committee members are responsible for designing and carrying out the required remediation work for the site and Delaware River sediment affected by the site's contamination, but are entitled to contribution of approximately $4.1 million from the principals of the metal reclamation company that contaminated the site with PCBs while salvaging scrap transformers. The

steering committee members are also entitled to seek reimbursement of their remediation work-related costs from the $13.2 million trust fund established as part of the settlement of their claims against the bankruptcy estate of the corporate parent of the current site owners and operators. The implementation of the remedy was started in early 2008 and was completed in 2010. During the Rate Year, the Company expects that the steering committee will be conducting the long-term site monitoring program activities required in their consent decree with the government. In addition, to assess the integrity of the capped area with marine mattresses, EPA has requested the performance of additional bioaccumulation studies at the site, including fish and worm studies in the Delaware River, and has requested evaluation of the sediment and erosion controls that are in place.

5. Arthur Kill Site: In March 2003, the DEC issued a Record of Decision ("ROD") requiring the remediation of the PCB-contamination caused by a September 1998 transformer fire at the Arthur Kill Station. DEC

and Con Edison entered into an ACO for the implementation of the remedy selected in the ROD for the waterfront area's contaminated soil and sediment. Con Edison performed the required remediation work during the last half of 2008, and returned to the site during the spring of 2009 to re-plant some of the tidal wetland areas disturbed by the work. In 2010, the DEC informed Con Edison that remediation performed before the Company sold the Arthur Kill property in 1999 did not achieve the numerical cleanup goals in two areas. However, based on additional sampling performed in these areas in 2011, the DEC informed the Company that additional remediation would not be required for those areas. In August 2012, the DEC delisted the site from the New York State Registry of Inactive Hazardous Waste Disposal Sites. Because the Company has no further obligations for this site, the Company has not projected any Rate Year costs for it. However, during the Linking Period, the Company projects that it will make a final payment of approximately $65,000 to the remediation contractor

for retainage. The Company expects to receive an insurance reimbursement of approximately $5.7 million from Associated Electric and Gas Insurance Services ("AEGIS"), which sold the Company a first-layer excess liability insurance policy that was in effect on September 7, 1998, when the fire occurred. The anticipated insurance recovery has been credited against the projected SIR costs to determine the projected costs for the Linking Period specified in my testimony.

6. North First Street Terminal ("NFST") Site: Con Edison sued Fyn Paint in the U.S. District Court for the Eastern District of New York seeking relief under CERCLA and New York common law for the solvent contamination that Fyn Paint's operations on its adjoining property caused on the NFST Site. Fyn Paint entered into a Voluntary Cleanup Agreement ("VCA") with the DEC for the investigation and remediation of the contamination that its operations caused on its property and adjoining properties, such as the NFST Site. Based on the results of Fyn Paint's investigation, the DEC approved and Fyn

Paint must implement an Interim Remedial Measures Work Plan that entails the operation of a product (i.e., mixture of volatile organic compounds such as toluene and xylene) recovery system to remove the solvents and treat the associated contaminated groundwater from beneath Fyn Paint's property and the NFST Site. Pursuant to a judgment entered by the district court in March 2008, and affirmed on appeal, Fyn Paint was required to fund 72 percent of the costs of the DEC-required investigation/ remediation work up to a maximum contribution of $792,000, and Con Edison was required to fund the remaining costs up to a maximum contribution of $3,208,000. The DEC has required Fyn Paint to excavate contaminated soil on its property and to continue groundwater treatment and solvent recovery as a final remedy for its property and the NFST. In July 2011, the DEC determined that Fyn Paint's remedial design was not supported by the field test data and requested that additional testing be performed. In February 2012, Fyn Paint submitted plans to conduct additional field testing, which

were approved by DEC and implemented by Fyn Paint. Fyn Paint has incorporated the results of its field test in the final remedial design that it has submitted to the DEC for approval. In August 2012, the DEC informed Fyn Paint that it must address additional contamination that Con Edison recently found on another parcel of the NFST site. The Company anticipates that Fyn Paint's remedial design will be approved by the DEC and implemented by Fyn Paint during the Linking Period and that the Company will perform technical oversight of Fyn Paint's activities during the Linking Period and Rate Year.

7. Maspeth Substation Site: Con Edison sold this site in 1996. Subsequently, oil containing high levels of PCBs was found floating on the groundwater table beneath the site's former outdoor transformer yard area. Con Edison began remediating PCB-contaminated soil in 2005 under a VCA with the DEC. The last phase of the required soil remediation, removal of PCB-contaminated soil from three adjacent residential properties and from on-site areas adjacent to two of those properties, was completed

during the second quarter of 2008. DEC's site remedy included quarterly groundwater monitoring for a period of at least two years. In July 2008, the Company installed four additional wells on the site and began the quarterly groundwater monitoring program. After the on-site groundwater monitoring program was completed, Con Edison submitted a Final Engineering Report (FER) in 2011. Subsequently, the DEC approved an application to modify the VCA to conform to areas that the Company had investigated and remediated. In January 2012, the DEC approved the FER and issued a limited liability release to the Company. However, the DEC is requiring continuation of groundwater monitoring and, if necessary, oil recovery, in wells located outside the former substation property. It has been assumed that this off-site groundwater monitoring program will be completed during the Linking Period.

8. Flushing Creek Site:

In September 2007, the DEC informed Con Edison that PCB contamination, which the DEC attributes to Con Edison's and its predecessor companies' operations

at the Company's former Flushing Service Center, had been detected in the sediment of a mudflat area of the Flushing Creek along the former service center property's bulkhead. In April 2008, the DEC and Con Edison entered into an ACO, under which Con Edison is required to investigate the extent of the off-site contamination caused by those former operations and, if deemed necessary by the DEC, remediate that contamination. Con Edison performed an initial and supplemental sediment investigation. The results of those investigations indicate that PCBs and other contaminants are present in sediment in the vicinity of the former service center site, as well as in sediments further upstream and downstream from the site. Based on forensic analysis of PCBs and other results, the Company concluded and the DEC agreed that some of the sediment contamination was not caused by contamination that originated at the former service center. On October 21, 2011, Con Edison submitted a Feasibility Study Report ("FS") that evaluated various remedial options and recommended a preferred option that would involve

limited dredging to address PCB impacted sediment in the vicinity of the former service center. Based on comments on the FS received from the DEC, Con Edison submitted a revised FS to the DEC in June 2012. The Company anticipates that it will complete the remedial design and perform the remediation during the Rate Year.

9. Borne Chemical - This site is a former petrochemical packaging/waste oil recycling facility that is located along the Arthur Kill waterway in Elizabeth, NJ. The site was abandoned in 1985 when its owner/operator went bankrupt. Con Edison is one of 30 PRPs that has agreed to investigate and implement New Jersey Department of Environmental Protection ("NJDEP") approved investigation and remediation programs for the site. The PRP Group has investigated the site and completed a $10 million NJDEP-approved program to clean out the site's oil and chemical storage tanks and piping systems. The PRP Group is now implementing a NJDEP-approved remediation plan to collect the free-phase oil present beneath portions of the site and excavate

and cap contaminated soils.

10. Gowanus Canal – On March 2, 2010, the EPA added the Gowanus Canal in Brooklyn (the "Canal") to its National Priorities List ("NPL") of Superfund sites. Before the site was listed, in August 2009, Con Edison received an EPA Notice of Potential Liability and Request for Information regarding its and its predecessors' operations at three facilities that are located adjacent to or near the 1.8 mile Canal: the Third Avenue Yard, the Gowanus Substation and the Gowanus Gas Turbines Site (which was sold in 1999). In November 2009, CECONY submitted a comprehensive response to EPA's Information Request with respect to the three named facilities. In addition to Con Edison, as of January 2013, EPA has sent notices of potential liability and requests for information to 36 other parties and has sent requests for information to 73 additional other parties. The Company understands that EPA's review is ongoing and that EPA will send additional notices of potential liability and requests for information to other parties as information develops. Since

receiving EPA's notice of potential liability, Con Edison has notified its insurers and has put the buyer of the gas turbines on notice that it intends to seek indemnification for covered environmental claims under the terms of the Company's agreement of sale.

EPA has completed its remedial investigation and risk assessment of the Gowanus Canal Superfund Site, which confirmed that the sediment in the Canal is contaminated with a variety of pollutants, including coal tar, heavy metals, pesticides, PAHs, PCBs, and volatile organic contaminants. PAHs were the most prevalent contaminant found in the Canal at the highest concentrations. The EPA issued a draft Feasibility Study Report ("FS") that evaluated various remedial alternatives in December 2011 and a FS addendum in December 2012. On December 27, 2012, the EPA issued for public comment a Proposed Remedial Action Plan ("PRAP"). After the EPA evaluates public comments, it will issue a Record of Decision ("ROD") that will address such comments and will document the agency's final decision on the

scope and type of remediation required. According to the PRAP, EPA estimates that it would take approximately three years to design the proposed remedy and five years to implement it.

Con Edison projects that it will incur costs during the Linking Period and the Rate Year for outside consultant and legal support in an effort to minimize the Company's potential liability. Such support may include evaluation of EPA's FS and PRAP, evaluation of flow and contaminant concentrations, preliminary cost allocation development and participation in a PRP Group. At this time, there is insufficient information to determine estimated response and remediation costs, Con Edison's potential share of such costs, and when any such costs would be incurred.

11. World Trade Center - As a result of the terrorist attack on the World Trade Center on September 11, 2001, oil and PCBs were released from a Con Edison substation located at 7 World Trade Center. The Company has been sued with respect to such releases and has incurred litigation defense costs. The

Company presently assumes that the litigation will be completed during the Linking Period and that no costs will be incurred during the Rate Year. If the litigation is not completed during the linking period, however, costs would be incurred during the Rate Year and overall costs for this site would increase.

12. Echo Avenue Site – This former substation site is located in New Rochelle adjacent to Echo Bay. Pursuant to its ACO with Con Edison, the DEC required the remediation of soils and Echo Bay sediments that were contaminated primarily with PCBs. All required remediation has been completed to the residential use cleanup criteria imposed by the DEC at the time the remediation was approved. However, the completed soil remediation for the eastern section of the site does not meet DEC's current requirements for unrestricted or residential use. Based on the Company's 2007 report summarizing the levels of remaining contamination at the site, the DEC has informally determined that additional site remediation is not required, provided that Con

Edison implements institutional controls (deed restriction and site management plan). Con Edison met with the DEC in April 2009 to discuss the scope of the institutional controls that the DEC will require. A proposed deed restriction and site management plan have been drafted. However, they cannot be finalized and submitted to the DEC for approval until the Company purchases from New York State an approximately one-quarter acre of formerly submerged lands that comprise a portion of the eastern section of the site and that is owned by the State. Because the State will not agree to the imposition of institutional controls on its land, Con Edison has entered into negotiations with the State to purchase the land in question in lieu of conducting additional remediation to clean up the State-owned land to "unrestricted" use levels. It is assumed that the land purchase would occur during the Linking Period and that the site management plan and deed restriction would be finalized during the Rate Year.

13. Global Landfill – This site is located in Old Bridge

Township, NJ. Con Edison is a member of a PRP group that is addressing this site under a Consent Decree with the NJDEP. Remediation requirements include capping of the landfill, which is targeted for completion in 2012. Operations, monitoring and maintenance ("OM&M") of the cap will be performed during the Rate Year and subsequent years. However, Con Edison believes that the PRP group already has sufficient funds to cover the cost of its OM&M activities during the Linking Period and Rate Year and that additional funds from Con Edison will not be needed during these periods.

14. Newtown Creek - In May 2012, Con Edison received a request for information from the EPA under the federal Superfund statute requesting information concerning Company facilities and activities within 1000 feet of Newtown Creek and its tributaries that may have resulted in spills or releases of hazardous substances into the Creek. Newtown Creek is a 3.8 mile long water body on the border between Queens and Brooklyn, and was designated a Superfund site in September 2010 to address extensive pollution

stemming from a long history of adjacent industrial operations (many involving petrochemical businesses). The information request identifies two Con Edison facilities: the "11th Street Conduit Facility" (a utility tunnel that traverses the Creek), and the Brooklyn head house of the tunnel. The Company submitted its response to EPA's information request on October 5, 2012. At this point, the Company has not been named a PRP, and the extent of Con Edison's liability, if any, cannot be determined. It is assumed that during the Linking Period the Company will incur some outside consultant and legal costs in preparing responses to EPA information requests. It is also assumed that costs will not be incurred during the Rate Year to evaluate the Company's potential liability.

APPENDIX B SITES

Q. Please explain the requirements that the 1994 DEC Consent Order, as amended by the 2006 Consolidated Consent Order, imposes upon Con Edison for "Appendix B" sites.

A. Appendix B addresses spills and leaks of "petroleum products" from the Company's fuel oil storage tanks, No. 6 fuel oil pipeline system, high-pressure pipe-type electric feeders, and other types of oil-filled equipment. For sites at which such spills and leaks occurred, it requires Con Edison to complete an investigation and remediation process, the procedures and specifics of which are set out in this appendix of the Consent Order. For each of those sites, the first step in the process is for Con Edison to identify the specific response measures that it implemented at the site when it first became aware of the release. If the DEC is satisfied that those completed measures are sufficient to support a determination on its part that no further action is required under the New York Environmental Conservation Law and Navigation Law, the DEC will close out the spill. For sites for which the DEC is unwilling to make such a finding, Con Edison must either conduct additional cleanup work, additional investigation work, or both. The 2006 Consolidated Consent Order streamlined the administrative aspects of the Appendix B program to

conform to the DEC's current guidance and eliminated reference to sites that had already been closed out. It did not reduce the number of sites that remained to be addressed and did not materially affect priorities and projected costs.

Q. How many sites are covered by Appendix B of the 1994 Consent Order?

A. Appendix B of the November 1994 Consent Order covered a total of 84 historical oil spill sites. At DEC's request, two of the 84 historical spills sites (Sites 4 and 7) were split into two sites each, bringing the total number of sites to 86. At many of the sites, more than one spill occurred. Some of the sites are Con Edison facilities, although most sites are street locations where there were leaks from the Company's fuel oil pipelines or dielectric fluid-filled equipment or feeders.

Q. What is the current status of the sites covered by Appendix B of the 1994 Consent Order?

A. Thus far, 36 sites have been determined by the DEC to require no further action and six have been transferred with divested properties, with the new

owners of the affected properties assuming responsibility for the required investigation/cleanup work. The remaining 44 open sites are being addressed in accordance with a DEC-approved Appendix B site prioritization schedule, as reflected in the 2006 Consolidated Consent Order. Investigation and remediation of the Astoria Site, which is one of the remaining open 44 Appendix B sites, is being performed under the Astoria RCRA corrective action requirements of the DEC hazardous waste management facility operating permit for Con Edison's PCB Waste Storage Facility at the Astoria Site.

Q. Please identify the 44 Appendix B sites that Con Edison must still address under the 2006 Consolidated Consent Order.

A. The 44 open Appendix B sites are listed in Exhibit __ (RSP-4), entitled, "CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. 2013 GAS RATE CASE: LISTING OF OPEN APPENDIX B SITES," which also specifies the location, DEC-approved priority, and status of each site as of June 30, 2012.

Q. Was that exhibit prepared under your direction or supervision?

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT __ (RSP-4)

Q. Please discuss the Company's anticipated investigation and remediation activities during the Rate Year for its Appendix B sites.

A. As indicated in Exhibit __ (RSP-4), as of June 30, 2012, investigation work plans have been submitted for all except three (Sites 22, 76 and 78) of the 44 remaining open sites. For these three sites, investigation work plans will be submitted to the DEC in 2012. For Site 7a, although the DEC has approved the investigation work plan, we will not perform that investigation until we can perform it in conjunction with fuel oil pipeline closure work. The combined work will result in lower overall costs for the Company. The other remaining open sites are either actively undergoing investigation and/or remediation or will have investigation or remediation work started as soon as the DEC approves the Company's proposed work plans for those activities. The Company

presently projects that many of these investigations will be partially or completely performed during the Rate Year. The most significant remediation projects during the Rate Year are expected to be for Site 10 (Astoria – which is discussed in the next section of my testimony) and Site 14 (Hudson Avenue Station). However, the timing of these and other Appendix B projects depends on the findings of the on-going and planned investigations, and the status of DEC review and approval of work plans and reports.

Q. What are the expected Rate Year costs for the Appendix B sites?

A. The expected costs for the Rate Year are approximately $3.4 million.

Q. Do you expect the Company to continue to conduct similar Appendix B Site investigation and remediation activities over the next five years?

A. Yes. Most open Appendix B sites are in the investigation phase or are expected to be in the investigation phase during the Linking Period and Rate Year. If the results of the investigations identify levels of contamination that require remediation, then

costs in future years may increase depending on the scope and schedule for such remediation.

ASTORIA PCB/HAZARDOUS WASTE STORAGE FACILITY

Q. Please describe the nature of the investigation and remediation program for the Astoria site.

A. On May 1, 1994, the DEC issued Con Edison a hazardous waste management facility operating permit for its PCB/Hazardous Waste Storage Facility at the Astoria site. DEC subsequently issued renewal permits on March 2, 2001 and July 7, 2008. One of the conditions of this permit is to investigate and, if necessary, remediate, several Solid Waste Management Units ("SWMUs") and Areas of Concern ("AOCs") at the Astoria Site, including those with potential MGP residuals. This investigation also encompasses Appendix B spills at the Astoria Site, which is one of the remaining open sites identified in the December 2006 Consolidated Consent Order between Con Edison and the DEC and is one of the sites listed in Exhibit ___

(RSP-4). The Company has investigated spills and several SWMUs and AOCs at the Astoria Site (*e.g.*, former MGP operating areas, North Storage Yard, Pipe Yard, Southwest Storm Sewer, Central Waste Treatment Facility, East Yard, Eastern Parcel, Former Pond Area, and the Athletic Fields) and has performed interim corrective measures ("ICMs") to: (1) recover oil from groundwater; (2) line a brick sewer that had provided a pathway for oil to enter the East River; (3) remove contaminated soil or place clean soil cover in various areas of the Athletic Fields; (4) remove coal-tar contaminated soil from certain areas of the Pipe Yard, (5) remove wastewater and sludge from two former manufactured gas holder tanks that were converted into neutralization, chemical precipitation, and sedimentation facilities for the treatment of boiler chemical cleaning and other wastewater that contained suspended solids and heavy metals; and (6) install, operate and maintain a storm sewer treatment system discussed further in response to the next question.

Q. Please discuss the Company's anticipated investigation and remediation activities during the Rate Year at its Astoria Corrective Action Site.

A. During the Rate Year, the Company expects to do the following work at the Astoria Site:

- Perform remedial planning, engineering design, and implement selected remedial actions (*e.g.*, shallow excavations to be performed as ICMs) in various areas of the site;
- Complete a significant ICM in the East Yard to address PCB contaminated soil;
- Continue to implement oil recovery ICMs at various SWMUs and AOCs; and
- Continue to operate and maintain a DEC-approved storm sewer treatment system that was designed and installed to meet effluent limits set in an April 22, 2010 Consent Order with the DEC for a storm sewer discharge known as "Outfall B." The DEC-approved treatment system is designed to treat groundwater that infiltrates into Outfall B, as well as some PCB-containing stormwater runoff that flows from various areas into Outfall B. The Consent Order imposes

action levels for PCBs and suspended solids in Outfall B stormwater discharges and requires twice monthly sampling for those parameters. If the stormwater discharge concentration exceeds an action level, the DEC may require Con Edison to evaluate and potentially implement additional measures to reduce discharge concentrations below the action levels.

Q. What are the expected Rate Year SIR costs for the Astoria Site?

A. The expected SIR costs for the Rate Year are approximately $8.0 million.

Q. Do you expect the Company to continue to conduct similar remediation activities at the Astoria site over the next five years?

A. Yes.

Q. Does the Company expect to incur other significant costs for the Astoria Site under the April 22, 2010 Consent Order?

A. Yes. The Consent Order also requires Con Edison to complete improvements to the Outfall B storm sewer system and to another storm sewer system known as Outfall G in accordance with work plans that were

submitted to and approved by the DEC. In order to implement these improvements, the Company must remove some existing components of these systems.

Q. Are the DEC-required improvements to and associated removals of the Outfall B and Outfall G storm sewer systems considered to be SIR costs?

A. No. These costs are capital costs and retirement costs, not SIR costs.

Q. What are the estimated capital and retirement costs for these projects?

A. Appropriated capital and retirement costs for the Outfall B system are approximately $14 million and $6.9 million, respectively, and the appropriated capital and retirement costs for the Outfall G system are approximately $11.5 million and $1.8 million, respectively.

UST SITES

Q. Please summarize the regulatory requirements applicable to the Company’s UST Program.

A. Con Edison's underground storage tanks are regulated under both EPA and DEC regulations. EPA's regulations at 40 CFR 280 ("Technical Standards and Corrective Action Requirements For Owners and Operators of Underground Storage Tanks (UST)") require UST owners and operators to investigate known or suspected releases from their UST systems and, if necessary, to remediate the contamination caused by those releases under the direction of the implementing state agency (the DEC in New York). New York State regulations require UST owners and operators to report known or suspected releases from their UST systems and to address such releases to the DEC's satisfaction. Both EPA and the DEC have issued guidance documents describing these requirements. Although the Company is not under a formal agreement (*e.g.*, an ACO or VCA with the DEC) to investigate/remediate these sites, it is obligated to do so under these federal and New York State regulatory requirements.

Q. How many UST sites have been investigated and/or remediated?

A. Since the Company's UST program began in the late 1990s, the Company has investigated and/or remediated a total of 42 UST sites.

Q. Of these 42 sites, how many have been completed?

A. 32.

Q. How many UST sites are currently being addressed under the Company's UST Program?

A. The Company currently has 10 UST sites that are being investigated and/or remediated under the UST Program. Currently, it is projected that work at most of these sites will only involve groundwater monitoring and reporting.

Q. Please identify the 10 active UST sites and briefly describe the current status of and projected activities at each site.

A. These sites are identified below, with a brief description of their current status.

- 3rd Avenue Yard, Brooklyn – Gasoline and fuel oil contamination is present at this site. Petroleum product recovery and groundwater monitoring are on-going. Remediation of gasoline contaminated soil is projected to begin in a former UST area during the

Linking Period. It is projected that this remediation will be completed and that the fuel oil contaminated soil in another area of the site will be remediated during the Rate Year.

- Former AMOCO Fuel Oil Terminal, Queens – Soil and sediment remediation have been completed. During the Linking Period, a remediation report will be prepared and submitted to the DEC for approval. Groundwater monitoring and reporting are planned during the Linking Period and the Rate Year.
- Atlantic Ave. Service Center, Brooklyn – Initial and supplemental investigations have been completed, and reports have been submitted to the DEC. Although gasoline contamination that may eventually require remediation has been found, the DEC has agreed to postpone that decision until after National Grid performs an investigation of a former manufactured gas holder that was owned and operated by a National Grid predecessor on the site. Groundwater monitoring and reporting are on-going.
- Bruckner Blvd. Service Center, Bronx – Soil remediation was completed and a remediation report was

submitted to and approved by the DEC. Groundwater monitoring and reporting are on-going.

- College Point Service Center, Queens – Based on the results of a site investigation, the DEC has determined that remediation is not required. Groundwater monitoring and reporting are on-going.
- Newtown Substation, Queens – Post-remediation groundwater monitoring of on-site and off-site wells and reporting are on-going. The DEC is reviewing off-site groundwater data to determine if additional action beyond groundwater monitoring is required. The cost projections presented in my testimony and exhibits assume that such additional action will not be required.
- Rye Service Center, Westchester – Initial and supplemental investigations have been completed and reports submitted to the DEC. Although gasoline contamination that may require remediation is present, the DEC has deferred that decision until Con Edison completes its investigation of its former Rye Gas Works, which is an MGP that was also located at this site. Our cost projections assume that groundwater

monitoring and reporting will be required during the Rate Year.

- Van Nest Complex, Bronx – Con Edison implemented in-situ chemical oxidation ("ISCO") batch treatment and is conducting follow-up monitoring to determine the treatment's effectiveness. An additional ISCO treatment is projected to be implemented during the Linking Period. Groundwater monitoring and reporting are on-going.
- Victory Blvd. Service Center, Staten Island – Remediation has been completed. Groundwater monitoring and reporting are planned during the Linking Period, and well closure is planned during the Rate Year to close out this site.
- W. 28th St. Service Center, Manhattan – Con Edison previously proposed and the DEC approved a RAWP calling for the construction and operation of an air sparging/soil vapor extraction ("AS/SVE") in-situ treatment system. However, based on improvements in groundwater quality, Con Edison has requested DEC approval of continued groundwater monitoring and reporting in lieu of implementing the RAWP. Con

Edison's cost projections for this site assume that the RAWP will not be implemented.

Q. How much does the Company project it will spend on UST Sites during the Rate Year?

A. The Company anticipates that it will spend approximately $0.7 million during the Rate Year.

Q. Do you expect the Company to continue to conduct similar UST Site investigation and remediation activities over the next five years?

A. Yes; I expect the overall level of UST Program activity to be less than $1 million annually after the Rate Year.

OTHER SITES

Q. Are there sites in the Company's SIR program that are not included in the programs described above?

A. Yes.

Q. Please identify those sites.

A. These other sites include the Kent Avenue Site, the Richmond Terrace Site, the Wadsworth/Garfield Spill Site, several Dielectric Fluid Spill Sites that are

not included in the Appendix B program, and the 74th Street Station kerosene spill site.

Q. Please describe the Kent Avenue Site.

A. This is a former power plant site that was purchased from the New York City Transit Authority. Power plant facilities at this site were demolished in the 1950s and during 2007-2009. Site investigation activities were performed before and after the most recent demolition project. In July 2010, this site was added to Con Edison's MGP Agreement with the DEC. Although the Kent Avenue Site is not a MGP site, it is located adjacent to a former MGP site that is being addressed by National Grid. The DEC decided to add the Kent Avenue Site to Con Edison's MGP Agreement to provide a mutually acceptable mechanism for DEC oversight of the SIR program for this site. In January 2012, the Company completed remediation of the former ash pit, which contained PCB-contaminated sediment. The remediation involved sediment removal, dewatering and disposal, and filling the pit with concrete. In February 2012, the DEC accepted the site investigation reports for the remainder of the property and

concurred with the Company's recommendation to perform soil removal to address soil contamination (primarily heavy metals) outside the footprint of the power plant building that was demolished in 2009. As a condition of its approval, the DEC required the Company to submit a work plan to perform a supplemental subsurface investigation between the demolished buildings and Wallabout Channel and an Interim Remedial Measure ("IRM") work plan for the soil removal. The Company has submitted and the DEC has approved a supplemental investigation work plan. This work plan was implemented, and an investigation report has been submitted to the DEC. In June 2012, the Company submitted an IRM Work Plan to the DEC, which was approved by the DEC on October 4, 2012. The Company anticipates that it will start IRM implementation during the Linking Period and complete it during the Rate Year.

Q. Please describe the Richmond Terrace Site.

A. This approximately two acre site, located in Staten Island, contains remnants of a demolished coal-fired power plant that was known as the "Livingston

Generating Station". It was also formerly the site of a transformer repair facility. Investigations performed at the site indicate the presence of asbestos and heavy metals that may require remediation. A groundwater investigation is planned to be conducted during the Linking Period. After all investigations have been completed, the extent of any remediation will be determined. At this time, the only costs projected for this site during the Rate Year are for groundwater monitoring and reporting.

Q. Please describe the Wadsworth/Garfield Spill Site.

A. This Site comprises the section of Garfield Avenue located just outside the Company's Wadsworth Substation. The groundwater in this area is very shallow, just a few feet beneath the roadway surface. During a sanitary sewer replacement project on Garfield Avenue in September 2011, the New York City Department of Environmental Protection ("NYCDEP") discovered oil in the trench they had excavated. The oil was sampled and determined to contain high levels of PCBs, which may have originated from spills from the adjacent Wadsworth Substation. This finding was

reported to the DEC, which opened a petroleum spill case. In order for the NYCDEP to complete the sewer replacement, Con Edison remediated the soil and pumped out contaminated groundwater in the immediate vicinity of the pipe. In 2012, the Company implemented a DEC-approved investigation work plan and submitted an investigation report to the DEC, which has determined that no further action is required and has closed out the spill. Close out costs are projected for this site during the Linking Period, with no costs projected for the Rate Year.

Q. Please describe the Dielectric Fluid Spill Sites.

A. Dielectric fluid is pumped through the Company's pipe-type transmission feeder cables for cooling. Most of these fluids consist of synthetic oils containing alkylbenzene and alkylbenzene/polybutene mixtures, although some contain some amount of mineral oil. As discussed previously, historical Con Edison dielectric fluid spills are being addressed under the Appendix B program. However, some more recent spills that have been cleaned up by excavating to the extent feasible but require long-term groundwater monitoring and/or

fluid recovery are being addressed under the SIR program. During the Rate Year, the Company will address residual contamination from these spills.

Q. Please describe the 74th Street Station Kerosene Spill Site.

A. The Company's 74th Street Station is located in Manhattan. After kerosene contamination was discovered in the basement, the extent of the contamination was determined by a series of investigations between 2006 and 2009. In February 2010, the Company submitted a report to the DEC requesting closure of the spill because the Company believed that the contamination was contained within the facility's basement floor and had not impacted soil or groundwater. In March 2012, the DEC rejected the Company's request. In May 2012, the Company met with the DEC, which subsequently required the Company to perform a supplemental investigation involving installation of an additional monitoring well and groundwater sampling. The Company completed this supplemental investigation and submitted a report to the DEC. Based on the previous and new groundwater

sampling results, the Company's report requested that the DEC close out the spill. On October 4, 2012, the DEC approved the Company's request to close out the spill without requiring remediation and has required the Company to close out the monitoring wells. As a result, the Company projects that no costs will be incurred during the Rate Year. However, costs have been incurred during the Linking Period to perform the DEC-mandated supplemental groundwater investigation and prepare a report concerning that investigation, and additional costs will be incurred to close out the monitoring wells.

Q. What is the total projected Rate Year cost estimate for these other SIR sites?

A. Approximately $1.2 million.

PROJECTED EXPENDITURES

Q. Before addressing projected expenditures for the Linking Period and Rate Year, please provide SIR expenditures for prior periods.

A. Expenditures for the Company's SIR Program have varied significantly over the past several years. In calendar year 2001, the combined expenditures for the various programs under the Company's SIR Program totaled $3.3 million. The total increased to approximately $19.8 million in 2002, $21.9 million in 2003, and $42.8 million in 2004, essentially remained steady (at approximately $40.0 million) during 2005, increased to approximately $44.6 million in 2006 and $42.3 million in 2007, increased substantially to approximately $99.4 million in 2008 and $74.4 million in 2009, and decreased to approximately $36.2 million in 2010 and $35.1 million in 2011. Total SIR costs for the period January – June 2012 were approximately $14.8 million. All of these actual costs (for 2001-June 2012) are rounded to the nearest $100,000.

Q. How much does the Company expect to spend during the Linking Period and the Rate Year for its SIR Program?

A. For the Linking Period, the period from July 1, 2012 through December 31, 2013, the total expenditure for these programs is projected to be approximately $68.5 million. For the Rate Year, the period from January

1, 2014 through December 31, 2014, an expenditure of approximately $28.3 million is projected for the Company's SIR Program. All projected costs (for the Linking Period and Rate Year) are rounded to the nearest $100,000.

Q. Has the Company estimated projected SIR costs for any time periods after the Rate Year?

A. Yes. Projected SIR costs are estimated to be approximately $43.2 million for each of the periods from January 1, 2015 through December 31, 2015 and from January 1, 2016 through December 31, 2016.

Q. Has an exhibit entitled "CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. 2013 GAS RATE CASE: SITE INVESTIGATION AND REMEDIATION EXPENDITURES ($ X 1000) FOR THE RATE YEAR AND SUBSEQUENT TWELVE MONTH PERIODS BEGINNING JANUARY 1 OF 2015 THROUGH DECEMBER 31 OF 2016" been prepared under your direction or supervision?

A. Yes, it has been.

MARK FOR IDENTIFICATION AS EXHIBIT __ (RSP-5)

Q. Has an exhibit entitled "CONSOLIDATED EDISON OF NEW YORK, INC. 2013 GAS RATE CASE COST PROJECTIONS FOR

LINKING PERIOD (7/1/2012 – 12/31/2013) AND RATE YEAR (BASED ON 6/30/2012 COST PROJECTIONS)($000's)" been prepared under your direction or supervision?

A. Yes, it has been.

MARK FOR IDENTIFICATION AS EXHIBIT __ (RSP-6)

Q. What information is presented in Exhibit __ (RSP-6)?

A. This exhibit provides quarterly cost projections for the Linking Period and Rate Year for each Con Edison remediation program and site and a brief description of the projected activities for each site with projected expenditures during each of these time periods.

Q. Has an exhibit providing more detailed information on the basis of the Company's forecasted SIR Program expenditures been prepared under your direction or supervision for sites listed in Exhibit ___ (RSP-6) with projected expenditures of at least $1 million during the linking period and/or the Rate Year?

A. Yes, that exhibit is entitled "CONSOLIDATED EDISON COMPANY OF NEW YORK, INC., 2013 GAS RATE CASE SIR COST PROJECTION ADDITIONAL INFORMATION."

MARK FOR IDENTIFICATION AS EXHIBIT ___ (RSP-7)

Q. Please explain the increase in projected expenditures during the Linking Period as compared to 2010-2011 spending levels.

A. The primary reasons for the higher cost projection for the Linking Period are planned remediation and MGP investigation at the Astoria Site and the corrective action to be conducted at the Pelham Gas Works MGP Site. Projected Linking Period costs are approximately $17.4 million for the Astoria Site and $21.5 million for the Pelham Gas Works MGP Site. Projected Linking Period (and Rate Year) costs for these and all other sites are provided in Exhibit ___ (RSP-6). More detailed information concerning these and other sites for which costs are projected to be at least $1 million during the linking period and/or Rate Year is provided in Exhibit ___ (RSP-7).

Q. How did you determine the projected expenditures in Exhibit __ (RSP-5) and Exhibit __ (RSP-6)?

A. The projections are based on forecasted spending levels for investigation or remediation-related activities that are expected to be required as part of

these programs during the Linking Period and Rate Year. They are based on best estimates by the Company's project managers in conjunction with the Company's environmental and engineering consultants. These cost projections are updated on a quarterly basis to reflect newly acquired information and changes in the status of the sites. As previously discussed, projected schedules are reviewed and evaluated at least annually and more frequently for active projects.

The cost projections specified in Exhibit __ (RSP-5) and Exhibit __ (RSP-6) reflect a credit of $5.7 million for anticipated insurance reimbursement for the Arthur Kill Superfund Site. The Accounting Panel's testimony explains the allocation of these expenditures to the Company's electric, gas and steam departments and the amounts included in the Company's revenue requirements.

Q. What factors could cause revisions in projected schedules and costs?

A. The projected schedules and estimated costs presented in my testimony are subject to change based upon

design and construction-related contingencies, which may include regulatory review, approval schedules, permitting processes, access and cooperation issues with property owners, results of site investigations, unanticipated field conditions and/or force majeure events. Delays in a project may result in acceleration or substitution of other projects.

Q. Are there any existing or anticipated insurance proceeds available to off-set SIR expenses?

A. Yes. As indicated in my testimony concerning the Arthur Kill Superfund Site, we expect to receive an insurance reimbursement of approximately $5.7 million from AEGIS during the Linking Period. This anticipated insurance recovery has been credited against the projected SIR costs to determine the projected costs for the Linking Period specified in my testimony.

Q. Do you expect to receive any other insurance proceeds that could off-set SIR expenses?

A. No. No other insurance proceeds are currently anticipated.

Q. Are there any existing or anticipated third party contributions available to off-set SIR expenses?

A. No. None are currently anticipated.
Q. Is there any SIR-related litigation that could affect SIR expenses?
A. None is currently anticipated during the Linking Period or Rate Year. The only open litigation concerning our SIR projects involves a dispute with the current owner of the Maspeth Superfund Site. In that case, the owner instituted a lawsuit against the Company, which is currently in the discovery phase.
Q. Could actual expenditures differ from these estimates?
A. Yes, for the reasons specified in the Summary of Testimony section above.

SIR COST SAVING EFFORTS AND PRACTICES

Q. What is the purpose of this section of your testimony?
A. This section describes the Company's efforts and practices to operate a cost-effective SIR program.
Q. What steps has Con Edison taken to control its site investigation and remediation costs and liabilities?

A. Con Edison has taken several actions to control its SIR costs and liabilities. They include:

- Development of Remedies - When permissible under applicable laws and regulations, Con Edison pursues remediation objectives with regulatory agencies based on the present and contemplated future use of sites, so that the remedies selected by the agencies are not more stringent than necessary for such uses. For example, if the present and contemplated future use of a site is for industrial or commercial purposes, the Company attempts to negotiate remediation requirements that are consistent with such uses, rather than the more stringent remediation requirements that would apply at sites with residential uses. When desirable and permissible under applicable laws and regulations, Con Edison attempts to negotiate with regulatory agencies and third party property owners remediation work plans that rely in whole, or in part, on post-remediation engineering and/or institutional controls in order to avoid more costly remediation to "unrestricted use" standards. In addition, when

investigation results show that remediation may not be necessary to protect human health and/or the environment, the Company advocates its position to the regulatory agencies to ensure that remediation requirements are not imposed unnecessarily. Below are some examples of the DEC and EPA agreeing with the Company's positions that resulted in cost savings or cost avoidance:

- East 115th Street MGP Site – DEC concurred with Con Edison's position that remediation of MGP-impacted sediments under the Harlem River is unnecessary because the contamination is at least 14 feet below the bottom of the river. DEC also concurred with the Company that elevated concentrations of certain semi-volatile organic compounds found in surface soil at the site were representative of urban background conditions, and therefore, removal of surface soil was not included as part of the DEC-approved remedy for this site.
- Pelham MGP Site – In 2006, DEC approved the Company's request to modify the already approved

remedy for the site by reducing the required depth of soil excavation in the rear parking lot from 20 feet to 10 feet based on groundwater elevation and cost-effectiveness considerations. At that time, the estimated savings to the Company as a result of this change was about $17 million. During remediation of the front parking lot, which required excavation in a designated area to a depth of between 14 to 20 feet based on the approved remedy, DEC approved the Company's request not to excavate to the maximum depth in certain areas because doing so would have required additional bracing. DEC's flexibility resulted in savings in both time and costs.

- White Plains MGP Site - The DEC-approved remedy for Operable Unit 1 ("OU-1") limited excavation of MGP-impacted soil to the top of the water table even though MGP contamination was found well below. The DEC agreed with the Company's position that deeper excavation of OU-1 would not have been effective because of upgradient contamination originating from OU-2 and that the

subsequent remediation of OU-2 would remove the source of that contamination. The shallower OU-1 excavation was supplemented with a containment barrier wall and recovery wells. In another example, the owner of an adjacent property to the site had insisted that the Company install a sub-slab depressurization system in its building to address potential soil vapor intrusion caused by the migration of MGP contamination from the site. The Company demonstrated to DEC through soil vapor and indoor air testing that there was no evidence of soil vapor intrusion. As a result, the approved remedy for this off-site property includes only monitored natural attenuation at this adjacent property.

- West 58th Street Holder Station Site – The investigation at this site found elevated concentrations of semi-volatile organic compounds but they appeared to be caused by fill materials brought on-site and from fuel oil tanks installed after Con Edison had sold the property. The DEC agreed with the Company's interpretation and

issued a No Further Action determination. Because of Con Edison's thorough investigation and reporting, the Company avoided an estimated $6 million in potential remediation costs.

- o East 99th Street MGP Site – MGP residuals were found at significant depth at one corner of an off-site property that was being redeveloped. Due to their depth, the MGP residuals had no impacts on the construction activities related to redevelopment. Con Edison's investigation also found dry cleaning solvent contamination at this property. The developer claimed $2 million in remediation costs and that this was due to the MGP contamination. The DEC concurred with Con Edison's conclusion that the solvent contamination was the reason for any remedial measures. The Company avoided the $2 million in remediation costs as a result of this decision.
- o Astoria North Storage Yard – The soil in this yard contains various contaminants, including PCBs, PAHs, and metals. However, the primary driver of the remediation is PCBs, for which the

DEC initially proposed a soil cleanup objective ("SCO") of 25 parts per million ("ppm") but agreed to consider a less stringent SCO if EPA allowed it. Con Edison submitted to and received approval from the EPA of a human health risk assessment that addressed PCBs and other contaminants of concern. Subsequently, the Company submitted to the EPA an application for a PCB Disposal Approval under the Toxic Substances Control Act that requested a less stringent PCB SCO than 25 ppm. Based on its review of our application and discussions with the DEC, EPA issued a PCB Disposal Approval that allows a PCB SCO of 100 ppm once soil has been excavated to the initial target depth (2 – 4 feet), which was based on a 25 ppm SCO. This means that once the target depth of 2 - 4 feet is achieved, additional excavation would be required if post-excavation PCB soil sample results exceed 100 ppm rather than 25 ppm PCBs. The DEC approved a revised RAWP that reflects the EPA's Approval. The North Storage Yard remediation project is

currently underway. Post-excavation soil sample results received for areas excavated so far indicate some results between 25 ppm and 100 ppm. As a result, negotiation of the less stringent SCO has resulted in cost savings for excavation, waste disposal, and backfill. Total cost savings resulting from the less stringent SCO cannot be determined until the project is completed.

- o Arthur Kill Site – Based on its review of the Company's remediation report for the upland soil remediation associated with a September 1998 transformer fire, the DEC required the Company to remediate two areas. Instead of immediately performing such remediation, the Company performed additional investigation to determine whether remediation is necessary and, if so, to determine the applicable scope. Based on the results of the Company's investigation showing that cleanup objectives have been met, the DEC agreed that remediation is not necessary.
- o West 28th Street SC UST Site – Based on the results of an investigation, groundwater

contamination was found. In order to address it, the Company performed a pilot study of an AS/SVE system. The pilot study was successful, and the Company submitted a RAWP to the DEC to implement it. However, based on subsequent groundwater monitoring results indicating decreasing contaminant concentrations, the Company requested and the DEC approved continued groundwater monitoring in lieu of installation of the AS/SVE system.

- 74th Street Station – As described in the section of my testimony concerning "Other Sites", the DEC initially required the Company to implement a DEC-approved RAWP to remove kerosene-contaminated concrete and a small amount of underlying soil. At the Company's request, the DEC allowed the Company to perform additional investigation to determine whether remediation is actually needed. The Company performed this investigation and submitted a report of the results to the DEC, which has closed out the spill without the need for any remediation.

- Experienced Staff - Con Edison continues to staff the Remediation Sections of its EH&S Department with experienced and dedicated project managers. They work closely with qualified consultants and contractors to develop and implement the best possible work plans and specifications, consistent with applicable government agency requirements. The Company also has a specialized Construction Department that manages remedial construction contractors. Construction staff is specially trained to perform constructability reviews of remedial design plans and specification, to manage these types of contracts and contractors, and to oversee field work to insure that the contractors comply with the terms of their contracts. In some situations, internal constructability reviews are augmented by engineering consultants (other than the ones preparing the design). Use of experienced in-house staff provides Con Edison with the capability to effectively handle unexpected conditions or issues at its SIR Program sites. It also provides Con Edison with the capability to incorporate cost-

effective, innovative technologies in its site remediation work, whenever possible. For example, in 2006, at the former Maspeth Substation Site, when post-excavation soil sampling showed significant PCB contamination at greater depths than anticipated, the remediation contractor proposed that the Company install a relatively complex sheeting and shoring system and excavate the entire area to address the localized deeper contamination. However, Con Edison's internal staff and Con Edison's consultant, working with another contractor, developed a much less expensive and intrusive plan, and obtained DEC approval for the plan. This revised plan, which was implemented in 2007, reduced the cost of remediation by approximately $4 million. Another example is the constructability review performed by Con Edison of the remedial design specification for the Pelham MGP Site, in which Con Edison determined that a slurry wall barrier could be used instead of the initially proposed secant pile wall barrier, with a resultant cost savings of approximately $4 million.

- Reuse of Excavated Materials - Whenever feasible and acceptable to the DEC and DOH, excavated soil and stone are reused as backfill at remediation sites. For example, rock crushing and soil reuse saved approximately $2 million during remediation at the East 173rd Street Gas Works Site (New York City's Starlight Park) in the Bronx and soil reuse at the Pelham Gas Works Site and Former Amoco Fuel Oil Terminal UST Site in Queens saved approximately $4.2 million and more than $200,000, respectively.
- Cost-Effective Investigations - When appropriate and acceptable to the DEC, Con Edison incorporates "step-out" procedures in its site characterization study ("SCS") and remedial investigation ("RI") work plans. These procedures allow Con Edison's project manager and DEC's project manager to expand the scope of an investigation while field work is being performed. Broadening the scope of investigation while field work is in progress helps minimize the need to prepare work plans for and conduct subsequent rounds of investigation.

- Participation in External Organizations - Con Edison actively participates in national and state industry forums and research organizations, such as the MGP Consortium, the Utility Solid Waste Act Group ("USWAG") Remediation & Response Committee, the Environmental Energy Alliance of New York ("EEANY"), and the Electric Power Research Institute ("EPRI"), so that it obtains the benefit of others' experience and knowledge and its in-house staff keeps abreast of regulatory requirements, technical developments in the remediation industry and innovative technologies. Con Edison supports activities of these organizations that have direct impact on pending and future remediation projects. In one particular case, Con Edison is supporting an in-situ sediment study that, if successful, could potentially add a remedial alternative and save significant costs. In another, the Company was the prime participant in an EPRI study to develop risk-based Total Petroleum Hydrocarbon ("TPH") SCOs for dielectric fluids typically used in pipe-type electrical transmission feeders, because the DEC did

not have any SCOs for TPH. During this study, EPRI and Con Edison worked closely with DEC to develop the work scope and discuss the study results. Con Edison submitted the EPRI Report to the DEC, which approved EPRI's recommended SCOs for these fluids. These SCOs are now used in the Appendix B Program described earlier in my testimony. In addition, some of these organizations (*e.g.*, USWAG, EEANY) comment on regulatory proposals in an attempt to obtain more reasonable, more flexible, and less costly requirements. Examples include EEANY's comments on the DEC's proposed Part 375 regulations, including soil cleanup objectives, EEANY's discussions with the DEC on the bioavailability of MGP waste constituents in sediments, EEANY's development of a statewide indoor air database at MGP sites to support a demonstration that indoor air should not be a concern at MGP sites, and USWAG's submittal of information to the EPA to support continuation of the hazardous waste exemption for MGP waste that fails the Toxicity Characteristic Leaching Procedure ("TCLP") for benzene. This

hazardous waste exemption allows MGP waste that fails the TCLP for benzene and does not exhibit any other hazardous waste characteristic to be disposed of as non-hazardous waste at thermal treatment facilities instead of being disposed of as hazardous waste at much more expensive hazardous waste incinerators. The DEC has developed guidance that essentially conforms to this exemption. Similarly, USWAG and other industry groups were instrumental in convincing the EPA to allow certain UST wastes that fail the TCLP for only benzene to be managed as non-hazardous waste. The DEC has adopted the EPA exemptions for MGP and UST remediation waste in its regulations or guidance. The EPA exemptions and DEC guidance have resulted in significant savings in MGP and UST site remediation costs. Furthermore, USWAG and other industry groups were successful in convincing the EPA to defer land disposal restriction treatment standards for PCBs for hazardous waste soil in most cases. The DEC has adopted EPA's deferral, which has allowed some hazardous waste soil with PCBs to be landfilled

instead of incinerated, resulting in significant cost savings.

- Competitive Procurement - The Company competitively bids all remediation projects, retains qualified contractors, and follows its comprehensive procedures, including remediation contractor management protocols, so that project work is performed properly and cost effectively.
- Combining Remediation with Site Redevelopment/ Construction - Whenever possible, Con Edison seeks to achieve cost savings by coordinating remediation work that requires soil excavation with the excavation work being performed by site developers as part of construction projects. By implementing required remediation work in conjunction with property owners' construction projects, Con Edison minimizes its expenditures by sharing with property owners the costs of activities common to both the remediation work and construction work, such as sheeting/shoring, excavation dewatering, excavation labor, soil transportation and disposal, and back-filling. Remediation work is also coordinated with

construction work at Company sites, where possible, to minimize overall costs. Such coordination was accomplished at the Third Avenue Yard (parking lot) and Victory Blvd. UST Sites.

- Cost Contribution from Third Parties - Con Edison pursues cost contribution from those who stand to gain from Con Edison's remediation of MGP contamination, such as owners of industrial properties that are being redeveloped for commercial or residential use. Con Edison typically requires that the developer of the property assume a share of Con Edison's cleanup costs and that if the developer receives tax credits under the New York Brownfield Cleanup Program that it share the benefit of those tax credits with Con Edison. Pursuant to these agreements, Con Edison has received from property owners in the past substantial payments that are attributable to tax credits.
- Pre-Remedial Design Investigation and Treatability Studies - When appropriate, the Company performs pre-remedial design investigations ("PDIs")to fill data gaps in order to develop the best possible

remediation work plans and specifications for regulatory agency approval and for competitive bidding. For example, a PDI performed at the Arthur Kill Superfund Site determined that the DEC's approved remediation concept included a Company-proposed sheeting and shoring system that was technically infeasible based on sediment geotechnical characteristics. This resulted in a modified design that was approved by the DEC. In addition, where appropriate, treatability or pilot studies are performed to demonstrate the applicability of proposed remedies before they are designed and implemented. For example, a pilot study of in-situ biosparging/bioventing treatment was performed at Appendix B Site 14 (Hudson Avenue Station) and a pilot study of air sparging/soil vapor extraction was performed at the W. 28th Street Service Center UST site.

- Forensic Analysis and Background Level Determinations – When appropriate, Con Edison performs forensic analysis of soil, sediment and product (e.g., oil, gasoline, coal tar) in an

attempt to differentiate contamination associated with Company operations or spills from contamination that may have been caused by others. The forensic analysis may involve fingerprinting the type of material present (*e.g.*, MGP waste, various forms of petroleum) or different formulations of PCB mixtures. When appropriate, the Company also performs sampling outside the suspected area of concern to determine site-specific background levels of contaminants for consideration by the DEC in their determination of the required the scope of remediation. This approach has been successfully used (e.g., for sediments at the Flushing Creek Site) to demonstrate impacted media (soil, sediments, etc) were not impacted by Con Edison's operations.

- Third Party Engineering Reviews – In an effort to optimize bid documents for complex projects (i.e., those projects which may be using new technology, are multi-engineering disciplined, or require special considerations due to the property use or layout), Con Edison has employed third-party

engineering consultants to review draft remediation plans and specifications. This was done for the Pelham Gas Works, Arthur Kill, and Kent Avenue ash pit remediation projects. In all of these cases, the third party consultant provided comments that were evaluated among the third party consultant, Con Edison EH&S and Construction Management staff, and the consultant that drafted the plans and specifications to finalize the plans and specifications for bid purposes.

- Insurance Cost Recovery - Con Edison puts its excess liability insurance carriers on notice of demands by the EPA and DEC that the Company pay for or implement site investigation and remediation work. It also pursues indemnification of the costs of such work with its excess liability insurance carriers. The Company has received insurance reimbursement payments totaling more than $10 million from its excess liability carriers since 1998, with an estimated additional insurance reimbursement of approximately $5.7 million anticipated for the Arthur Kill Superfund Site. When necessary and

appropriate, the Company pursues litigation against insurance carriers that deny or reserve coverage for such costs. To date, the Company's litigation efforts against its excess liability insurance carriers (and those of other potentially responsible parties for sites) for the Company's Superfund sites have resulted in settlement proceeds of approximately $6.5 million. For MGP sites, the Company's insurance litigation (which included an appeal by Con Edison to the New York Court of Appeals for the Tarrytown MGP site litigation) has resulted in settlement proceeds of more than $45.2 million.

- Claims for Indemnification- Con Edison attempts, where possible, to transfer environmental liability for future remediation costs in agreements with third-parties in connection with the sale of real property or other assets and seeks indemnities for such future liabilities.
- Identification of Other Potentially Responsible Parties ("PRPs") - Con Edison attempts to identify other PRPs and, when appropriate, attempts to

recover investigation or remediation costs from such entities. For example, Con Edison instituted CERCLA response cost contribution litigation against the successor in interest to the United Gas Improvement Company ("UGI"), the Philadelphia-based utility holding company that during the late 1800's held controlling interests in the local companies that operated most of the MGPs in Westchester County and that operated three MGPs in Yonkers during that period. The U.S. District Court for the Southern District of New York granted the UGI successor's summary judgment dismissing the action. On appeal to the United States Court of Appeals for the Second Circuit, Con Edison's action was reinstated with respect to the three Yonkers MGPs that UGI actually operated until the formation of the Westchester Lighting Company. Con Edison's appeal also resulted in new Second Circuit precedent that a CERCLA PRP could maintain a cost recovery action against another PRP under Section 107(a) of CERCLA. Con Edison later filed an amicus brief with the United States Supreme Court in the United States

government's challenge of a similar ruling by the United States Court of Appeals for the Eighth Circuit that relied largely upon the Second Circuit's ruling in the Con Edison/UGI case. The United States Supreme Court upheld both rulings in June 2007. This decision has allowed the Company to obtain a settlement with UGI (requiring UGI to pay a portion of the Company's future costs for the sites of the three Yonkers MGPs), and would enable it to seek recovery of SIR costs from other PRPs in appropriate cases. In addition, the Company attempts to identify other potential contributors of hazardous substances for EPA's use in identifying other PRPs at Superfund sites with anticipated very large remediation costs. For example, the Company worked with EPA to help identify several potential contributors of hazardous substances to the Gowanus Canal Superfund Site. It is anticipated that any such additional PRPs would reduce Con Edison's potential share of the costs.

- Participation in PRP Groups - Con Edison participates in Superfund site PRP Groups to

encourage them to negotiate with the government consent decrees and orders that equitably allocate liability among all financially viable PRPs and, when warranted, institute CERCLA cost contribution actions against recalcitrant PRPs. Examples include the cost recovery actions taken by the PRP Groups for the Metal Bank Superfund Site, Maxey Flats Superfund Site, and PCB Treatment Inc. Sites. In connection with the Metal Bank Site, the PRP steering committee instituted CERCLA response cost contribution litigation against the former and current owners and operators of the Metal Bank Site. Under the judicially-approved consent decrees between the parties, the steering committee will receive from the former and present site owners and operators significant contribution towards the costs of the required remediation work for the site. In the case of the Maxey Flats Site, the consent decrees that the steering committee entered into with the United States and the other settling PRPs required the settling federal agency PRPs to pay a significant share of the expenses that the steering

committee incurred implementing the first phase of EPA's required remedial action program. The steering committee also received funding from EPA from the proceeds of the cash-out settlements that EPA had entered into with *de-minimis* PRPs for the site. The ACO that the members of the PRP steering committee entered into with the EPA for the PCB Treatment Inc. Sites contained comparable provisions.

- TSDF Audits - To minimize the potential that it will become a PRP at newly listed Superfund sites, Con Edison has established a list of acceptable waste treatment, storage and disposal facilities ("TSDFs") and periodically reevaluates that list. Con Edison's procedures require that new TSDFs be approved by the Vice President of EH&S before they are used. Such approvals are granted only after the proposed new facilities are determined to be necessary (*e.g.*, to meet increased capacity needs for disposal of a particular waste type or to provide significant cost savings) and meet acceptance criteria (*e.g.*, robust waste acceptance procedures, solid record of

compliance with regulatory requirements, adequate spill/release prevention systems in use, low potential for groundwater/soil contamination). All proposed new TSDFs are evaluated by EH&S staff, which can reject the proposed new TSDF or make a recommendation to the Vice President of EH&S before the final decision is made.

- Due Diligence in Property Transfer - To minimize the potential that property transfers might result in significant SIR costs, properties for prospective sale and purchase are extensively evaluated to identify potential environmental risks using environmental site assessment procedures. For example, the Company was considering purchasing a site for a new substation in Manhattan. However, based on EH&S staff review of available records, it was determined that the site was a State Superfund Site because of perchloroethylene releases from a dry cleaner. As a result of this evaluation, the Company decided not to purchase the site and thereby avoided potential remediation costs.

SIR PROGRAM PROCESS AND INTERNAL CONTROLS

Q. What is the purpose of this section of your testimony concerning the Company's SIR Program process?

A. This section describes each step in the Company's SIR Program process, from the start of investigation to the implementation of remedies approved by the appropriate regulatory agencies, and explains the Company's management practices and bidding processes as part of our efforts to operate a cost-effective SIR Program.

Investigation Process

Q. Please describe the process that Con Edison follows for the investigation of its SIR Program sites.

A. I will begin by discussing the investigation process for Con Edison's MGP Sites. The process is governed by Con Edison's MGP Agreement with the DEC and the VCAs, ACOs, and Brownfield Cleanup Agreements ("BCAs") that Con Edison has entered into with the DEC for sites not covered by the MGP Agreement. Depending on the conditions encountered at a site, the process may

include multiple rounds of investigation. Each step of the process is subject to the review and approval of the DEC and DOH and must be conducted consistent with applicable DEC regulations, guidance and policies. To facilitate the development of its site investigations, Con Edison conducted detailed historical reviews of its and its predecessor companies' operations at each of its MGP Sites. The results of these reviews enabled the Company and its consultants to pinpoint the locations of the gas production/purification equipment, feedstock/residual processing and storage facilities, and other areas of potential concern at each MGP Site, so that the Company's investigation sampling efforts focused on them. In addition, Con Edison has prepared a DEC-approved Citizen Participation Plan ("CPP") for its MGP Program. This plan describes the procedures that Con Edison will follow to communicate to interested citizens and elected officials the investigation and remediation activities that the Company is required to undertake for its MGP Sites under its MGP Agreement, VCAs, ACOs, and BCAs with the DEC. Recently, the DEC has

required the Company to prepare site-specific CPPs for some of its sites instead of following its generic CPP.

The Company also performs investigation and remediation projects for other types of SIR Sites. For federal Superfund sites, the procedures, policies, regulations, and guidance documents that the Company must follow are specified in the ACOs and consent decrees that the Company has entered into with the EPA. For New York State Superfund sites and Appendix B sites, the required process and protocol are governed by Con Edison's ACOs with the DEC. For the Astoria Site, the procedures and protocols are governed by the DEC operating permit discussed earlier in my testimony and the DEC regulations implementing RCRA. For UST sites, the required procedures and protocols are specified in EPA and DEC regulations and guidance. For other SIR sites, the required procedures and protocols are specified in DEC regulations and guidance and, for the Kent Avenue Site, the VCA.

While there are some differences in the specific investigation process for each of these types of

sites, the goal of the process applicable to each such site is the same -- to ensure that the scope of the investigation characterizes and delineates the nature and extent of a site's contamination with sufficient specificity to support a determination by the DEC, DOH, and/or EPA as to whether remediation is necessary to protect human health and/or the environment from the risks posed by the contamination and, if remediation is needed, to assess and determine the scope of the required remediation activities.

The first step of the investigation process under the MGP Agreement is to conduct a DEC-approved SCS, which is a subsurface investigation to evaluate whether there is evidence of historical MGP-related contamination in the soil, soil vapor, or groundwater at a site. DEC-approved SCS work plans focus on site areas that were the former locations of MGP structures that produced or stored feedstock or residual materials capable of causing environmental contamination, such as ammonia wells, condensers, gas holders, oil and coal tar storage tanks, relief holders, and tar wells. The locations of these types

of facilities were identified as part of the detailed historical review Con Edison performed before entering into the MGP Agreement with the DEC. As required by the DEC and DOH, a draft SCS work plan must include site background information, including the known/suspected locations of former gas production and storage structures, prior investigation findings, if any, and the proposed work scope (*e.g.*, soil boring and test pit locations, soil vapor sampling, groundwater monitoring well installation, air monitoring, and laboratory analytical requirements).

Based upon the historical information that the Company has compiled for the manufactured gas production and/or storage operations formerly conducted at an MGP Site and the input and guidance provided by the Company's EH&S site project manager, Con Edison's environmental consultant prepares a draft work plan for the Company's review. The Company's EH&S site project managers actively communicate with DEC and DOH site project managers and the Company's consultants during the preparation of draft SCS work plans to ensure that the draft plans meet the DEC's

and DOH's requirements and the Company's expectations. After any revisions based on the Company's EH&S site project manager's review are made, the draft SCS work plan is submitted to the DEC for its review and approval. The DEC will solicit input from the DOH.

Once the draft work plan has been approved by DEC and DOH, the SCS field work may begin. A fact sheet is typically prepared for distribution to appropriate stakeholders prior to the start of the SCS fieldwork.

For sites no longer owned by Con Edison, the Company must obtain the property owner's consent in the form of an access agreement before the SCS fieldwork commences. The negotiation of access agreements for these sites can be a challenging and time-consuming process due to the nature of the operations currently being conducted on them, such as schools, hospitals, apartment building complexes, public parks, and commercial businesses. Access agreements for such sites typically include provisions specifically developed to ensure that the SCS field work does not unduly interfere with on-going site operations.

Upon the completion of the SCS fieldwork, a report is submitted to the DEC and DOH for their review and approval. Depending on the findings of the SCS, these agencies will determine which of the following three steps is the most appropriate for a site:

- No further action is required because there is no evidence of MGP-related impacts that warrants further investigation or remediation;
- Additional investigation is required to better characterize and delineate the nature and extent of the MGP-related impacts present on and around the site; or
- Remediation is necessary to address the MGP-related impacts that have been sufficiently characterized and delineated, and the Company must proceed with the development/evaluation of remedial alternatives.

A Remedial Investigation ("RI") refers to the second and subsequent rounds of investigation beyond the SCS. More than one round of on-site investigation and, in some cases, off-site investigation may be

necessary to define the contamination with a sufficient degree of certainty to support the assessment of potential remedial alternatives and the development of a RAWP incorporating the remedial activities that the DEC and DOH deem appropriate. The RI process is similar to that for SCSs, with community outreach and, when the work is done at a third party-owned property, access agreement negotiations. RI work plans must be approved by the DEC and DOH.

After the RI fieldwork and sample analyses are completed, a draft RI report is submitted to the DEC and DOH for their review and approval. Based on the results of the RI, these agencies will make one of the three determinations specified above in my discussion of the SCS process.

Remediation Determinations

Q. Under what circumstances do the DEC and DOH typically require the remediation of site contamination?

A. DEC and DOH require remediation when they determine that the contamination present at a site presents a current or potential future significant threat of harm to public health and/or the environment or is

necessary to meet statutory or regulatory goals and objectives. This determination is made on the basis of the results of the SCS and/or RI for a site. With regard to potential public health impacts, DOH will consider whether potential complete exposure pathways have been identified at the site during the investigation work.

Q. Do DEC and the DOH consider costs in determining whether remediation is required?

A. No. That determination is made by them solely on the basis of whether remediation is required to mitigate a current or potential future significant threat of harm to public health and/or the environment or to meet statutory/regulatory goals and objectives. If such threats are found to exist or remediation of the contamination is necessary to achieve statutory and regulatory goals/objectives, remediation must be performed.

Q. Do costs play any role in the remedy selection process?

A. Yes. While the DEC and the DOH do not consider economic impacts as one of the two threshold criteria

in determining whether and to what extent remediation is required, the DEC's regulations and guidance documents permit consideration of costs in evaluating remedial alternatives. Under those regulations and guidance documents, "cost effectiveness" is a secondary permissible criterion for such evaluations and can be considered by the DEC when it evaluates and determines whether to select one of two or more remedial alternatives that are protective of human health and the environment and that are consistent with applicable and relevant rules, regulations, policies and guidance. For example, under DEC's regulations and guidance documents, the goal of remediation is to restore sites to their pre-contamination condition to the extent that it is technically feasible to do so. If this goal cannot be met, the remedy selected must, at a minimum, adequately protect human health and the environment, and include technically feasible remediation measures for so-called "source materials", such as free coal tar, coal tar-contaminated soil, and purifier waste. If two or more competing remedial alternatives are

capable of meeting all these goals and are essentially equivalent in addressing non-cost-related criteria, DEC can select the least costly alternative. The criteria used by the DEC in evaluating remedial alternatives are described in more detail in my testimony below concerning the Remedial Planning Process.

Remedial Planning Process

Q. Please describe the remedial planning process that Con Edison must follow for SIR Program Sites for which DEC and the DOH or EPA have determined that remediation is required.

A. Under the MGP Agreement (and the ACOs, VCAs, and BCAs for MGP Sites not covered by that agreement, ACOs for New York Superfund Sites, Appendix B, and the hazardous waste management facility operating permit for the Astoria Site), once the DEC and DOH determine that remediation is required, Con Edison is required to identify and evaluate potential applicable remedial alternatives for DEC's and DOH's approval. In the case of federal Superfund Sites, Con Edison must identify

and evaluate potential applicable remedial alternatives for EPA's approval.

Q. For sites at which remediation is required, please describe the process the Company follows in its development of proposed remedial alternatives.

A. I will focus on the specific process for MGP Sites. However, the process applicable to other types of SIR Program sites is similar.

For MGP Sites, Con Edison must prepare an Alternatives Analysis Report ("AAR") for DEC and DOH consideration and approval. In that report, Con Edison must identify potential remedial alternatives, screen them to determine which alternatives appear technically feasible to implement, and then assess the feasible alternatives using the evaluation criteria discussed below.

The first step in the AAR process is to meet with DEC and DOH to discuss their views on the general parameters of what they believe would comprise an approvable remediation program for a site, given the site's use and the extent of the contamination present. For sites no longer owned by Con Edison,

meetings are also scheduled with the site owners to identify any changes in site use being considered by them. These meetings are essential to understanding the perspective of the regulatory agencies and property owners, so that Con Edison does not waste time and resources pursuing "dead ends."

Pursuant to the DEC's requirements, the AAR must identify potential remedial alternatives and evaluate them against the following criteria in order to determine which alternative is the most appropriate based on all the relevant factors. The first two factors listed below are referred to as Threshold Criteria that must be satisfied in order for an alternative to be considered further for selection. The next five are referred to as Primary Balancing Criteria and the last two are Modifying Criteria. The primary balancing and then modifying criteria are used to compare the remedial alternatives that satisfy the Threshold Criteria.

Threshold Criteria:

- overall protectiveness of public health and the environment;

- compliance with standards, criteria, and guidance;

Primary Balancing Criteria:

- long-term effectiveness and permanence;
- reduction in toxicity, mobility, or volume of contamination through treatment;
- short-term impacts and effectiveness;
- implementability;
- cost-effectiveness, including capital costs and annual site maintenance plan costs. According to DEC guidance, "this criterion is an evaluation of the overall cost effectiveness of an alternative or remedy" and "a remedy is cost effective if its costs are proportional to its overall effectiveness"; and

Modifying Criteria:

- community acceptance
- state acceptance based on current, intended and reasonably anticipated future land use (when a complete remediation to unrestricted use levels would not be achieved).

If the DEC and DOH do not find the Company's AAR to be approvable, these agencies will inform the Company of their reasons for disapproval and specify the revisions that the Company must incorporate into the draft AAR. For example, the DEC or DOH may prefer a different alternative over the one recommended by the Company. Once the DEC and DOH deem the AAR to be approvable, a notice will be published in the State's Environmental Notice Bulletin for a 30-day public comment period (45 days for sites in the Brownfield Cleanup Program). A public meeting is held at which DEC, DOH, and Con Edison present the recommended remedial alternative and receive comments from the public. Con Edison will distribute a Fact Sheet to stakeholders announcing the availability of the AAR and the public meeting.

Q. Does Con Edison make the final decision on which remedial alternative must actually be implemented?

A. No. While it may suggest remedial alternatives, Con Edison does not make the final decision on which remedial alternative must actually be implemented. That decision is made by the DEC (or EPA for federal

Superfund sites). After the close of the public comment period, DEC will formally approve the AAR. Depending on the comments received, the AAR may be revised to reflect public input. Community acceptance is one of the criteria considered by the DEC in the selection of an approved remedy.

Q. Is the selected remedial alternative sometimes implemented by third party property owners instead of the Company?

A. Yes. For properties undergoing redevelopment, the Company and the property owner/developer may enter into a cooperation agreement to coordinate remediation and site redevelopment and share costs. By cooperating and implementing required remediation work in conjunction with a property owner's construction project, Con Edison can achieve cost savings by sharing with the property owner the cost of activities common to both remediation and construction work. This includes such high cost items as, sheeting and shoring, soil excavation, dewatering, soil transportation and disposal, and back-filling. In such

cases, Con Edison would have an oversight role to see that the remedy is being properly implemented in a cost effective manner. In the case of federal Superfund sites in which the Company is a member of a PRP Group, the PRP Group may implement the selected remedy.

Q. Is agency approval of a remedial alternative the end of the remediation planning process?

A. No. The decision documents that the DEC or EPA issue when they select and approve a remedial alternative for a site generally contain only summary information about the remedial alternative. Depending on the complexity of the remedy and the site, the DEC will require Con Edison to prepare either a Remedial Action Work Plan ("RAWP") or detailed remedial design for DEC and DOH approval. A detailed remedial design is typically required for the more complex remedies/sites. As part of these designs, the DEC generally requires the development of a remedial design package containing detailed drawings, plans, and specifications to implement the selected remedial alternative. In some cases, additional studies or

investigations may be required. For example, if the DEC requires groundwater treatment to meet a specified cleanup level, Con Edison may conduct bench-scale laboratory studies needed to design the treatment system required to meet that the remedial objectives. The detailed drawings, plans, and specifications for construction of the selected remedial alternative are subject to DEC/DOH review and approval.

Remedial Construction Process

Q. Please describe Con Edison's remedial construction process.

A. The Construction Management ("CM") Department within Con Edison's Construction organization is responsible for supporting the efforts of Con Edison's EH&S Department to manage the remedial construction phase of remediation projects. Remedial design plans and specifications and engineer's cost estimates are prepared by the Company's environmental engineering consultants working jointly with the EH&S project manager and CM. Depending on the estimated cost of

remediation, one of three lists of pre-qualified remediation contractors will be used to solicit technical proposals and bids for the performance of the remedial construction work. For relatively small and straightforward projects, a technical proposal and associated technical evaluation may not be required. Additional information concerning review of technical proposals is provided later in my testimony, in the Selection/Use of Contractors section.

After the award of a Purchase Order to the selected remediation contractor, CM will manage the contractor's performance of the work with the EH&S Remediation project manager participating as a key member of the team. DEC generally has an inspector assigned to sites for which significant remedial construction work is required to ensure that the Company complies with the requirements of the approved remedy and design specifications and to participate in project team meetings. For projects entailing less significant remedial activities, the DEC inspector will visit the sites periodically. In addition, the Con Edison environmental engineering consultant that

prepared the approved design and bid specifications will be present to see that the agency-approved remedy and design and bid specifications are implemented properly, and to obtain information needed to prepare the remediation report (sometimes referred to as the final engineering report) and, in some cases, to perform air monitoring and/or post-excavation soil sampling.

As stated previously in my testimony, when remediation is to be performed at third party sites, the Company must enter into an access agreement with the property owner. In addition to providing access, the agreements contain commitments by the property owner not to violate post-remediation institutional controls required as part of the DEC-approved remedy and not to interfere with the operation of any DEC-required engineering controls.

Q. Does the completion of the remedial construction phase of the DEC-approved remedies for Con Edison's MGP Sites or other SIR Program sites mark the end of Con Edison's obligations under its MGP Agreement, VCAs, or ACOs with the DEC for those sites?

A. It does so only for sites that have been remediated to DEC "unrestricted use" standards. However, because many of the Company's MGP Sites and other SIR Program sites are located in highly-developed areas occupied by existing buildings or facilities, or present other logistical challenges, it is frequently not feasible to remediate a site to meet "unrestricted use" standards pursuant to DEC regulations and guidance. At other sites, it may not be cost-effective to meet "unrestricted use" standards due to the background levels or depths of contaminants present at the site. In such cases, Con Edison may propose, and the DEC and DOH may allow, remediation to alternative standards that protect public health and the environment for specified uses of the site. If Con Edison does not remediate a site to "unrestricted use" standards, Con Edison must comply with one or more DEC-required institutional and/or engineering controls at the site to address the remaining contamination after completing remedial construction and to minimize the potential for exposure to such contamination. Examples of typical institutional controls include restrictions

on the use and redevelopment of a remediated property that are made enforceable by the DEC through environmental easements or deed restrictions. Engineering controls include subsurface containment or cutoff walls, sub-slab soil gas ventilation systems, groundwater treatment, or product (*e.g.*, coal tar, gasoline, or fuel oil) recovery systems. These controls are required in perpetuity or until the DEC, with DOH concurrence, determines that they are no longer necessary.

In order to comply with these various controls, the Company is required to prepare a Site Management Plan ("SMP") for DEC's approval. A typical SMP includes procedures to:

- operate and maintain engineering controls and/or treatment systems;
- maintain compliance with institutional controls, where applicable;
- periodically inspect and evaluate site information to determine whether the remedy continues to be effective; and

- monitor and report the performance and the effectiveness of the remedy, including periodic sampling.

Consultants/Contractors and Internal Staffing

Q. Please describe the role of outside consultants and contractors in the Company's SIR program.

A. The Company uses qualified and competitively priced environmental consultants to prepare investigation work plans, perform investigations and prepare reports of investigation findings, evaluate remedial alternatives, prepare remedial action plans and specifications, perform treatability and pilot tests, as well as remediation oversight, and prepare remediation reports.

Q. What primary types of subcontractors do environmental consultants typically use during investigations?

A. The Company's environmental consultants typically use drilling subcontractors to perform test pits and to install soil borings and groundwater monitoring wells, laboratory subcontractors to perform sample analyses

required by agency-approved work plans, and land surveyor subcontractors to document the precise geographic coordinates of test pit, boring, and well locations.

Q. Why doesn't the Company contract directly with these subcontractors?

A. The Company looks to the environmental consultants for overall management of the investigations, including oversight and coordination of the subcontractors (about half a dozen in most cases). It would be counter-productive and would confuse the line of responsibility between the environmental consultant and subcontractors if the Company were to contract directly with the subcontractors.

Q. What about the option of buying the required drilling equipment and using the Company's own laboratory for analytical support?

A. There is not sufficient regularly scheduled work to justify the purchase of drilling equipment and hiring of properly trained and experienced full-time operators. With respect to using an in-house laboratory, although the Company has a state-approved

environmental laboratory, that laboratory is not approved for most of the analyses required under the approved investigation work plans for SIR program sites, nor does it meet agency requirements for analytical data validation deliverables. Also, Con Edison's ACOs and consent decrees with the EPA explicitly require the use of independent contractors acceptable to EPA for such work.

Q. What role do remediation contractors play in the Company's SIR Program?

A. The Company uses qualified and competitively priced remediation contractors to implement the required remedial construction elements of its agency approved site remedies.

Q. What types of subcontractors do remediation contractors typically use during remediation projects?

A. Remediation contractors typically use engineering subcontractors to prepare detailed design documents (e.g., sheeting and shoring plan) and obtain building permits, environmental/safety consultants to prepare environment, health and safety plans, perform air and personnel monitoring, and obtain wastewater discharge

permits, waste transporters and waste management facilities to dispose of wastes generated during the remediation project, and laboratories to perform analyses required by waste management facilities or for other purposes. In addition, remediation contractors use various material and equipment suppliers and installers.

Q. Why doesn't the Company contract directly with these subcontractors?

A. The Company believes it is more appropriate to place responsibility for these activities on the contractor. This makes the contractor accountable for all aspects of the work, including work performed by subcontractors. For example, if there are any delays in obtaining materials (e.g., steel for sheeting), delays in obtaining permits (e.g., City sewer discharge permit for wastewater, City Department of Buildings permits), delays in obtaining approvals from waste management facilities, or the presence of off-specification material for waste disposal, the contractor would be responsible.

Q. What about the option of buying the required construction equipment or using Company employees to perform some of the remediation activities?

A. There is not sufficient regularly scheduled work to justify the purchase of specialized construction equipment and the hiring of specially trained and experienced operators. Examples of specialty equipment include large diameter (*e.g.*, 30 inches) drill rigs for installing secant piles, equipment used to install slurry walls, equipment for performing in-situ chemical treatment, and equipment for performing in-situ contaminant stabilization.

Q. Has the Company adopted any procedures for selecting and retaining environmental consultants and remediation contractors?

A. As discussed below in my testimony, the Company has and implements comprehensive procedures and protocols for selecting and retaining outside environmental consultants and remediation contractors.

Q. How many Con Edison employees are directly involved in the Company's SIR Program on a full-time or a regular basis?

A. The Company currently has 33 employees directly involved in its SIR Program on a full-time or a regular basis. This includes 15 employees in the Company's EH&S Department, 15 employees in its CM Department, and three employees in the Law Department.

Q. Please describe the role of the EH&S employees in the Company's SIR Program.

A. The Remediation Department of EH&S has overall responsibility within the Company for managing the Company's SIR Program. This department consists of a Director, two Section Managers (one for the MGP program and one for all other remediation programs), a total of 11 Project Managers (five for the MGP program and six for all the other remediation programs), and an Administrative Assistant. Remediation staff persons serve as Project Managers and Project Engineers for their assigned sites under the SIR Program. Their responsibilities include:

- Directing the consultants on the development of investigation work plans for DEC and DOH approval;

- Coordinating with the Law Department, Public Affairs, and property owners to complete access agreements;
- Coordinating with CM to implement the investigation and remediation work plans;
- Reviewing and approving the consultants' budget and review and recommend for approval consultants' invoices;
- Participating in public meetings and other meetings with stakeholders in connection with investigation findings, proposed remedies, and other project-related issues;
- Coordinating with the DEC, DOH, EPA, consultants, and property owners on the development of proposed remedies;
- Participating in the procurement process to select a remediation contractor for each of their remediation projects;
- Participating in negotiations with property owners on cooperation agreements with respect to remediation responsibilities and cost sharing;

- Preparing quarterly projections of expenditures and estimates of future liability; and
- Providing periodic reports on the status of their projects to Company management.

Q. Please describe the role of the CM employees in the Company's SIR Program.

A. CM employees support EH&S in the implementation of the SIR Program investigation and remediation work. This includes support of fieldwork, review of bid specifications, and management of remediation contracts and contractors. Currently, CM has a Construction Manager, three Project Specialists, four Chief Construction Inspectors, and seven Inspectors primarily assigned to remediation projects.

Q. Please describe the role of the Law Department employees in the Company's SIR Program.

A. The Law Department provides environmental legal support, including: (1) the negotiation and preparation of access and other agreements with the present owners, lessees, and/or developers of the Company's and its corporate predecessors' former MGP and other sites; (2) the negotiation and preparation

of consent orders, consent decrees, PRP group participation agreements, and other agreements for Superfund sites owned by third parties, and (3) when appropriate, litigation to protect the Company's interests when negotiations are unsuccessful in resolving important issues (*e.g.*, claims against insurance carriers and third parties).

Q. Are there other Company employees who support the SIR Program on an intermittent basis?

A. Yes. These include, but are not limited to, employees in Public Affairs, Occupational Health, Real Estate, other groups within EH&S, Central Field Services, and other organizations as necessary.

SIR Program Internal Controls

Q. Does the Company have internal controls for managing its SIR Program?

A. Con Edison has a comprehensive system of internal controls in place to see that it performs its SIR projects at the lowest reasonable cost. The following internal controls are employed by the Company to

achieve this objective:

- standardized remediation contractor management protocols;
- established procedures for selecting and retaining environmental consultants and remediation contractors;
- rigorous process for the review and approval of consultant and contractor invoices; and
- internal audit process.

Q. Please identify the Company's remediation contractor management protocols.

A. These protocols include the Company's Contract Administration Manual ("CAM"), Supplemental Construction Contract Requirements ("Supplemental Requirements"), and the Standard Terms and Conditions of Construction Contracts ("Standard Terms"), which are provided as part of the Company's workpapers in this proceeding.

Q. Please summarize the purpose of the CAM.

A. The purpose of the CAM is to provide direction for Company personnel in the administration of contracts

to promote the efficient use of Company and contractor resources, as well as compliance with all applicable laws and regulations. It provides detailed guidance for the administration of construction contracts, including remediation-related construction work. The manual describes the Company's procedures for requisitioning and procurement of construction contracts, establishes guidelines for executing changes to labor contracts after the purchase order or contract has been issued, defines the procedures utilized to process payments under construction contracts, and establishes a system for monitoring progress of major projects against a planned schedule. It also sets standards of performance for field activities and provides procedures to be followed in their execution and provides instructions to promote compliance with the Company's requirement that contractors working for Con Edison have fully developed site/task specific Environmental, Health and Safety Plans for their work.

Q. Please summarize the purpose of the Supplemental Requirements.

A. The Supplemental Requirements contain requirements for the contractor's management of construction work, including remediation-related construction work. The Supplemental Requirements establish requirements for contractor performance regarding documentation, notice to proceed, approval of subcontractors, schedule monitoring, working hours, use of proper personal protective equipment ("PPE"), adherence to safety regulations, and identification of hazards encountered at the job site. The Supplemental Requirements identify required submittals and schedule of submissions for items such as shop and work drawings, operating procedures, substitution of materials, and as-constructed drawings. They supplement Con Edison's Standard Terms and govern the contractor's work regarding the use of qualified representatives; work permits; equipment and material delivery, handling, and storage; and site maintenance.

Q. Please summarize the purpose of the Standard Terms.

A. The Company's Standard Terms are incorporated into its contracts for construction services, including remediation-related construction work. The Standard

Terms define the contractual obligations of the contractor and Con Edison. The obligations and stipulations that are addressed include, but are not limited to Contract Formation; Specifications, Plans, and Drawings; Price and Payment; Time for Completion; Excusable Delay; Safeguards in Work; Work Conditions; Contractor's Performance; Con Edison's Authority; Estimated Quantities; Warranties; Changes; Claims; Codes, Laws and Regulations, and Maintenance of Work.

Q. Are there similar terms and conditions for professional services and service contracts?

A. Yes. The Company has Standard Terms and Conditions for Professional Services and Standard Terms and Conditions for Service Contracts. These documents are being provided as part of the workpapers associated with this testimony.

Q. Please describe the process Con Edison uses to select and retain its SIR Program environmental consultants.

A. I will focus primarily on MGP Program consultants. However, the process used by the Company to retain

environmental consultants for other SIR Program sites is generally similar. The Company's internal procurement process for such consultants consists of the following general steps:

- Preparation of Purchase Requisition – This is the formal request to the Company's Purchasing Department for procurement action. The Purchase Requisition is issued by EH&S and includes the services required, estimated budget, recommended bidders, scope of work and any other related documents. As described below in my testimony, in some cases, a technical evaluation is performed as a pre-qualification phase before a Purchase Requisition is issued.
- The Purchase Requisition must be approved by the appropriate level within EH&S before it is sent to Purchasing.

- Issuance of Bid Package/Request for Proposal - After it receives a Purchase Requisition, Purchasing assigns a buyer to the project. The buyer works with EH&S to prepare a Request for

Proposal ("RFP") inviting consultants to submit technical proposals and commercial proposals. The RFP may include a pre-bid meeting and always includes a deadline for submitting proposals.

- Pre-Bid Meeting (if necessary) – If necessary, a pre-bid meeting is typically conducted at least one week after the consultants receive the RFP. This allows the consultants to review the scope of work prior to the meeting and to ask pertinent questions.
- Review of Technical Proposals – The RFP requires the consultants to submit separate technical and commercial proposals. Technical proposals are forwarded by Purchasing to EH&S for review. The commercial proposals are retained by Purchasing for later evaluation if the bidding consultants' technical proposals are found to be acceptable. Technical evaluation criteria are normally established by EH&S prior to the issuance of the RFP, and the consultants are informed of those criteria. After completion of its technical review, EH&S provides a report with the review

results to the Purchasing Department. The report is transmitted by the person in EH&S who signed the Purchase Requisition.

- Review of Commercial Proposals – After receiving the results of the technical evaluation from EH&S, the Purchasing Department opens the commercial proposals submitted by those consultants with acceptable technical scores. For projects that do not require a technical proposal, the commercial evaluation begins upon the receipt of the commercial proposals. The Purchasing Department identifies the low bidder (or bidders if multiple contracts are to be awarded), and negotiates pricing with the low bidder(s), if appropriate. A meeting with the consultant(s) may be held to avoid possible misunderstandings regarding the required work scope.
- Contract Award– The consultants that have been found to be technically acceptable and that have submitted the lowest cost proposal based on the commercial evaluation are recommended by the

Purchasing buyer for award of a Purchase Order ("PO") to perform the consulting services. The level of approval required depends on the value of the PO.

In 2002, the Company retained a team of seven consultants to support its MGP Program. In 2005, when the POs issued to those consultants expired, Con Edison conducted a two-step selection process for the issuance of second-round POs. For the pre-qualification phase, 20 environmental consulting firms were invited to submit responses to a questionnaire jointly developed by EH&S and Con Edison's Purchasing Department; 17 firms responded. Because the Company's MGP Program was moving from investigation to remedial planning and remediation at many of the sites, remediation experience was deemed to be a more important consideration in 2005 than in 2002. Con Edison considered each consultant's experience in innovative investigation and remediation technologies, as well as its success in negotiating with regulatory agencies, particularly the DEC. The questionnaire

included a test problem designed to give Con Edison insight into each such firm's capabilities in analyzing investigation results and other relevant information to develop cost-effective remedial alternatives that would likely be acceptable to the DEC and DOH. Ten of the 17 firms were rated high enough to participate in the second phase of the procurement action.

In the second and final phase, these ten firms were invited to provide pricing information for professional services and fieldwork (e.g., drilling and other investigation-related activities). These rates were applied to a model investigation work scope to determine the reasonableness of pricing being offered by each firm for a typical MGP site investigation. The Purchasing Department negotiated with the firms to reduce any premiums and reached acceptable agreements with nine firms. POs were awarded to those nine firms in November 2005 for three-year terms; these POs were extended for a period of time while the Company negotiated new terms and pricing. In 2010, the Company awarded Purchase Orders

with three (3) year terms to six of the original nine firms. Of the original nine firms, one firm went out of business, and two firms combined via corporate merger or acquisition with two firms that had PO's, leaving six firms from the original nine. The current contracts with MGP consultants expire in April 2013. Con Edison is currently evaluating whether to extend all or some of them.

By retaining a team of qualified and competitively priced consultants to support the investigation, remedial planning, and remediation oversight activities of the MGP Program, the Company generally avoided having to conduct a separate procurement action for each individual site. However, EH&S, in conjunction with Purchasing, may determine that a separate PO should be awarded after competitive bidding among the existing consultants for a particular MGP site in certain circumstances, such as where a very high initial investigation cost estimate was projected based on the investigation work plan for that site.

The Company's procurement process to retain environmental consulting services for the other programs is similar to the process described above for the MGP Program. Currently, four environmental consultants have been retained to support sites already in the UST Program and five environmental consultants have been retained to support new UST sites and other non-MGP sites (*e.g.*, Appendix B sites). There are two consultants that are common to both sets of contracts. For very large and complex site investigation projects, such as the East River Appendix B Site, Hudson Avenue Station Appendix B site, consolidated Long Island City Site 79 under Appendix B, separate POs were issued. Likewise, separate POs have been issued to environmental consultants for State Superfund Sites, such as the former Maspeth Substation Site, Echo Avenue Substation Site, former Arthur Kill Generating Station, Flushing Creek Site and North First Street Terminal that are currently owned or previously owned by Con Edison, and for the Curcio Scrap Metal federal Superfund Site, for which Con Edison is the major PRP. Finally, POs have

been awarded to two consulting firms for the Astoria RCRA Corrective Action Site, one for the site-wide investigation that was initiated in 1993, and one for the risk assessment and remedial planning for the North Storage Yard, which has PCB and other contamination.

Q. How does Con Edison select remediation contractors?

A. The selection of contractors is a multi-step process. The first step in Con Edison's remediation contractor procurement process for its SIR Program was the development of a pre-qualified bidders list. The purpose of this list is to streamline the selection process by establishing a short list of contractors pre-qualified to bid on future MGP, as well as other, remediation projects. The list obviates the need to evaluate which firms should be invited to bid on each remediation project.

A questionnaire related to the contractor's experience with construction and remediation was sent to 28 remediation contractors. The questionnaire was developed by a team comprised of representatives from

Con Edison's Purchasing, CM and EH&S Departments. Qualifications for remedial construction work were evaluated by a team from CM and EH&S in accordance with predetermined scoring criteria. The team concluded, and Purchasing concurred, that 15 of the 17 contractors (that had submitted timely responses) met the Company's qualification requirements. Based on their past experience, including the size of the remediation projects previously handled by them, the firms were placed in three categories, so that the smaller firms would not be invited to bid on larger, more complex remediation projects. Subsequent to the approval of these 15 firms, the Company evaluated and approved five additional remediation contractors.

The procurement process to hire a remediation contractor consists of the following general steps:

- Preparation of Purchase Requisition – This is the formal request to Purchasing for procurement action. The Purchase Requisition is issued by CM, and it includes the services requested, estimated budget, recommended bidders, detailed specifications and other related documents. The Purchase Requisition must be

approved by the appropriate level within Construction before it is sent to Purchasing.

- Issuance of Bid Package/Request for Proposal - After Purchasing receives a Purchase Requisition; a buyer is assigned to the project. The buyer works with CM and EH&S to prepare a Request for Proposal ("RFP") inviting the contractors to submit a technical proposal and a commercial proposal. Depending on the scope of work and other considerations, Purchasing may issue a Request for Bids ("RFB") under which the contractors are requested to submit a commercial proposal without a technical proposal. The RFP or RFB includes a scheduled field visit to the site and a deadline to submit proposals.

- As indicated earlier in my testimony, technical proposals may be required for large (based on cost and scope of work), complex projects (based on engineering considerations and property constraints), to insure that bidders understand the scope and complexities of the project. For relatively small, straightforward projects, a technical proposal and associated technical evaluation may not be required.

For these sites, Purchasing will issue a Request for Bids ("RFB") under which the contractors would submit a commercial proposal without a technical proposal. A decision concerning whether to perform a technical evaluation is made by the EH&S Remediation Department in consultation with Construction. Remediation projects for which it was determined to require technical proposals include the sediment remediation at the Arthur Kill Superfund Site, the Maspeth Site, and the White Plains, East 173rd Street and Pelham Gas Works MGP sites. The RFP or RFB includes a scheduled field visit to the site and a deadline to submit the proposals.

- Field visit – The field visit is typically conducted at least one week after the contractors receive the RFP or RFB. This allows the contractors to review the specifications prior to the field visit and ask pertinent questions.
- Review of technical proposals (when a technical proposal is required) – The RFP requires the contractors to submit separate technical and commercial proposals. Technical proposals are forwarded by

Purchasing to CM and EH&S for their review. The commercial proposals are retained by Purchasing for later evaluation if the bidding contractors' technical proposals are found to be acceptable. Technical evaluation criteria are normally established by CM and EH&S prior to the issuance of the RFP, and the contractors are informed of those criteria.

- Review of commercial proposals – After receiving the results of the technical evaluation from CM and EH&S, the Purchasing Department opens the commercial proposals submitted by those contractors with acceptable technical scores. For small, straightforward projects that do not require a technical proposal, the commercial evaluation begins upon the receipt of the commercial proposals. The Purchasing Department works with the Company's Bid-Check Estimating Section to evaluate the pricing information submitted by the contractor with the lowest cost proposal to determine if the proposed labor rates, unit prices, lump sum prices, and other cost items are reasonable and consistent with current market conditions. A meeting with the contractor may

be held to avoid misunderstandings regarding the required work scope.

- Contract award – The contractor that submitted a technically acceptable proposal and the lowest cost proposal based on the commercial evaluation is recommended by the Purchasing buyer for award of a PO to perform the remediation. The level of approval required depends on the value of the PO.

Q. Does Con Edison have policies and procedures associated with the procurement process?

A. Yes. Some of these policies and procedures are listed below and copies are provided as workpapers for this testimony.

- Corporate Instruction 280-4: "Administration of Construction, Service, and Public Improvement/Interference Contracts". This corporate instruction authorizes publication of the CAM described above.
- Corporate Policy Statement 300-5: "Statement of Procurement Policies and Procedures".

- Corporate Instruction 320-14: “Acquisition of Materials, Supplies, or Services”.
- Purchasing Operating Procedure OP-2: “Preparation and Approval of Bid List, Invitation for Bids and Procurement Process Cycle Times”.
- Purchasing Operating Procedure OP-3: “Bid Evaluations, Negotiations, and Requests for Authorization to Purchase”.
- Purchasing Operating Procedure OP-5: “Supplier Diversity Program”.
- Purchasing Operating Procedure OP-6: “Vendor Management”.
- Purchasing Operating Procedure OP-7: “Purchase Order Files”.
- Purchasing Operating Procedure OP-11: “Contractor/Material Supplier Performance”.
- Corporate Environmental, Health and Safety Procedure CEHSP A.12.03: “EH&S Qualifications for Contractor Procurement”.

Q. Please describe the Company's oversight process for the services provided by its SIR Program remediation contractors.

A. The Company utilizes CM personnel to administer and oversee remediation contracts. Remediation projects are procured primarily as fixed price contracts that may have unit prices for certain types of work such as excavation and disposal, backfill, and water treatment. As described above, CM utilizes established procedures contained in the Company's Contract Administration Manual (CAM) to monitor work and to execute changes to contracts.

The CAM prescribes the responsibilities of the field personnel responsible for managing contract construction work and provides detailed procedures for documenting the progress of work in the field. Field Inspectors are assigned to projects and depending on the size and scope of the work will generally oversee the work of the contractor on a daily basis. The duties of Field Inspectors include, but are not limited to, such items as job set-up review; schedule review and compliance; review of work completed by the

contractor; inspection of work, environmental and safety compliance; completion of the Con Edison daily log book; input into the Contractor Oversight System (COS); and project closeout procedures. The Field Inspector will set up and maintain a central filing system to retain pertinent contract correspondence and documents such as:

- Budget and Cost;
- Purchase Orders;
- POCRs/POCAs (Change Orders);
- Specifications;
- Correspondence;
- Schedules;
- Performance Logs;
- Payments;
- Permits;
- Submittals and Approvals;
- Meetings;
- Environmental and Safety Records;
- Project Close Out Documents;

- Materials and Equipment;
- Check Lists;
- Sampling Reports;
- Asbestos Notifications;
- Air Monitoring;
- Licenses and Training;
- Disposal Sites; and
- Manifests.

The Company's Field Inspectors are responsible for the implementation of changes to the base contract and are thoroughly familiar with the reason for the change, its scope and effect on the schedule. In the case of design changes, sufficient liaison with the EH&S project manager is required to make sure the change is implemented in a timely fashion so as to minimize its effect on the overall job. For all changes, the Field Inspector prepares a Finding of Fact that provides a description of the change, the reason for the change, a range figure estimate of material, equipment and labor costs, and details the change's effect on the project schedule. Findings of Fact are reviewed and

approved by the CI's supervisor and at higher levels of management depending on the individual and cumulative dollar value of the estimated cost of the change. The EH&S project manager for the remediation project also must concur with the Findings of Fact before they are approved. After the Findings of Fact are approved at the appropriate management level, a change order request is issued to the contractor to provide a price for the work. If the change order is estimated to be more than $25,000.00, Con Edison's Bid Check Estimating group will also provide an independent price for the work performed. Once a price agreement is reached, a contract modification is processed based once again on the designated management approval level, which is dependent on the individual and cumulative dollar value of the change. If agreement cannot be reached on a fixed price or unit price, then Con Edison may authorize the contractor to proceed to implement the change on a time and materials basis in accordance with the aforementioned contract management documents until an

agreement is reached or in lieu of an agreement on a fixed or unit price.

Q. What is the Company's process for the review and payment of SIR Program environmental consultant invoices?

A. Con Edison's EH&S Department manages contracts with environmental consultants. The following steps are generally followed by EH&S project managers in their review of invoices submitted by the consultants:

- Utilize a recently implemented accounting system that tracks all unit rates specified in the PO for labor, material charges, and other line items. This feature of the system eliminates the potential for consultants to charge rates that are not specified in the PO and eliminates potential contractor calculation errors that could occur with paper invoices.
- Reconcile the number of units for each line item/work activity claimed to have been used/performed with the number of units actually used/performed. This is done through a review of

field notes and other supporting documentation. Under the recently implemented accounting system, consultants submit electronic invoices on the system in lieu of submitting paper invoices. Before a consultant submits an invoice electronically, the consultant provides the EH&S project manager with the quantity of each PO line item that it plans to invoice and the information that supports the planned invoice, such as time sheets or subcontractor invoices. The project manager then is required to review the supporting information to verify that it is consistent with the information specified in the purchase requisition used by Con Edison to request the consultant's services. Purchase requisitions specify the requested services by PO line item and identify the appropriate project and task numbers (previously known as account numbers or work order numbers)that will be charged.

- Once the project manager is satisfied that the charges proposed for invoicing by the consultant are substantiated, the project manager will enter the

approved quantities for each line item in the system as having been received. Invoices for more than $3,000 are subject to further review of the supporting documentation before the project manager enters the received quantities. The system will automatically reject payment requests for line item amounts exceeding those authorized in a purchase requisition.

Q. What is the Company's process for the review and payment of SIR Program contractor consultant invoices?

A. CM is responsible for the review and approval of SIR Program remediation contractors invoices. CM uses the following Con Edison documents to format, reconcile and process payment applications from such contractors: (1) CAM; (2) Supplemental Requirements, and (3) Standard Terms. The purposes of these documents are explained earlier in my testimony.

Remediation contractors are required to submit Performance Statement that correlates with their project schedule. Performance Statements are tabulated summaries of the contractor's work and mirror the contractor's price schedule. Lump sum, unit price and change order items are listed on the

Performance Statement and include information on the description of work, the quantity of work, the unit price of work if applicable, and the total value of work. The Performance Statements indicate the value of work completed to date, the value of work requested for the current payment application and the total value of work remaining. CM receives invoices from the contractor that includes back-up information such as weight tickets, survey measurements and as-built drawings that are used to substantiate the accuracy of the invoice. If the invoice is not approvable in its entirety, the contractor is required to revise it as appropriate or approval of partial payment is recommended. Once the invoice is approved by the CM section that manages the remediation contractor, the invoice is sent to CM's Administrative Services Group, where invoice reconciliation is performed again. Once an invoice is approved, regardless of whether it is from an environmental consultant or remediation contractor, it is receipted on the Company's system for subsequent payment.

Q. Does Con Edison prepare and review financial reports for SIR sites?

A. Yes. Con Edison's Accounting Department prepares and distributes reports on a monthly basis indicating site-specific and program-specific expenditures.

Q. Are these monthly reports reviewed to identify any expenditures that may have been erroneously charged to a particular site?

A. Yes. Accounting Department staff and EH&S Remediation staff review listed expenditures. If any expenditures are identified that appear to have been charged to a SIR site account erroneously, Accounting and EH&S investigate and, if appropriate, have the charge transferred to appropriate project and task numbers.

Q. Has Con Edison conducted internal audits of its SIR Program projects?

A. Audits of SIR projects have been conducted by Con Edison's Auditing Department and an external consultant. The audit process reviews have included, among other things, whether:

- The project was competitively bid and awarded to the lowest bidder among the technically acceptable contractors;
- The engineering package was accurate and complete;
- EH&S regulations and contractor health and safety plans were complied with;
- Construction Management properly managed, monitored, and documented the project and any changes in the project scope were properly justified;
- Project payments were accurate and timely, and any increases in pricing were properly justified and reviewed for accuracy;
- Construction Management effectively monitored contractor work and completed the appropriate oversight inspections and the required associated documentation.

COMPLIANCE WITH RATE CASE FILING REQUIREMENTS

Q. Are you familiar with the Commission's recently adopted rate case filing requirements with respect to SIR costs?

A. Yes, I am. In its Order of November 28, 2012, in Case 11-M-0034 ("Order"), the Commission adopted several rate case filing requirements with respect to SIR costs in order to enhance its oversight of these costs.

Q. Please state what these filing requirements are.

A. The Commission's order states that in any future rate filing in which a utility seeks to recover SIR expenses, it must provide sworn testimony: (1) establishing that the remediation process is in compliance with existing timetables and DEC requirements, or providing explanations for any divergence; (2) discussing the utility's cost control efforts, including an attestation to utility compliance with the best practices inventory; and (3) indicating the results of any internal process the utility may have conducted with respect to review of SIR procedures, and in particular explaining how

internal controls are brought to bear on site investigation and remediation projects.

Q. Please discuss the Company's compliance with these requirements.

A. For a discussion of the Company's compliance with existing timetables and DEC requirements for remediation programs, see pages 19 through 23 of my testimony. Pursuant to the Commission's Order, the utilities are working on establishing an inventory of best practices. The Order provides for the utilities to file the inventory of best practices no later than March 28 (i.e., 120 days after the issuance of this Order). While that inventory is being developed, I discuss in detail above the Company's SIR cost control efforts and practices in the section of my testimony entitled "SIR Cost Saving Efforts and Practices." Finally, I discuss above the Company's internal controls and how those controls are brought to bear on site investigation and remediation projects in pages 98 through 155 of my testimony.

Q. Does this conclude your initial testimony

A. Yes, it does.