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Q. Would the members of the Municipal Infrastructure Support Panel please state your names and business addresses?

A. (Mobyed) Michael Mobyed and my address is 59-17 Junction Blvd., Rego Park, NY 11373.

(Sanoulis) Gus Sanoulis and my address is 59-17 Junction Blvd., Rego Park, NY 11373.

Q. What are your current positions at Consolidated Edison Company of New York, Inc. (“Con Edison” or the “Company”)?

A. (Mobyed) I am employed by Con Edison as the Department Manager in Construction’s Public Improvement Department.

(Sanoulis) I am employed by Con Edison as the General Manager in Construction’s Public Improvement / Engineering Departments.

Q. Please describe your educational backgrounds.

A. (Mobyed) I graduated from Queens College in New York City in 1989 with a Bachelor’s degree in Computer Science.

(Sanoulis) I graduated from the City College of New York in 1982 with a Bachelor of Engineering degree in Mechanical Engineering.
Q. Please describe your work experiences.

A. (Mobyed) I joined Con Edison in 1974 as a Customer Service Representative. In 1984, I joined the Public Improvement Department and have held various positions of increasing responsibility. In August of 2010 I assumed my current position of Department Manager in Public Improvement.

(Sanoulis) I joined Con Edison as an Assistant Engineer in 1982. Since then, I have held various management positions of increasing responsibility in the Company, including Plant Manager of the Waterside and Hudson Avenue Stations, Chief Mechanical Engineer, General Manager of Facilities and General Manager of Construction Services. In January of 2010 I assumed my current position of General Manager in Public Improvement and Engineering.

Q. Please generally describe your current responsibilities.

A. (Mobyed) My current responsibilities as Department Manager of Public Improvement are to oversee the construction management for all municipal projects that impact Con Edison facilities in the service territory. This requires planning, coordinating, and
negotiating with the municipalities and its contractors to facilitate the timely completion of projects in a cost-effective manner.

(Sanoulis) My current responsibilities as General Manager of Public Improvement and Engineering are to oversee all work in Public Improvement / Engineering and maintain the integrity of Con Edison’s electric, gas and steam systems during the course of municipal construction projects. This requires planning, coordinating, engineering and negotiating to facilitate the completion of projects.

Q. Have you previously testified before the New York State Public Service Commission?

A. (Mobyed) No.

(Sanoulis) Yes, I testified in Case Nos. 99-F-1314, 99-S-1621, 05-S-1376, 09-S-0794 and 09-G-0795.

Q. What is the purpose of your testimony?

A. Our testimony addresses:

(1) The definition and significance of “interference” as it relates to Con Edison’s systems;

(2) Operation and Maintenance (“O&M”) interference costs associated with the Company’s facilities (“Electric, Gas & Steam”) for the rate year ending
December 31, 2014 (“Rate Year” or “RY1”), and for two additional 12-month periods ending December 31, 2015 and December 31, 2016 (which we will refer to as RY2 and RY3, respectively, for ease of reference);

(3) Capital interference costs associated with the Company’s facilities for calendar years 2013 to 2017;

(4) Mitigation measures the Company undertakes to reduce its interference costs; and

(5) A proposal for reconciliation of interference capital and O&M expenses.

DEFINITION AND SIGNIFICANCE OF INTERFERENCE

Q. Please explain interference.

A. Con Edison has an extensive system of gas and steam mains, gas and steam services, electric cables, conduits, structures and poles in addition to electric services and appurtenances of various sizes and operating voltages, within the streets of its service territories, which includes Manhattan, Bronx, Queens, Brooklyn, Staten Island and Westchester County. These facilities share the space under the streets with privately owned facilities such as telephone and cable TV, and municipal owned facilities such as water, sewer, transit and traffic facilities. In addition,
electric overhead facilities share space above the streets with private and municipal facilities such as telephone, cable TV, fire alarm, street lighting and traffic signals. When an entity plans to perform work, either underground or overhead, and is prevented from completing the proposed plan due to other facilities being in the way, the term “interference” is used.

Q. Please describe the presence of the Company’s electric, gas and steam systems throughout the Con Edison service territory.

A. The Company has an extensive system of electric distribution in the entire service territory, all five boroughs and Westchester County, as contrasted with the gas and steam systems. The Company’s gas system is only in Westchester, Bronx, Manhattan and parts of Queens. The steam distribution system is limited to Manhattan, south of 96th Street.

Q. Is there more than one kind of interference?

A. Yes. Interference can be direct or indirect. A direct interference is that in which an existing Con Edison facility occupies the space of a proposed municipal facility and must be located, identified,
and relocated to a new location in order to accommodate and provide space for a new municipal facility. An indirect interference is that in which Con Edison facilities do not occupy the space of the proposed municipal facilities, but requires the Company to identify the location of its facilities, monitor construction work by the municipality’s contractor, and take steps necessary to support and protect its facilities.

Q. Please describe the cost responsibility for Company interference related to work by or for private entities as distinguished from work performed by or on behalf of municipal entities.

A. If a private entity performs work in the vicinity of the Company’s facilities, and the Company determines that any component of the electric, gas and/or steam system needs to be supported, protected, adjusted or relocated to accommodate the work, then the private entity is required to reimburse the Company for costs the Company incurs. However, if the City of New York (“City”) or another municipality performs work, such as installing or
repairing a sewer or water main in the vicinity of the Company’s facilities, then the Company bears the costs to locate, move, support, protect and/or relocate the facilities affected by the municipality’s construction activity.

Q. Apart from the installation of municipal facilities, are there any other types of municipal activities that affect the Company’s interference expenses?

A. Yes. For example, when a City street is repaved or the pavement around Con Edison’s facilities is modified, the Company may need to raise or lower its structures (e.g., castings of manholes). The costs that the Company incurs to raise or lower these castings or modify these structures are also considered to be an interference expense.

Q. What type of municipal construction activities cause interference with Company facilities?

A. The typical municipal activities that affect Company facilities are the installation of water, sewer and drainage facilities, reconstruction of roads, highway bridges, curbs and sidewalks, and, as mentioned above, the repaving of roadways.
MUNICIPAL INFRASTRUCTURE SUPPORT PANEL - STEAM

Q. How often does the Company have to support, protect and/or relocate its facilities?

A. On any given day, there are hundreds of municipal projects being planned, engineered, or constructed within the Company’s service area. These projects are initiated by various City organizations such as the Department of Design and Construction (“DDC”), Department of Transportation (“DOT”), Department of Environmental Protection (“DEP”), Department of Parks, Bureau of Bridges, and the Economic Development Corporation (“EDC”), in addition to various municipalities in Westchester County. The projects may be planned or they may be the result of an emergency, such as a response to a water main break. However, any excavation needed for these municipal project activities typically impact Con Edison facilities located in that area and, therefore, may present interference issues.

Q. Does the Company coordinate with municipalities in order to avoid instances of interference?

A. Yes. The Company’s engineering groups work closely with City and municipal agencies to minimize the impact of municipal projects on Company facilities.
However, due to the heavy congestion of various underground facilities within the streets, relocating or supporting Company facilities is often unavoidable.

Q. What, if any, control does the Company exercise over the scope and/or timing of the work performed by the City and other municipalities?

A. While the Company employs measures to mitigate the costs related to municipal interference work (as discussed in more detail below), the Company has no control and extremely limited influence over the scope and/or timing of City/municipal projects.

Q. What is the risk to the Company for not performing interference work associated with City projects?

A. Under the New York City Administrative Code, the Company is required to relocate or protect utility facilities located at the site of public works projects undertaken for the benefit, health or safety of the residents of the City or face financial penalties, which apply on a per day, per location basis.

Q. Is the City the primary municipality that drives the level of the Company’s interference expenditures?
A. Yes. The City’s Capital Infrastructure Improvement Program is the primary driver of the Company’s interference expenditures, both for capital and O&M. Other municipalities in Westchester County also perform this work, but on a smaller scale.

Q. Does the City develop a forecast for their infrastructure expenditures?

A. Yes. The City of New York Office of Management and Budget ("OMB") publishes its five-year Capital Commitment Plan ("Commitment Plan") three times a year, in April, September and February. This plan describes anticipated infrastructure projects that the City expects to commit funding to in each of the upcoming fiscal years for the different categories of reconstruction work. The City’s fiscal year runs from July 1st to June 30th.

Q. Are there any particular categories of City infrastructure work listed in the City’s Commitment Plan that typically involve interference work?

A. Yes. The categories of City infrastructure work that typically involve interference work are Highways, Highway Bridges, Water Main 1, Water Main 6 and Sewers.
Q. Are the projects identified in the Commitment Plan always executed as anticipated?
A. The scope and timing of projects can change from fiscal year to fiscal year. Changes are reflected as updates in the Commitment Plans, which as noted above, are published three times a year.

Q. What impact does this have on the Company’s ability to reasonably forecast interference expense?
A. Frequent changes by the City to its plans, coupled with the Company's obligation to respond to these changes on a timely basis, undermines the Company’s ability to forecast interference expenditures with a reasonable degree of accuracy.

Q. What is the forecasted City OMB Budget for 2013 and 2014 as it relates to the interference project type categories mentioned above (i.e., Highways, Highway Bridges, Water Main 1, Water Main 6 and Sewers)?
A. The OMB has authorized for these interference-type categories $1.1 billion in 2013 and $914 million in 2014.

Q. Was the exhibit entitled “NYC OMB EXPENDITURES 2009-2014” prepared under your supervision or direction?
A. Yes, it was.
Q. What does this exhibit show?

A. This exhibit shows actual OMB expenditures for 2009 to 2011 for these interference-type categories, as well as the City’s current forecast for 2012 to 2014.

Q. Do the OMB projections provided above or the Company’s interference costs discussed below reflect any recent announcements made by the City to significantly accelerate funding for critical infrastructure projects and, consequently, further increase the Company’s interference expenditures?

A. No they do not. On October 17, 2012, Mayor Michael Bloomberg, City Council Speaker Christine Quinn and City Comptroller John Liu jointly announced changes to the City’s four-year Capital Commitment Plan by the acceleration of work on more than $1 billion of critical infrastructure projects throughout the City ([http://www.nyc.gov/html/om/html/2012b/pr360-12.html](http://www.nyc.gov/html/om/html/2012b/pr360-12.html)). The changes will accelerate capital commitments to projects that are in progress or are ready to begin and, in many cases could be completed in the next 20 months. The OMB projections provided above do not reflect the impact of this acceleration program. In
addition to increasing the OMB projections, this program will also result in increased interference costs for the Company. We will address during the update phase of this proceeding the effect of this recent change on the City’s OMB projections and the Company’s costs. It should be noted that this acceleration program is but one example of the many variables that are beyond the Company’s control and that have a significant impact on the Company’s interference expenditures.

Q. How has the Company’s response to the cultural barriers identified in the most recent Management Audit affected the way that interference work is performed?

A. The Company’s efforts to implement cultural imperatives through its interference work are demonstrated in many different ways, which include coordination with the City and other municipalities in accordance with the cultural imperative to enhance customer and other external relationships. The numerous mitigation efforts discussed later in our testimony are also consistent with the Company’s efforts to reinforce cost management consciousness.
INTERFERENCE - O&M

Q. Please describe O&M interference costs.
A. As described in the Definitions section above, the Company’s O&M interference costs are the maintenance expenditures incurred when the Company is required to support, protect or maintain facilities due to interference with proposed City or other municipal facilities. O&M interference costs are most often associated with indirect interference.

Q. Please provide the Company’s recent actual O&M interference costs for electric, gas and steam (excluding Company labor) by calendar year and for the historical year.
A. The total O&M cost in 2009 to 2012 and the historic year were as follows:

<table>
<thead>
<tr>
<th>O&amp;M</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>Historic</th>
<th>2012*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric-O&amp;M</td>
<td>$56.7</td>
<td>$59.4</td>
<td>$62.0</td>
<td>$70.6</td>
<td>$79.1</td>
</tr>
<tr>
<td>Gas-O&amp;M</td>
<td>$9.7</td>
<td>$14.1</td>
<td>$13.9</td>
<td>$15.9</td>
<td>$14.9</td>
</tr>
<tr>
<td>Steam-O&amp;M</td>
<td>$5.8</td>
<td>$4.4</td>
<td>$5.4</td>
<td>$6.5</td>
<td>$7.1</td>
</tr>
<tr>
<td>Total</td>
<td>$72.2</td>
<td>$77.9</td>
<td>$81.3</td>
<td>$93.0</td>
<td>$101.1</td>
</tr>
</tbody>
</table>

Note: Dollars in Millions

Note: 2012* = Actual through Q3 plus forecasted Q4
Q. What are the Company’s projected 2012 O&M costs (excluding company labor) when using actual costs incurred through the third quarter (“Q3”) plus the projected fourth quarter (“Q4”)?

A. The company is expecting unprecedented levels of interference expenditures for O&M in fiscal year 2012. Through Q3 the Company has incurred $60.2 million in electric O&M, $11.3 million in gas O&M and $5.5 million in steam O&M. The Company is projecting $79.1 million in electric O&M, $14.9 million in gas O&M and $7.2 million in steam O&M through year end.

Q. Why has interference O&M spending increased each calendar year from 2009 to 2012?

A. As noted above, the City’s actual infrastructure expenditures in the project categories that typically generate interference work for the Company have increased during the period 2009 to 2012. Major projects such as Astor Place, 59th Street, Hudson Street Water Tunnel projects and the East Houston Street roadway reconstruction project are examples of major cost drivers. The level of Company O&M costs are directly related to the level of City capital
infrastructure costs and have therefore increased accordingly.

Q. What are the Company’s total O&M cost projections for interference in the Rate Year (excluding Company labor)?

A. The Company is forecasting $102.4 million in total O&M expenditures in the Rate Year, comprised of $79.6 million for electric, $17.9 million for gas, and $4.8 million for steam.

Q. What are the major drivers for the Company’s projected O&M costs in the Rate Year?

A. The forecasts for the Rate Year are projected to remain high because the City has commenced several major projects that are expected to continue (and thus continue generating interference work) for the next several years.

For example, the City Water Tunnel Number Three series of “Phase A” Manhattan projects consists of three projects that are nearing completion and five additional projects started in 2012 with a projected end date in 2017. Also, there are two other major Water Tunnel projects in the final phase of design to be released for bid by the City in the near future.
Additionally, there is a series of “Phase B” Water Tunnel projects that are in the preliminary design phase and are projected to work well into the end of the decade.

Q. Has the Company forecasted O&M interference expenses for periods beyond the Rate Year?
A. Yes. The Company has forecasted O&M interference expenses for two annual periods beyond the Rate Year. The Company is forecasting a total O&M expenditure (excluding Company labor) of $98 million, comprised of $76.5 million for electric, $16.8 million for gas, and 4.7 million for steam, for RY2. For RY3 the Company has forecasted a total O&M expenditure (excluding Company labor) of $94.4 million, comprised of $75 million for electric, $14.9 million for gas, and $4.5 million for steam.

Q. Was the exhibit entitled “ACTUAL AND FORECASTED O&M EXPENDITURES” prepared under your supervision or direction?
A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT ___ (MISP-2)

Q. What does this exhibit show?
This exhibit shows actual O&M, Electric, Gas and Steam, expenditures for 2009 to 2011, as well as the historical year O&M expenditures. This exhibit also shows forecasted O&M, Electric, Gas and Steam, expenditures for 2012, RY1, RY2 and RY3.

Please explain how the Company developed its forecasted O&M expenditures for RY1 through RY3.

The Company’s O&M forecast is comprised of costs associated with: (1) recurring annual programs; (2) projects with defined scopes; and (3) preliminary projects with undefined scopes.

Please explain these categories of expenditures.

The first category includes annual programs which consist of recurring type work. Examples of these programs are test pits, manhole castings, and gas main encroachments, which are performed based on field conditions or on an as needed basis. These annual programs are forecasted based on the previous three-year cost average for each component. This method of forecasting is utilized because there is no defined project scope of work or planned work schedule.

The second category includes projects with defined scopes which include projects in construction, out for
bid or awarded by the municipality. These projects are evaluated based on the infrastructure design plans. The Company then develops a project specific cost estimate utilizing established unit work items and pricing.

The third category includes preliminary projects in the early phase of design that lack sufficient municipal project scope details to adequately determine the impact on Company facilities. The Company’s cost estimates for this category of projects are developed taking into consideration a variety of factors, utilizing two separate methods. The first method for developing a cost estimate is for projects with a defined location and undefined scope (e.g., MED-607, East 34th Street in Manhattan) is by evaluating the potential impact due to the Company electric, gas, steam facilities existing within the project area, the location (borough and specific geographic work area), the type of interference accommodations anticipated (support, protect, alter), the scale of the municipal project (water mains, sewers, drainage, curbs, sidewalk, roadway, etc.) and the order of magnitude of the municipal project cost
MUNICIPAL INFRASTRUCTURE SUPPORT PANEL - STEAM

estimate. These factors are then evaluated based on historical experience to develop cost estimates for these types of projects. The second method for developing a cost estimate is for projects with undefined locations and defined scopes, (e.g., Pedestrian Ramp Installations in Manhattan, Catch basin replacements in Brooklyn) is done by extrapolating expenditure trends from available completed projects of a similar type. In addition, the Company’s yearly budget projections are cash flowed taking into consideration proposed project start dates and durations, which are estimated based upon their preliminary status.

In summary, the Company’s annual O&M interference forecast is the sum of the projected costs associated with recurring annual programs, projects with defined scopes and preliminary projects with undefined scopes.

Q. Was the exhibit entitled “O&M CATEGORIES OF EXPENDITURES” prepared under your supervision or direction?

A. Yes, it was.

MARK FOR IDENTIFICATION AS EXHIBIT ___ (MISP-3)

Q. What does this exhibit show?
A. This exhibit shows forecasted O&M expenditures by category for electric, gas and steam.

Q. In past proceedings, Staff has proposed basing the forecast for O&M interference expenditures on a five-year average of recent actual costs. Is a forecast based upon a five-year average of recent actual costs reasonable for this rate proceeding?

A. Using an average of recent actual costs to develop a forecast for interference expenditures is reasonable for recurring, routine work performed by the Company. As discussed above, the Company does utilize this approach in forecasting annual programs, which comprise on average, approximately forty percent of the projected expenses.

Q. You used a three-year average for the annual programs rather than a five-year average as previously recommended by Staff. Please explain why.

A. The three-year average is the traditional approach for recurring work of the same or similar nature, which has long been accepted in Con Edison rate filings for developing forecasts for various types of costs where there is no additional information that warrants the use of a different historical period.
Q. Please explain why using an average of recent actual costs is not reasonable for forecasting expenses associated with the work other than the annual programs that the Company performs, both ongoing and preliminary.

A. Actual costs as seen from 2009 to 2011 have been increasing disproportionately from past spending levels. The Staff approach does not take into consideration changes in spending patterns by the City that indicates future expenditures are likely to materially exceed average spending levels from the prior five-year period. Two important factors that are not captured when relying exclusively on a historic level analysis, which are key drivers of future interference expenditures, are the order of magnitude and timing of planned municipal projects. It is not reasonable to ignore this information when forecasting future expenditures. Using an average historical amount to establish a future spending target is appropriate where, for example, the Company can exercise reasonable control over the incurrence of such costs if there are unanticipated events that would otherwise increase
costs. However, that is not the case for interference costs. As indicated above, the Company needs to respond to the City's timetable and is subject to penalties for failure to respond. Accordingly, using a simple average of recent Company expenditures is not a reasonable basis for forecasting expenditures for a future period in an environment where costs have been increasing and are reasonably expected to vary.

Q. Wouldn’t the application of a five-year average smooth out these differences over the long term?

A. Theoretically, yes, if applied annually and the magnitude of City project scopes and resulting impact on Company facilities and interference costs were relatively consistent over many years. However, due to the potential for significant changes in City project scopes and cost drivers to occur over a five-year period, as has occurred during the recent five-year historical period, the five-year averaging approach is prone to produce projected Company expenses that are either significantly understated or overstated and therefore is a flawed methodology for setting rates. Rates should be established based on a combination of relevant historical costs and
forecasted expenditures that take into account known
changes in City project scopes, timing and overall
spending pattern trends. Moreover, the Company believes the use of a five-year
average may likely be abandoned in a future proceeding
if there was good reason to believe that the Company
would incur costs in the Rate Year below the historic
average level. For example, if the City announced
dramatic cuts in its budget that demonstrated the
Company would incur costs below the historic average
even if the City completed 100 percent of its
forecasted projects, the Company believes it is
unlikely that this evidence would be ignored.

INTERFERENCE - CAPITAL

Q. Please describe the capital costs associated with
interference.

A. As described in the Definitions section above, the
Company’s capital interference costs are expenditures
incurred when the Company is required to relocate its
facilities to a new location due to interference with
proposed municipal facilities. Capital interference
costs are most often associated with direct
interference.
Q. What were the total capital interference costs incurred between calendar years 2009 and 2012?

A. The total capital incurred from 2009 to 2012 were:

<table>
<thead>
<tr>
<th>Capital</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td>$33.8</td>
<td>$34.5</td>
<td>$57.1</td>
<td>$79.9</td>
</tr>
<tr>
<td>Gas</td>
<td>$32.4</td>
<td>$53.2</td>
<td>$69.3</td>
<td>$79.9</td>
</tr>
<tr>
<td>Steam</td>
<td>$1.1</td>
<td>$1.5</td>
<td>$2.8</td>
<td>$6.0</td>
</tr>
<tr>
<td>Total</td>
<td>$67.3</td>
<td>$89.2</td>
<td>$129.2</td>
<td>$165.8</td>
</tr>
</tbody>
</table>

Note: Dollars in Millions

Note: 2012* = Actual through Q3 plus forecasted Q4

Q. What are the Company’s projected 2012 capital costs when using actual costs incurred through the third quarter (“Q3”) plus the projected fourth quarter (“Q4”)?

A. The company is expecting unprecedented levels of interference expenditures for Capital in fiscal year 2012. Through Q3 the Company has incurred $65.8 million in electric, $55.7 million in gas and $3 million in steam. The Company is projecting $79.9 million in electric, $79.9 million in gas and $5.9 million in steam through year end.

Q. What is the forecast for capital expenditures related to interference going forward?
A. The Company is forecasting from 2013 to 2017 the following expenditures:

<table>
<thead>
<tr>
<th>Capital</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric</td>
<td>$70.9</td>
<td>$69.3</td>
<td>$63.7</td>
<td>$60.6</td>
<td>$54.6</td>
</tr>
<tr>
<td>Gas</td>
<td>$74.2</td>
<td>$76.0</td>
<td>$72.9</td>
<td>$61.0</td>
<td>$50.7</td>
</tr>
<tr>
<td>Steam</td>
<td>$3.2</td>
<td>$5.0</td>
<td>$4.6</td>
<td>$2.8</td>
<td>$2.0</td>
</tr>
<tr>
<td>Total</td>
<td>$148.3</td>
<td>$150.3</td>
<td>$141.2</td>
<td>$124.4</td>
<td>$107.3</td>
</tr>
</tbody>
</table>

Note: Dollars in Millions

Q. Was the exhibit entitled “ACTUAL AND FORECASTED CAPITAL EXPENDITURES” prepared under your supervision or direction?

A. Yes, it was.

Q. What does this exhibit show?

A. This exhibit shows actual capital expenditures for 2009 to 2011 for Electric, Gas and Steam. This exhibit also shows forecasted capital expenditures for 2012 to 2017 for Electric, Gas and Steam.

Q. How was the Company’s five-year capital forecast developed?

A. The Company’s capital forecast is comprised of the same elements as the O&M forecast: (1) recurring
annual programs; (2) projects with defined scopes; and 
(3) preliminary projects with undefined scopes.
The Company’s annual capital interference forecast is
the sum of the costs associated with the annual
programs, the projects with defined scopes and
preliminary projects with undefined scopes.
Q. Was the exhibit entitled “CAPITAL CATEGORIES OF
EXPENDITURES” prepared under your supervision or
direction?
A. Yes, it was.
MARK FOR IDENTIFICATION AS EXHIBIT ___ (MISP-5)
Q. What does this exhibit show?
A. This exhibit shows forecasted Capital expenditures by
category for electric, gas and steam.
Q. What are the major drivers for the Company’s projected
capital costs in 2013 and 2014?
A. The major drivers for the Company’s forecasts for 2013
and 2014 are the same as those discussed above in the
O&M section of our testimony.
Q. In past proceedings, Staff has proposed basing the
forecast for interference expenditures on a five-year
average of recent actual costs. Is a forecast based
MUNICIPAL INFRASTRUCTURE SUPPORT PANEL - STEAM

upon a five-year average of recent actual costs reasonable for this rate proceeding?

A. As discussed above in the O&M section of our testimony, using an average of actual costs to develop a forecast is appropriate for certain types of interference expenditures (i.e., annual programs). However, this approach is not reasonable for most interference expenditures.

Q. Please explain why.

A. As indicated above in our discussion of O&M expenses, two areas that cannot be accounted for in a historical level analysis alone, and are key drivers of actual future expenditures, are the order of magnitude and the timing of planned and pending municipal projects. For example, the current rate case annual capital expenditure targets were set exclusively on the basis of the five-year historical averages. As a result, the actual capital costs incurred over the course of the current rate plan have been significantly higher than the targets set using solely a five-year historical average as shown in the table below:
### Capital

<table>
<thead>
<tr>
<th></th>
<th>RY1</th>
<th>RY2</th>
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<tbody>
<tr>
<td>Elec. Target</td>
<td>$38.0</td>
<td>$38.0</td>
</tr>
<tr>
<td>Elec. Actual</td>
<td>$33.4</td>
<td>$70.9</td>
</tr>
<tr>
<td>Gas Target</td>
<td>$33.0</td>
<td>$33.0</td>
</tr>
<tr>
<td>Gas Actual</td>
<td>$68.5</td>
<td>$75.0</td>
</tr>
<tr>
<td>Steam Target</td>
<td>$1.9</td>
<td>$1.9</td>
</tr>
<tr>
<td>Steam Actual</td>
<td>$3.5</td>
<td>$3.6</td>
</tr>
</tbody>
</table>

**Note:** Dollars in Millions

Electric **RY1** = 4/1/10-3/31/11, **RY2** = 4/1/11-3/31/12

Gas/Steam **RY1** = 10/1/10-9/30/11, **RY2** = 10/1/11-9/30/12

### MITIGATION

**Q.** What measures has the Company undertaken to mitigate interference costs?

**A.** In addressing interference costs, the Company is required to adhere to state and municipal statutes, codes, regulations and other established protocols. Given the nature of interference work and the fact that this work (and related expenditures) is driven by factors outside of the Company’s control, the opportunities for mitigation measures are, consequently, limited. As part of the Company’s initiative to address its Cultural Imperatives, which includes a cost conscious culture and improving
external relationships with the numerous municipal agencies, the Public Improvement / Engineering department has implemented the following aggressive initiatives to mitigate interference costs:

**Strengthening Public Improvement Engineering:**

Engineering is the first opportunity for cost mitigation when interfacing with various municipal agencies during the initial design and planning phases of a project. Engineering takes the opportunity to study the agencies’ scope of work and perform an in-depth analysis to determine the type, nature, and extent of the interferences. During the planning phase of agency projects, Engineering may suggest/request and discuss possible scope changes to minimize interferences and request design accommodations. The engineering group also provides field consulting to mitigate the impact of unanticipated as-found subsurface field conditions. Additionally, when the municipality determines the street will be excavated Con Edison utilizes this opportunity to consolidate existing infrastructure and reduce costs but still provide the same level of service capacity. For example, when multiple service
boxes or manholes exist on a block, the Company’s engineering group may redesign and consolidate to a smaller quantity of structures. This reduction will create additional space in the street, reduces additional maintenance locations and ultimately reduce future interferences.

Maximize Number of Section-U Projects: Section U is the section in the City bid contract with the contractor where the utilities identify and quantify the interference scope of work with the sole purpose of coming to a unit price agreement that is binding and final. The purpose of the contract requirement is to identify work where the existence of utility facilities potentially impacts the productivity of the City work and improve the coordination of construction requirements for the City and the Company. The protocol for Section U is established jointly by the City of New York and the major utilities operating in the City. The Section U protocol provides the Company with certain limited leverage to negotiate a fair market price with the City agency contractors for the Company’s portion of interference work. Projects are not automatically classified as Section U until
Company proposals for bid package inclusion are approved by the DDC. Through efforts undertaken by the Company’s engineering department to meet City requirements, the Company has been able to maximize the number of interference projects categorized under Section U. Those efforts include earlier coordination of project scope, increased accommodation requests and defined scope submissions.

**Joint Bid Protocol:** For work performed under the Joint Bid protocol, the utility interference work is included in the City bid documents and is competitively bid along with the City work. The Joint Bid protocol was introduced by State Legislation in the Coordinated Construction Act in 2004 specifically for the work funded by the Federal Government in Lower Manhattan. The City and the utilities spent approximately two years establishing the detailed process for Joint Bid and the first project under this protocol was bid in late 2007. Legislation was also passed to include the Water Tunnel Number 3 projects in Manhattan under the Joint Bid protocol in September 2010. However, this legislation has been stayed as a result of a challenge in court by the General
Contractors Association. Instead of delaying the Water Tunnel projects pending a resolution of this issue by the court, the City decided to proceed with these projects under Section U.

Negotiating Team: The Company utilizes a negotiating team concept. The team consists of the estimator, the project engineer, the borough manager and the borough project specialist. The negotiating team concept has been extremely successful since its inception by facilitating pricing uniformity for the same work items throughout the boroughs and reducing prices for commonly utilized items which resulted from estimating time studies.

The Company has utilized multi-year and multi-borough contractor agreements to establish consistent pricing across its service area. This effort has also reduced Company administrative costs that would normally be associated with multiple negotiations for different projects with the same vendor.

Evaluate field conditions to create new Work Units:

Con Edison has been working with the Empire City Subway since the mid 1990’s to develop a list of common work units as a means of standardizing
MUNICIPAL INFRASTRUCTURE SUPPORT PANEL - STEAM

municipal field work. These standardized units are referred to as Con Edison, ECS and Time Warner (C.E.T.) specification items. As recent as 2010, the list has expanded to over 250 items that cover commonly utilized utility work tasks.

Maximize Lump Sum Agreements: The Company promotes lump sum agreements, which are single price agreements that encompass all labor, material and equipment to complete the units outlined in the City contract. This creates financial incentive for efficient construction management by the contractor instead of negotiating for extra work on a piecemeal basis. The agreements also reduce the Company’s risk by minimizing adverse impact on Company facilities and potential costs associated with project schedule delays.

Arbitration Strategy: Under the Section U protocol, the contractor of record for any Section U project negotiates in an attempt to reach an agreement with the utilities prior to the start of the project. If an agreement cannot be reached, the matter is submitted for arbitration to the American Arbitration Association and the result is final and binding.
Another goal served by estimating time studies and the negotiating team concept is to support efforts to successfully challenge contractors in arbitration if the pricing offered by the contractor is inconsistent with fair market value. In 16 arbitration cases the Company has disputed the sum total of $23.3 million in contractor claims and the arbitration resulted in only $4.6 million in liability. This process has saved the Company $18.7 million in disputed charges from municipal contractors since January 2000.

Structure Department Functions for Maximum Efficiency:

The Company utilizes the trenchless technology concepts where and when possible by meeting, on water and sewer projects, with the DEP to analyze upcoming projects and determine if relining the existing structure is feasible compared to traditional excavation. The Company meets with the DEP to examine engineering plans and determine if a critical Company facility poses challenges within the project area. The Company then performs a cost analysis to determine if the use of the trenchless technology is more cost effective in lieu of the open cut method to repair existing water or sewer infrastructures. Since 2009,
the Company estimates savings of approximately $5 million by utilizing this business practice. The key advantages to the trenchless method are the reduced impact to pedestrian and traffic patterns, shorter City construction schedule, and the reduced costs.

**Opportunities to Reduce Project Costs by Performing Advanced Relocation:**

When feasible, advanced relocation of Company facilities is performed to avoid interferences with City facilities. This is predominately performed in the outer boroughs where it is more feasible as opposed to the congested streets in Manhattan. Recently and when practical, the Company has been more aggressive in attempting to perform work in advance in Manhattan to minimize the impact on the City schedule, the community, and reduce the financial exposure from having to negotiate pricing with the City’s contractor. The Company utilizes the Company’s existing unit price contractors to perform the work in advance at a lower overall cost when compared to the costs when using the municipal City contractors to perform interference work.
One example of this is the Company’s proactive approach to begin the infrastructure work for the Times Square reconstruction project in advance of the City’s scheduled start date. Due to the City’s aggressive project schedule, the complexity of the underground systems in that area, and the high profile location within Manhattan the Company began work one year in advance of the proposed municipal start date. By working with the City agencies and the Times Square Alliance the advanced work will result in less interference on the City project, which in turn will minimize overall interference costs and potential delays to this high profile project.

**RECONCILIATION**

Q. Do the Company’s current electric, gas and steam plans provide for reconciliation of capital and O&M expenditures related to interference?

A. Yes. For O&M expenses, each plan generally provides for full downward reconciliation of actual expenses below the targeted level of expenses and reconciliation of amounts above the target level of expenses plus 30 percent, shared on an 80/20 basis...
between customers and the Company, respectively, with limited exceptions.
For capital expenditures, each rate plan generally provides for full downward reconciliation and no reconciliation of capital expenditures above the target level except in limited circumstances under the Gas Rate Plan.

Q. Is the Company proposing any modifications to these mechanisms as they apply to either capital or O&M expenditures?

A. Yes. For capital expenditures, the Company is proposing a full reconciliation of Municipal Infrastructure Support capital expenditures in the context of a comprehensive net plant reconciliation mechanism, which is presented by Company witness Muccilo.
For O&M expenses, the Company is proposing to eliminate the current limitations on recovering actual Municipal Infrastructure Support O&M expenses above the target.

Q. Why should the limitations on sharing actual O&M expenses above the target be eliminated?
A. As we have explained in this testimony, interference costs are beyond the Company’s direct control, are not subject to reasonable estimation, are driven by the infrastructure work performed by the City and other municipalities, and constitutes work the Company is required to perform pursuant to a schedule established by the municipality that often requires a significant diversion of Company resources and significant incremental costs. Accordingly, the Company believes that rates should reflect a reasonable estimate of these expenses and then be subject to full reconciliation for actual expenses above or below the target.

Q. Has the Commission rejected asymmetrical reconciliation of interference expenses in the past?

A. Yes, it has. In its 2009 rate order in Case 08-E-0539, issued April 24, 2009, the Commission rejected downward-only reconciliation of interference O&M expenses, stating (p. 63):

Given the extent to which the Company’s municipal infrastructure operation and maintenance expenses are driven primarily by the City’s plans and only secondarily by the efficiency with which the Company completes the necessary work, we decline to adopt a one-way, downward-only reconciliation for this expense category.
Q. Didn’t the Company propose and the Commission adopt asymmetrical sharing of interference O&M expenses in adopting the current rate plan?

A. Yes, but as part of a comprehensive multi-year rate plan that reflected a significant give-and-take among the parties on a myriad of issues. Outside the context of a settlement, there is no reasonable basis for asymmetrical treatment of these expenses.

Q. Should there be a concern that the Company will not seek to minimize its interference costs if there is full reconciliation of these expenses?

A. There should be no concern. The Company has demonstrated a long-standing and consistent approach to mitigating these costs, to the extent practicable, utilizing multiple controls both internal and external of the Company, and continued coordination between the City and the Company during the design phase, which is a critical component of the continued success in controlling rising costs. This approach has also been evident during periods when a bilateral reconciliation mechanism for interference expenses was in place.
Moreover, these cost mitigation efforts are also now engrained in the Company’s efforts to implement the cost management cultural imperative resulting from the recent Management Audit.

Q. Is reconciliation of these expenses of increasing importance to the Company?

A. Yes, for two reasons. First, as we have seen in recent years, the Company’s spending is subject to material changes for large, new City projects not captured by the forecasts established in the rate proceeding. Second, there has been a steady increase in City infrastructure spending for which there is no reasonable basis to assume a change during the Rate Year.

Q. Please explain.

A. The City spent $805 million in 2009 in the categories that typically involve interference work. In 2013, the City has committed $1.1 billion for work in these same categories. If the amount of work performed by the City is consistent with its forecast, the Company’s interference costs similarly will increase. The Company has experienced over the past few years that the project scopes have increased significantly.
As an example, during the historical year the Company spent $86.2 million ($65.5 for electric, $15.1 million for gas and $5.6 million for steam), on O&M projects and an additional $6.8 million ($5.1 million for electric, $880 thousand for gas and $860 thousand for steam), on O&M specific to Water Tunnel Number Three.

For capital, during the same historical period, the Company spent $118 million ($57.7 million for electric and $60.3 million for gas), on capital projects and an additional $38.7 million ($20.6 million for electric, $15.1 million for gas and $3 million for steam), on Water Tunnel Number Three. This is not indicative of traditional interference work. The magnitude and scale of the Water Tunnel Number Three interference work is unprecedented. For the reasons explained earlier in our testimony, this City project, with its multiple sub-projects, is set to run through the 2020’s with the most significant amount of work occurring between 2012 and 2017.

Q. Are there other reasons why the Company’s infrastructure spending has been increasing and is expected to continue increasing?
A. Yes. The Company’s interference costs are forecasted to increase due to the City’s aggressive programs to address its aging infrastructure, City scope changes, new water tunnel distribution mains, revitalization of neighborhoods, increased responses to community needs and project variables including the types of infrastructure projects selected, community congestion (residential/commercial/boroughs), and Company existing facility interference impacts.

Q. Assuming the interference costs you forecast are adopted for purposes of setting rates in this proceeding, are you still recommending a symmetrical bilateral reconciliation mechanism?

A. Yes we are.

Q. Please explain why.

A. Although the City’s spending levels are higher today and expected to remain higher for the reasons previously explained in our testimony, they are still subject to material variation outside the Company’s control. And in the context of a one-year rate plan, the slippage or acceleration of a major project for a short period could have a major impact on the relationship between actual and forecasted
expenditures, which the Company has no reasonable opportunity to mitigate.

Q. Are there other potential interference costs that cannot be reasonably forecasted and included in the Company’s financial projections?

A. Yes. There are many variables affecting the actual City expenditures that are beyond the Company’s control. The Company is at risk for unidentified major projects (e.g., Emergency Repairs, Tappan Zee Bridge replacement final design scope, bioswales, critical infrastructure upgrades, fast track projects by City agencies), expansion of shared costs between the Company and the municipality (i.e., City Engineering costs, Traffic Enforcement Agents, Pedestrian Managers) and unanticipated administrative, legislative or policy changes for the service territory.

Q. Have the municipalities in your service territory identified any municipal infrastructure projects to be initiated as a result of Superstorm Sandy?

A. Municipalities are making assessments of potential infrastructure projects. To our knowledge, no specific projects have yet been identified.
Q. Are any municipal infrastructure support costs related to potential municipal projects resulting from Sandy reflected in this rate request?

A. No. Until the municipalities complete their assessment process and identify infrastructure projects, a reasonable estimate of potential support costs cannot be determined. The Company will update its forecast during the course of this proceeding if such information becomes available.

Q. Do you have any concluding remarks?

A. Yes. For all of the foregoing reasons, the Commission should adopt the proposed reconciliation mechanisms for capital and O&M interference expenses proposed in this testimony and by Company witness Muccilo.

Q. Does this complete your testimony?

A. Yes, it does.