

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
Consolidated Edison Company of New York, Inc.

Case 08-E-0539

September 2008

Prepared Testimony of:

Staff Infrastructure Investment Panel

Kin Eng, Utility Analyst 3

Leka P. Gjonaj, Power Transmission
Planner 4

Nicola Jones, Utility Engineer 2

Patrick J. Maher, Utility Engineer 2

Michael J. Rieder, Utility Engineer 3

William D. Wade, Utility Engineer 3

Office of Electric, Gas, & Water
State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350

State of New York
Department of Public Service
90 Church Street
New York, New York 10007

- 1 Q. Please state your names, employer, and business
2 address.
- 3 A. Kin Eng, Leka P. Gjonaj, Nicola Jones, Patrick
4 J. Maher, Michael J. Rieder, and William D.
5 Wade. We are all employed by the New York State
6 Department of Public Service (Department). Mr.
7 Eng and Ms. Jones are both located at 90 Church
8 St., New York, New York 10007. Messrs. Gjonaj,
9 Maher, Rieder, and Wade are located at Three
10 Empire State Plaza, Albany, New York 12223.
- 11 Q Mr. Eng, what is your position at the
12 Department?
- 13 A. I am a Utility Analyst 3 assigned to the
14 Electric Distribution Systems Section in the
15 Office of Electric, Gas, and Water.
- 16 Q. Please describe your educational background.
- 17 A. I graduated from New York Technical College with
18 an Associate in Applied Science Degree in
19 Electrical Technology in 1986.
- 20 Q. Please describe your responsibilities with the
21 Department and professional experience.
- 22 A. I joined the Department in 1981. I supervise
23 the Electric Distribution Systems Section in the
24 Office of Electric, Gas, and Water in New York

1 City. My current responsibilities include:
2 monitoring utility operations to determine if
3 facilities are operated and maintained in
4 accordance with appropriate codes and safe
5 operating practices; ensuring that utilities are
6 adequately prepared to respond to emergencies by
7 reviewing utilities' electric emergency plans
8 and attending annual emergency drills; and,
9 monitoring utility operation and maintenance
10 activities to ensure acceptable electric service
11 reliability. I have been involved in many
12 investigations of electric utility service
13 disruptions, including the Westchester Outages
14 in January 2006, the Long Island City Network
15 outages in 2006, the Jodie Lane Fatality
16 Investigation, the August 2003 Blackout, the
17 September 11th terrorist attack in 2001, and the
18 Washington Heights outages in 1999.

19 Q. Have you previously testified before the
20 Commission?

21 A. Yes. I testified in Case 04-E-0572 regarding
22 infrastructure investment and Case 07-E-0523
23 regarding infrastructure investment, reliability
24 performance mechanism, and emergency management.

1 Q. Mr. Gjonaj, what is your position in the
2 Department?

3 A. I am employed as a Power Transmission Planner 4
4 in the Bulk Transmission Section of the Office
5 of Electric, Gas, and Water.

6 Q. Please state your educational background and
7 professional experience.

8 A. I hold a Bachelor of Science degree in
9 Mechanical Engineering from Clarkson University
10 and a Master of Science in Mechanical
11 Engineering degree from Rensselaer Polytechnic
12 Institute. I am also a licensed Professional
13 Engineer in New York State. Before joining the
14 Department in November 1990, I was employed by
15 General Electric as a Manufacturing Engineer in
16 its Defense Systems Division. I was responsible
17 for designing, implementing, and recommending
18 manufacturing and quality control equipment
19 needed for the production of highly specialized
20 components and systems for the United States
21 Navy.

22 Q. Please describe your duties with the Department
23 of Public Service.

24 A. My areas of responsibility include and have

1 included conducting electric system computer
2 simulations and the review and analysis of
3 proposed power plant siting projects under
4 Public Service Law Article X, wholesale market
5 matters, cyber security, utility fuel budgets,
6 purchased power contracts, depreciation, capital
7 budgets, operating and maintenance expenses,
8 rate design, cost allocation, and cost of
9 service determinations.

10 Q. Have you previously testified before the
11 Commission?

12 A. Yes. I have testified in Commission proceedings
13 on a broad range of topics including: review of
14 construction budgets; depreciation expense and
15 rate base; rate design matters; purchased power
16 and utility fuel budgets/targets; independent
17 power producer contracts; and, electric
18 production computer simulations.

19 Q. Ms. Jones, what is your position at the
20 Department.

21 A. I am a Utility Engineer 2 assigned to the
22 Electric Distribution Systems Section in the
23 Office of Electric, Gas, and Water.

24 Q. Please describe your educational background.

1 A. I graduated from Rensselaer Polytechnic
2 Institute with a Bachelor of Science Degree in
3 Civil Engineering and a Bachelor of Science
4 Degree in Management in 2003.

5 Q. Please describe your responsibilities and
6 professional experience with the Department.

7 A. I joined the Department in 2005. My
8 responsibilities include: monitoring electric
9 utility safety and reliability; investigating
10 the causes and utility response to emergency
11 events; monitoring electric distribution
12 infrastructure projects; and monitoring utility
13 compliance with electrical codes and with
14 electric service and safety standards.

15 Q. Have you previously testified before the
16 Commission?

17 A. Yes. I testified in Case 07-E-0523 regarding
18 infrastructure investment and reliability
19 performance mechanism.

20 Q. Mr. Maher, what is your position in the
21 Department?

22 A. I am employed as a Utility Engineer 2 in the
23 Safety, Electric, Gas & Steam Section of the
24 Office of Electric, Gas & Water.

1 Q. Please state your educational background and
2 professional experience.

3 A. I hold a Bachelor of Science degree in
4 Electrical Engineering from the University of
5 Missouri. Before joining the Department, I was
6 a Field Engineer with Stone & Webster
7 Engineering Corporation and a Senior Engineer
8 with Galson Corporation in Syracuse.

9 Q. Please describe your duties with the Department
10 of Public Service.

11 A. I am currently involved with ensuring that the
12 electric utilities adhere to the Commission's
13 Electric Safety Standards.

14 Q. Have you previously testified before the
15 Commission?

16 A. Yes, I have testified in the Iberdrola - Energy
17 East Merger Case 07-M-0906 and the NYSEG Rate
18 Case 05-E-1222 regarding electric reliability
19 performance mechanisms.

20 Q. Mr. Rieder have you already discussed your
21 educational background, professional and
22 testimonial experience, and responsibilities?

23 A. Yes, that information is included in my
24 individual testimony submitted in this

1 proceeding.

2 Q. Mr. Wade, what is your position in the
3 Department?

4 A. I am a Utility Engineer 3 assigned to the Gas
5 Rates Section in the Office of Electric, Gas, &
6 Water.

7 Q. Please state your educational background and
8 professional experience.

9 A. I graduated summa cum laude from Union College,
10 Schenectady, New York with a Bachelor of Science
11 degree in Civil Engineering in 1979. I also
12 received a Master of Engineering degree from
13 Union College in 1983 and a Bachelor of Arts
14 degree in Secondary Education from Trinity
15 College, Burlington, Vermont, in 1990. I joined
16 the Department of Public Service in 2003, coming
17 from the New York Department of Transportation
18 where I held a civil engineering position. My
19 professional experience includes eighteen years
20 in engineering, seven and a half years in
21 business, and three and a half years in
22 education. My engineering experience includes
23 project, facilities, process, and quality
24 engineering positions with General Electric and

1 IBM. My business experience was with MKW
2 Enterprise Incorporated, a specialty valve
3 supply company that I co-founded in 1992 and
4 sold in 1999. At MKW, I oversaw the day to day
5 operations and was responsible for the company's
6 finances and accounting. My educational
7 experience involved teaching mathematics and
8 engineering to students at both the high school
9 and college level.

10 Q. Please describe your duties with the Department
11 of Public Service.

12 A. My duties with the Department of Public Service
13 have been the analysis of various regulatory
14 concerns, including rate design, the forecast of
15 gas delivery volumes and revenues, depreciation
16 rates, rate base, capital budgets, operation and
17 maintenance expenses, rate unbundling, and
18 revenue decoupling.

19 Q. Have you previously testified before the
20 Commission?

21 A. Yes. I have testified in numerous Commission
22 proceedings with respect to rate design, sales
23 and revenue forecasts, depreciation rates, and
24 rate unbundling.

1 Overview

2 Q. What is the purpose of the Staff Infrastructure
3 Investment Panel's (SIIP) testimony?

4 A. The purpose of this testimony is to address
5 Consolidated Edison Company of New York, Inc.'s
6 (Con Edison or the Company) transmission and
7 distribution (T&D) capital projects and
8 operation and maintenance (O&M) expense programs
9 as presented by the Company's Infrastructure
10 Investment Panel (IIP). Other aspects of the
11 Company's capital programs, including electric
12 production and shared services, will be
13 separately discussed by other Staff in panel
14 testimony. However, those Panels will refer to
15 concepts discussed throughout this testimony.
16 The Company's IIP presents capital projects and
17 programs for the calendar years 2008 through
18 2012. It also presents O&M program expenses for
19 the rate years ending March 31, 2009, 2010,
20 2011, 2012, and 2013. We are recommending
21 adjustments that cumulatively reduce the
22 Company's rate year T&D plant in service by
23 \$125.769 million and expense adjustments that
24 reduce the Company's rate year T&D O&M expenses

1 by \$22.528 million. While Staff is addressing
2 only a one-year case in this proceeding, the
3 rate year ending March 31, 2010, we did review
4 the Company's proposed capital and O&M spending
5 plans beyond the rate year. As such, we will
6 discuss our findings, including our proposed
7 plant levels, for the rate years proposed by Con
8 Edison ending March 31, 2011 and 2012.

9 Q. Please describe how you plan to discuss the
10 Company's T&D capital projects and O&M expense
11 programs.

12 A. First, we will summarize our proposed
13 adjustments to the Company's forecasted net T&D
14 plant accounts and our adjustments to the
15 Company's proposed O&M spending. Second, we
16 will explain the extent of our review of the
17 Company's T&D capital and O&M projects and
18 programs and describe the general nature of our
19 adjustments. Third, we will explain in detail
20 our recommended adjustments for each project and
21 program by operational area. In so doing, we
22 will first present our adjustments to the
23 Company's capital projects for System
24 Operations, continue with Transmission

1 Operations, Substation Operations, and conclude
2 with Electric Operations. Fourth, we will
3 present our adjustments to the Company's O&M
4 programs by operational area in the same order
5 as we did for the Company's capital projects.
6 We will then discuss our support for a cap on
7 net plant amounts and quarterly reporting of
8 project cost variances, as sponsored by Staff
9 witness Padula. Finally, we will discuss issues
10 related to a generator interconnection project
11 and discuss our proposal to increase the current
12 productivity imputation.

13 Q. Does your analysis refer to, or otherwise rely
14 upon, any information obtained during the
15 discovery phase of this proceeding?

16 A. Yes, we will refer to, and have relied upon,
17 several responses to Staff Information Requests
18 (IR), which we are sponsoring as Exhibit ____
19 (SIIP-1).

20

21 Summary of Adjustments

22 Q. Please summarize the impact your recommended
23 adjustments to the Company's T&D capital budget
24 will have on the level of electric plant to be

1 used for ratemaking purposes in this case.

2 A. First and foremost, we are not proposing changes
3 to the Company's T&D capital budget. The
4 Company is entitled to spend at whatever level
5 it deems appropriate to provide safe and
6 adequate service. Rather, we are recommending
7 adjustments to the amount of plant forecasted to
8 be added to the Company's plant in service
9 balances during the rate year and, thereby,
10 adjusting the amount of carrying charges allowed
11 to be recovered from customers. These
12 adjustments reflect the level of capital
13 additions the Company has justified in its
14 initial rate case presentation and during the
15 discovery phase of this proceeding and, thus,
16 the level of plant in service that is most
17 appropriate to use in setting rates.

18 Q. If the Company completes projects, which it
19 deems appropriate to provide safe and adequate
20 service, at higher spending levels than
21 forecasted, won't customers be exposed to higher
22 electric rates than this testimony would
23 otherwise recommend?

24 A. No. The rates to be paid by customers will be

1 set in accordance with the level of forecasted
2 net plant that the Commission adopts in this
3 proceeding, as well as other cost of service
4 items. If the Company adds plant at levels in
5 excess of the forecasted level that rates are
6 based upon, there are no provisions for
7 automatically adjusting rates associated with
8 that increased level of plant. The rate impact
9 will be addressed in the Company's next rate
10 proceeding. However, as we will explain, the
11 Company, in its next rate proceeding, should be
12 required by the Commission to fully justify the
13 need and costs associated with all plant added
14 to its plant accounts in excess of the rate year
15 levels approved by the Commission in this
16 proceeding, thus protecting customers from
17 potential inappropriate overspending by the
18 Company.

19 Q. Please summarize the impact your recommended
20 adjustments will have on the amount of electric
21 T&D plant used for ratemaking purposes.

22 A. The Company's proposed T&D capital program
23 increases the amount of electric plant added to
24 plant in service by \$1.35 billion, \$1.82 billion,

1 and \$2.04 billion over the three rate years
2 ending March 31, 2010, 2011, and 2012,
3 respectively. The T&D capital adjustments we
4 recommend will reduce the amount of electric
5 plant added to plant in service by \$125.769
6 million in the rate year ending March 31, 2010.
7 Our adjustments would further reduce the amount
8 of electric plant added to plant in service by
9 \$494.261 million in a second rate year ending
10 March 31, 2011. Assuming a third rate year, our
11 adjustments, however, increase the amount of
12 electric plant expected to be added to plant in
13 service during the rate year ending March 31,
14 2012 by \$290.184 million, as result of slipping
15 closure of a major project into a third rate
16 year rather than a second rate year as proposed
17 by the Company. We provided our specific
18 capital adjustments, which are made on a
19 calendar year basis, to Staff Witness Randt.
20 Ms. Randt incorporated these adjustments into
21 the Company's plant in service forecast model to
22 develop an average net plant amount to be used
23 for ratemaking purposes for the rate year and
24 then provided the average net plant amount to

1 the Staff Accounting Panel. The Staff
2 Accounting Panel used the average net plant
3 amount to develop the Company's overall revenue
4 requirement.

5 Q. Please summarize the impact your recommended O&M
6 program adjustments will have on the Company's
7 revenue requirement.

8 A. The Company's proposed T&D O&M program changes
9 increase its annual O&M expenses by \$40.0
10 million for the rate year ending March 31, 2010
11 and by \$6.1 million and \$4.9 million if a second
12 and third year ending March 31, 2011, and 2012,
13 respectively, are added to the rate plan. The
14 T&D O&M adjustments recommended by us reduce the
15 Company's proposed annual T&D O&M level by
16 \$22.528 million for the rate year ending March
17 31, 2010.

18 Q. Please explain what you mean in saying the
19 "level of T&D plant and T&D O&M expenses to be
20 used for ratemaking purposes."

21 A. The Company presents its capital budgets on a
22 calendar year basis, which reflects the amount
23 of spending it expects to incur on capital
24 projects during that calendar year. For many of

1 its large capital projects, the Company budgets
2 expenditures over several years. When the
3 project is completed, and thus is used and
4 useful, the total dollars expended on that
5 project are added to the Company's plant
6 accounts. The Company's net plant accounts,
7 that is to say the total amount expended to
8 complete the Company's capital projects minus
9 depreciation charged to those plant accounts, is
10 the primary component of the Company's rate
11 base. The Company's rate base is one component
12 used in calculating the Company's revenue
13 requirement for a rate year by applying a rate
14 of return on the amount of net rate base. Thus,
15 the level of T&D plant assumed for ratemaking
16 purposes is the average amount of net plant in
17 service expected to be included in the Company's
18 rate base during the rate year. The amount of
19 net plant forecast is calculated by taking the
20 existing amount of plant in service during the
21 test year, per the Company's books, adding the
22 amount of plant that is expected to be placed in
23 service during each month of the link period and
24 the rate year, and subtracting an amount

1 accruing for depreciation on that plant during
2 each month. The average of the monthly net
3 plant in service balances for the rate year is
4 the level that is reflected in rate base.

5 Q. How is the amount of plant to be placed in
6 service during the rate year determined from the
7 Company's capital budgets?

8 A. Capital projects are added to the Company's
9 plant accounts using two different methods; at a
10 single point in time or ratably. When a large
11 capital project, like a substation, is
12 completed, it is added to the Company's plant
13 accounts at that single point in time. For
14 instance, if a substation is expected to be
15 completed and placed into service in May 2009,
16 the total amount expended on that project will
17 be added to the Company's plant accounts in May
18 2009. For projects with specific in-service
19 dates, the amount of plant expected to be placed
20 in service during the rate year is determined
21 from the Company's capital budgets over a number
22 of years by properly indentifying the total cost
23 of the project and the month it will be used and
24 useful for customers.

1 Q. Please continue.

2 A. For capital projects that result in the addition
3 of many pieces of plant into service throughout
4 the year, such as the installation of vented
5 manhole covers, it would be impractical to add
6 the cost of every individual vented manhole
7 cover to the Company's plant accounts each time
8 a cover is placed in service. Rather, the total
9 amount of capital dollars to be expended by the
10 Company on that capital project over the course
11 of the year is added to the plant account in
12 specific monthly amounts reflecting historical
13 seasonal construction patterns, which is said to
14 be done ratably. Thus, for projects that are
15 flowed into the plant accounts ratably, the
16 amount of plant expected to be placed in service
17 during the rate year is determined from the
18 Company's capital budgets by properly
19 identifying the most likely level of cost the
20 Company will incur for that project during the
21 year and distributing that amount to its plant
22 accounts accordingly on a monthly basis
23 throughout the forecasted rate year. The
24 Company is allowed the opportunity to recover a

1 return on, and the depreciation of, the
2 investment over the useful life of the plant.
3 The amount included in rates to recover the cost
4 of the plant, the depreciation of the plant, and
5 property taxes related to the plant is generally
6 referred to as the carrying charges on the
7 investment. With regard to the level of O&M
8 expenses used for ratemaking purposes, we are
9 setting rates based on the forecast of costs
10 proposed by the Company and adjusted by us.

11

12 Extent of Staff's Review

- 13 Q. Now that you've summarized your adjustments'
14 impact on the Company's revenue requirement,
15 please briefly describe the electric
16 infrastructure investment Con Edison proposes
17 undertaking during the next several years.
- 18 A. Con Edison identifies numerous projects designed
19 to increase its electric system capacity to
20 address load growth within its service
21 territory, reinforce its T&D system, and enhance
22 public safety related to the Company's electric
23 facilities. In addition, it also presents
24 numerous ongoing programs that address the

1 Company's aging electric system infrastructure.

2 Q. Please briefly explain the need to address the
3 Company's system capacity and its aging
4 infrastructure.

5 A. In order to continue to provide its customers
6 with a safe and reliable electric system, Con
7 Edison is obligated to provide sufficient
8 electric delivery capacity to not only meet
9 current needs, but also to meet projected future
10 needs. The load growth within Con Edison's
11 service territory has been steadily increasing
12 over the past twenty years, as shown in
13 Exhibit___(SIIP-2). The increasing demand from
14 growing customer usage increasingly stresses the
15 electric system as it is currently configured.
16 Without the proposed upgrades and
17 reinforcements, the older equipment in its
18 substations, such as transformers and feeders
19 that supply the secondary system, will
20 eventually exceed their design criteria and
21 could potentially break down over time. As a
22 result, the electric system may become less
23 reliable, thereby providing inadequate and
24 unsatisfactory electric service to customers.

1 Q. Please continue.

2 A. Con Edison, therefore, needs to continue to
3 maintain and improve its aging infrastructure.
4 The Company should proactively replace its old,
5 and in some cases undersized, overhead and
6 underground equipment. The average age of its
7 switching stations and area substations are over
8 45 and 35 years, respectively. Similarly, its
9 primary and secondary distribution cables have
10 average ages of over 24 and 37 years,
11 respectively. If the Company only replaces
12 equipment in response to an outage or equipment
13 failure, as opposed to following a well planned
14 improvement schedule, older equipment will begin
15 to fail with increasing frequency.

16 Q. What other projects has the Company proposed to
17 improve its electric infrastructure?

18 A. The Company also proposes projects that will
19 mitigate the effects of storm and heat-related
20 events, enhance its computer technology programs
21 to assist in making operating and engineering
22 decisions, and improve operating efficiencies by
23 streamlining its processes.

24 Q. Please continue.

1 A. To better address public safety issues and
2 respond to customer outages, Con Edison has
3 proposed projects to replace distribution
4 equipment, increase mitigation of hazardous
5 facilities, and implement new processes and
6 procedures to improve its emergency response.

7 Q. Please explain the review that was performed to
8 develop your recommended adjustments.

9 A. For each operational area (System, Transmission,
10 Substation, and Electric Operations) we analyzed
11 each capital project or program for which the
12 Company has budgeted expenditures during the
13 calendar years 2009, 2010, 2011, and 2012.
14 Similarly, we reviewed each O&M program proposed
15 by the Company's proposed rate years ending
16 March 31, 2010, 2011, and 2012. Our analysis
17 and evaluation of the need, timing, and cost of
18 the projects and programs resulted in our
19 proposed adjustments. Information requests were
20 submitted for every project and program.
21 Approximately 300 IRs were propounded on the
22 Company, many of which were multi-part questions
23 for a combined overall total of over 1,100
24 requests for information. We reviewed and

1 evaluated the information provided by the
2 Company in response to each of these requests.
3 Additionally, over the course of several weeks
4 we interviewed the Company personnel directly
5 responsible for the individual projects and
6 programs from each operational area. These
7 interviews were conducted to discuss, clarify,
8 and investigate each capital project and O&M
9 program proposed by the Company. Subsequent to
10 the interviews, numerous site inspections were
11 conducted to investigate and confirm the status
12 of major on-going and conceptual capital
13 projects and to assist our analysis of the
14 timing, reasonableness of cost, and need for
15 those projects.

16 Q. Please explain the process by which you
17 identified or selected specific capital projects
18 to inspect.

19 A. Because it would not have been possible to
20 physically inspect every capital project within
21 the Company's programs, our field investigations
22 focused on major capital projects scheduled to
23 be completed or that entailed a significant
24 amount of spending during the next few years.

1 For capital programs related to System
2 Operations, we toured the new energy control
3 center and inspected the East Control Room,
4 which is scheduled for renovation. During this
5 inspection, we discussed other capital projects
6 that are proposed by Con Edison to upgrade its
7 energy control center facilities and enhance the
8 operation of the Company's bulk power system.
9 The major transmission projects inspected
10 included the M29 line, which will provide a 345
11 kV transmission line from Sprain Brook, located
12 in Westchester County, to the Academy station,
13 located in northern Manhattan, and also the
14 structure reinforcement project for the two
15 Hudson River crossing towers. Other
16 transmission projects discussed during our site
17 inspections related to the construction of
18 transmission feeders connecting major
19 transmission stations to area substations either
20 proposed or already under construction. Our
21 investigation of substation work included site
22 inspections at the following substations: York,
23 Astor, Woodrow, Fresh Kills, Academy, Rainey,
24 Newtown, and Vernon. During each of these site

1 inspections, interviews were conducted with the
2 project managers to further explore the
3 Company's project management and cost control
4 measures and to confirm the in-service dates for
5 those projects. Projects undertaken by Electric
6 Operations were also inspected in order to
7 ascertain the work involved with the Company's
8 largest distribution capital programs. We
9 inspected capital project work sites related to
10 secondary main repairs, transformer and primary
11 cable replacements, and network protector
12 repairs. During these Electric Operations field
13 inspections, we observed the working conditions
14 and system design considerations that exist in
15 Con Edison's service territory.

16 Q. Did you interview, or gather information from,
17 Company personnel beyond those individuals
18 engineering and directing the work associated
19 with the actual projects?

20 A. Yes, we also submitted IRs to and interviewed
21 Company personnel responsible for the Company's
22 capital and O&M budgeting process. These
23 interviews focused on the Company's cost
24 estimation process, starting from initial order

1 of magnitude estimates through and including
2 current working estimates, which cost out a
3 project once it has been fully engineered.
4 These interviews also focused on the Company's
5 budgeting process, from a project's initial
6 inclusion in the Company's five-year plan to its
7 reflection in the annual budget for the
8 prospective year, when final appropriations are
9 made and money is actually expended on the
10 project. We also discussed cost control
11 measures that the Company utilizes to ensure
12 that its proposed projects are completed in a
13 cost effective manner, including the Company's
14 bid check process and its use of competitively
15 bid contractor services. The interviews and
16 requests for information related to the
17 Company's budgeting processes were intended to
18 provide us with information to better understand
19 and analyze the need, timing, and cost of the
20 projects and programs proposed by the Company.
21 It should be noted, however, that our review was
22 not aimed at specifically or comprehensively
23 evaluating the budgeting processes and
24 procedures, and thus, we make no recommendations

1 in that regard in this testimony. Issues
2 related to the Company's capital budgeting and
3 cost control processes and procedures are
4 subject to a more rigorous review in both the
5 on-going review of the Company's T&D capital
6 spending in Case 07-E-0523 and the on-going
7 Management Audit of the Company in Case 08-M-
8 0152.

9 Q. Please continue.

10 A. Overall, we made a significant effort to fully
11 investigate the Company's proposed T&D capital
12 spending plan and O&M budgets. During the
13 course of that review, however, we were mindful
14 that the Company has the burden of proof to
15 support its proposed investments in electric
16 plant and the costs to operate and maintain its
17 electric T&D, production, and shared services
18 infrastructure, which, except for T&D plant, is
19 discussed in other Staff Panel testimony. To
20 that end, and based on our extensive review, we
21 are proposing a number of adjustments to the
22 Company's forecasted net T&D plant accounts and
23 its proposed O&M spending levels.

24

1 General Nature of Staff's Adjustments

2 Q. Before you explain your specific T&D related
3 adjustments, please describe the general nature
4 of your adjustments.

5 A. Our review and adjustments focused on the need,
6 timing, and cost of the Company's T&D projects
7 and programs. With regard to need, we reviewed
8 the justification provided by the Company in its
9 pre-filed testimony and exhibits, conducted
10 several related interviews, and analyzed its
11 responses to information requests for each
12 project and program in order to assess the
13 project's necessity for the provision of safe
14 and adequate service. For those projects that
15 were not sufficiently justified or imminently
16 necessary, we recommend that the cost of the
17 project be excluded from the Company's rate base
18 for the purpose of setting rates in this
19 proceeding.

20 Q. Please continue.

21 A. In addition to assessing the need for each
22 project and program, we determined if the timing
23 of that project's inclusion in the Company's
24 plant in service was consistent with the

1 expected completion of the project's becoming
2 used and useful to customers. Finally, we made
3 a determination of the reasonableness of the
4 costs associated with the projects and programs.
5 Specifically, we determined if the expected
6 level of funding for each program appeared
7 reasonable. Where we conclude otherwise, we
8 propose and will discuss the appropriate
9 adjustments.

10

11 Staff Adjustments

12 Q. Please describe your proposed adjustments to the
13 Company's capital and O&M projects and programs.

14 A. With regard to our review of the level of
15 spending Con Edison proposes for its projects
16 and programs, we made adjustments to the
17 Company's proposed T&D capital and O&M spending
18 levels to reflect historic spending levels and
19 historic hiring practices for the staffing of
20 new and existing O&M programs.

21 Q. Please explain your proposed adjustments based
22 on historic spending levels.

23 A. The Company's response to DPS-40 provided
24 historic spending levels for each line item in

1 the Company's pre-filed Exhibits__ (IIP-2, 3, 4,
2 5, 6, 7, and 9) showing the amount the Company
3 budgeted and actually expended from 2003 through
4 April 2008. This data shows that the Company,
5 in the calendar years 2004 through 2007, spent
6 6.7% and 14.8% more than budgeted in capital and
7 O&M, respectively. On a line by line item basis
8 in a given calendar year, the Company's
9 overspending occurred either on projects for
10 which there was no budgeted amount for the
11 particular line item or on projects for which
12 the budget was under forecasted. For those
13 projects for which no budget line item existed
14 in a calendar year, a budget line item was
15 created in the following year. For pre-existing
16 budgeted projects, Con Edison increased the
17 budget to reflect the previous year's under
18 forecast. We made our adjustments to those
19 proposed increases where the historical
20 expenditure levels did not fully support the
21 proposed level of increase.

22 Q. Did you forecast any expenditure level for non-
23 budgeted items?

24 A. No, our analysis was limited to the line items

1 presented in the Company's pre-filed testimony.
2 We did not consider projects and programs that
3 are not in the budget but could be initiated
4 within the rate year as a result of unforeseen
5 events. As explained elsewhere in this
6 testimony, if the Company ultimately decides to
7 undertake a project that is not currently
8 contemplated, it will have the opportunity to
9 justify and prospectively recover the
10 associated, reasonable cost via its next
11 electric rate filing.

12 Q. Please continue.

13 A. Our analysis was performed using the data
14 provided in the Company's response to DPS-40 for
15 each line item. We compared historical budgets
16 to historical expenditures in order to determine
17 an appropriate forecasted level of expenditures
18 for the calendar year 2009 for capital projects
19 and in the rate year, April 2009 through March
20 2010 for O&M programs. An adjustment was made
21 to the amount budgeted by the Company in the
22 rate year to reflect our forecasted expense
23 levels for each line item. This type of
24 adjustment was made to several projects and

1 programs contained in both the capital and O&M
2 budget.

3 Q. Why is an adjustment based on historic spending
4 levels reasonable and/or appropriate?

5 A. The Company's annual budget is a projection of
6 what the Company plans to expend in order to
7 execute its capital and O&M programs. Actual
8 expenditures, conversely, provide a measure of
9 how well the Company forecasts project costs and
10 construction schedules and ultimately is able to
11 execute its capital and O&M program proposals.
12 The budgets for the capital and O&M programs
13 presented in this case are essentially
14 forecasts. Our objective here is to set rates
15 that recover, as closely as possible, the
16 reasonable costs of the capital and O&M programs
17 that we have reviewed and that Con Edison is
18 most likely to execute during the rate year.
19 The historical relationship between budgeted and
20 actual expenditures provides a reasonable guide
21 as to what the Company will likely expend on its
22 capital and O&M projects and programs rather
23 than relying strictly on its budget forecasts.

24 Q. Please explain the Panel's cost adjustments that

1 are based on historical hiring practices for the
2 staffing of new and existing O&M programs.

3 A. The Company's response to DPS-45 provides the
4 Company's staffing level, through the end of
5 July 2008, for the 346 positions approved as a
6 result of O&M program changes for the current
7 rate year ending March 2009. Through the first
8 third of the rate year, 96 positions were
9 actually filled. At this rate, 288 (3 x 96) of
10 the 346 positions, or 83.2%, will be filled by
11 the end of the rate year. Of the positions
12 filled thus far, 22 of the 96 positions, or
13 22.9%, were filled by existing employees.
14 Unfilled positions translate to lower expenses
15 than reflected in the budgets, which assumes all
16 positions are filled from the beginning of the
17 rate year and in place for the entire year. We
18 therefore applied a 60% reduction in labor and
19 associated costs for the first year of these
20 program changes based on the Company's recent
21 experience in staffing new programs and changes
22 to existing programs.

23 Q. How was the reduction of 60% developed?

24 A. Assuming a linear rate for filling the new

1 positions, actual expenditures for the rate year
2 would be about half of the rate year ending
3 level (83.2%), or 41.6%. This 41.6% figure was
4 rounded to 40% for the actual expenditures,
5 which results in a 60% reduction in the labor
6 and associated expenses for the first year of a
7 program. We consider 60% to be a conservative
8 number since it does not consider the time
9 needed to backfill positions filled by existing
10 employees and the 83.2% figure is based on all
11 O&M programs. It is unlikely that the Company
12 will backfill these positions any faster than
13 the program change positions and, excluding
14 positions for non-infrastructure investment-
15 related programs, such as the law department,
16 would have produced an even lower rate and
17 higher concomitant reductions in first year
18 program costs.

19 Q. How did you apply the 60% reduction in the first
20 year?

21 A. We performed an analysis of the data provided in
22 the Company's pre-filed Exhibits___(IIP-2, 3, 4,
23 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18,
24 19, 20, 21, 22, 23, 24, and 25), and the

1 Company's responses to DPS-40, DPS-45, and DPS
2 165 to estimate where the planned and actual
3 staffing levels would be at the beginning of the
4 rate year. Our analysis indicates that \$10.431
5 million of the \$34.505 million in program change
6 staffing was planned to be filled by the
7 beginning of the rate year with the current fill
8 rate indicating an actual staffing level of
9 \$6.328 million (\$2.1093 million / 1/3 year) at
10 the beginning of the rate year. This represents
11 a \$4.103 million adjustment to the staffing at
12 the beginning of the rate year. A first year
13 general adjustment of \$3.098 million, consisting
14 of \$2.462 million (60% of \$4.103 million) in
15 labor and \$0.636 million (25.82% of \$2.462
16 million) in associated costs, was made for the
17 projected shortfall in staffing from the planned
18 staffing as detailed in the Company's pre-filed
19 exhibits and IR responses. The \$0.636 million
20 in associated costs was calculated using the
21 same ratio of associated costs to labor costs in
22 our specific line item by line item adjustments.
23 We then proceeded to make line item by line item
24 adjustments for those programs where additional

1 staffing was projected during the rate year and,
2 where applicable, additional adjustments for
3 associated costs. Exhibit___(SIIP-3) shows the
4 summary of our adjustments based on both
5 historical costs and hiring practices.

6 Q. Please explain associated cost adjustments.

7 A. Associated costs include material and supplies,
8 environmental cleanup, vehicles and equipment
9 costs that are incurred as a result of the work
10 being performed by the additional employees. We
11 assumed that these costs are proportional such
12 that if only 40% of the employees were actually
13 hired, then only 40% of the associated costs
14 would be incurred.

15 Q. Are there any cost adjustments based on
16 historical hiring practices for the staffing of
17 new and existing O&M programs that are
18 attributable to the Company's July 25 update?

19 A. Yes. On July 25, 2008, Con Edison provided an
20 update to its original filing which included an
21 additional \$4.865 million in labor, \$0.836
22 million in contract labor and \$0.183 million in
23 materials and supplies for maintenance related
24 to capital expenditures. We recommend a first

1 year adjustment of \$3.024 million (\$2.920
2 million in labor costs and \$0.104 million in
3 materials and supplies) using the 60% reduction
4 based on the historical hiring practices.

5 Q. Please summarize your adjustments based on
6 historical costs.

7 A. We recommend adjustments based on historical
8 costs of \$44.613 million in capital expenditures
9 and \$2.865 million in O&M program expenditures.
10 For substation operations, the adjustments total
11 \$32.6 million in capital. There are no
12 adjustments based on historical costs to O&M
13 programs for substation operations. For system
14 and transmission operations, the adjustments
15 total \$0.15 million in capital and \$1.465
16 million in O&M programs. For electric
17 operations, the adjustments total \$11.863
18 million in capital and \$1.400 million in O&M
19 programs.

20 Q. Please summarize your adjustments based on
21 historical hiring practices for the staffing of
22 new and existing O&M programs.

23 A. We recommend adjustments based on historical
24 hiring practices to staff O&M programs of

1 \$16.658 million. Of this total, \$13.629 million
2 is labor cost related and \$3.029 million is
3 related to associated costs. Included in this
4 adjustment is a general adjustment of \$2.462
5 million in labor costs and \$0.636 million in
6 associated costs to reflect lower staffing
7 levels at the start of the rate year versus the
8 planned staffing levels and the adjustment to
9 the July 25, 2008 Company update of \$2.920
10 million in labor costs and \$0.104 million in
11 materials and supplies. For substation
12 operations, the adjustments total \$0.374 million
13 in labor costs and no adjustments for associated
14 costs. For system and transmission operations,
15 the adjustments total \$1.191 million in labor
16 costs and \$0.816 million in associated costs.
17 For electric operations, the adjustments total
18 \$6.682 million in labor costs and \$1.473 million
19 in associated costs.

20 Q. Does the Panel have other adjustments as a
21 result of its investigation?

22 A. Yes, we will now discuss our adjustments to
23 specific projects and programs that are not
24 included in the foregoing discussion.

1 Capital Adjustments

2 System Operations

3 Q. What level of capital expenditures has the
4 Company proposed for this area?

5 A. For System Operations, as shown on the Company's
6 pre-filed Exhibit___ (IIP-9), for years 2009,
7 2010, and 2011, projected capital expenditures
8 total \$16.8 million, \$9.75 million, \$3.25
9 million, respectively.

10 Q. Are you proposing adjustments in this area?

11 A. Yes, we propose adjustments for years 2009 and
12 2010 totaling \$2.5 million and \$2.0 million,
13 respectively.

14 Q. Please identify the project or program and the
15 level of the proposed adjustment.

16 A. For the Operation Requirements (On-Line Systems)
17 project, we propose reductions of \$2.0 million
18 in 2009 and \$1.5 million in 2010. For the Bulk
19 Power Improvements project we propose reductions
20 of \$0.5 million in 2009 and \$0.5 million in
21 2010.

22 Q. Please provide a brief description of the
23 Operation Requirements (On-Line Systems)
24 project.

1 A. As shown on the Company's pre-filed
2 Exhibit___(IIP-22), page 1 of 21, this category
3 comprises a number of projects. One of the
4 projects entitled "EMS for Electric/Steam
5 Operation," more fully described on page 15 of
6 the same exhibit, is to replace the Company's
7 steam system Energy Management System (EMS) that
8 is co-located within the Company's transmission
9 and distribution EMS in its Energy Control
10 Center (ECC).

11 Q. What did your review find for this program?

12 A. Based on our ECC site investigation and
13 discussions with the Company, it is clear that
14 the steam system EMS capital replacement costs
15 should be borne by steam customers and not the
16 Company's electric customers. If, however, the
17 Company can demonstrate that some portion of the
18 steam system EMS function benefits electric
19 customers, a different allocation method could
20 be proposed by the Company for Staff's review
21 and approval.

22 Q. What is your recommendation?

23 A. We recommend a reduction of \$2.0 million in 2009
24 and \$1.5 million in 2010 for the Operation

1 Requirements (On-Line Systems) project.

2 Q. Please provide a description of the Bulk Power
3 Improvements Project.

4 A. Briefly, the Company's newly installed Energy
5 Management System, with its fully digitized
6 operator interface, has created the potential
7 for displaying and combining data from the micro
8 level (circuit-by-circuit) to a macro or system
9 level, and for accessing data from other
10 databases (e.g., EPRI) at the "click-of-the-
11 mouse." The Company could use this capability,
12 in part, to create visualization tools for its
13 bulk power system operators.

14 Q. What did you find in your review of the Bulk
15 Power Improvements project and what is your
16 recommendation?

17 A. During our meeting with the Company at the ECC,
18 it became apparent that there were no firm
19 Company plans, requests for proposals, or design
20 instructions yet developed for this project. We
21 understand that this project is still early in
22 its conceptual planning phase. Further, the
23 Company's response to DPS-50, requesting a
24 priority ranking of capital projects, showed

1 this to be the lowest ranked project in the
2 System and Transmission Operations area. Based
3 on the foregoing, we recommend a \$0.5 million
4 reduction in 2009 and a reduction of \$0.5
5 million in 2010.

6 Transmission Operations

7 Q. What level of capital expenditures has the
8 Company proposed for this area?

9 A. For Transmission Operations, as shown on the
10 Company's pre-filed Exhibit___ (IIP-4), in years
11 2009, 2010, and 2011, the capital expenditures
12 total \$207.194 million, \$165.050 million, and
13 \$90.350 million, respectively.

14 Q. Do you propose adjustments in this area?

15 A. Yes, we propose reductions in years 2009, 2010,
16 and 2011 that total \$17.450 million, \$11.15
17 million, and \$11.0 million, respectively. In
18 percentage terms, this represents reductions of
19 8.42%, 6.76% 14.11%, in the years, 2009, 2010,
20 and 2011, respectively.

21 Q. Please identify the project or program and the
22 associated level of the proposed adjustments.

23 A. For the Vernon West 49th St-38M72 Upgrade
24 project (Vernon), we propose a \$6.3 million

1 reduction. For the Emergent Transmission
2 Reliability program, we propose a \$10 million
3 reduction in each of the years 2009, 2010, and
4 2011. And, for the Transmission Feeder Failures
5 program, we propose a \$1.0 million reduction in
6 each of the years 2009, 2010, and 2011.

7 Q. Please provide a description of the Vernon
8 project.

9 A. Briefly, the Vernon project entails the
10 installation of a phase angle regulator and
11 associated equipment upgrades at the Vernon
12 (Queens) station in order to regulate the power
13 flow on the 38M72 feeder that interconnects
14 Vernon with the West 49th station (Manhattan).
15 The 38M72 feeder is used as an emergency tie
16 during a contingency loss of 345 kilovolt (kV)
17 feeders M51 and M52, and when in service, its
18 power flows are currently controlled via the
19 MVAR/MW output manipulation of the Poletti
20 generator, which is scheduled for retirement in
21 2010. In addition, we have come to understand
22 that even if the retiring Poletti generator is
23 replaced at its current interconnection point,
24 the replacement unit, which most likely will be

1 a combined-cycle natural gas fired facility,
2 would not possess the inherent operating
3 characteristics needed to enable it to perform
4 the output control function now performed by the
5 existing Poletti generator.

6 Q. Please provide the details underlying your
7 Vernon project adjustment.

8 A. Our review of this project revealed that the
9 Company initially planned to purchase property
10 near the Vernon station for the purposes of
11 locating the phase angle regulator, after which
12 it would build the necessary transmission and
13 complete the connections between the phase angle
14 regulator and the Vernon station. This plan has
15 since changed, and the Company now expects to
16 install the phase angle regulator at its Vernon
17 station, thereby obviating the need for
18 purchasing real estate and constructing
19 additional transmission lines. Based on the
20 Company's response to DPS-337, the expected
21 savings are approximately \$6.3 million.

22 Q. Please provide a brief description of the
23 Emergent Transmission Reliability item.

24 A. The Company provides, on page 151, lines 13-15,

1 of its IIP pre-filed testimony, the following
2 justification for this program: "[t]his program
3 will provide funding to address emergent
4 reliability issues impacting transmission system
5 reliability." Following discussions with the
6 Company, our understanding of this program is
7 that it essentially funds capital projects that
8 have not been explicitly identified when the
9 annual budget is developed.

10 Q. Please continue.

11 A. According to Con Edison's response to DPS-40, it
12 expended no capital in this category since at
13 least 2004, the earliest year for which data was
14 provided. During that period, the Company had
15 only budgeted funds in this category in years
16 2005 and 2008. Further, examination of the
17 Company's submitted plant in service forecast
18 model shows that it allocates the \$10 million of
19 capital ratably to plant in service during the
20 rate year.

21 Q. What is your recommendation for this program?

22 A. Unforeseen situations requiring capital
23 expenditures can and will arise between
24 budgeting cycles. When that situation arises,

1 the Company should expend the capital needed to
2 ensure safe and adequate service, assigning it
3 to the proper plant account(s), with such
4 expenditure being subject to review in a
5 subsequent rate case. In light of this, we
6 recommend adjusting this category by \$10 million
7 to reflect the Company's lack of historic
8 expenditures in this program category.

9 Q. Please provide a brief description of the
10 Transmission Feeder Failures program.

11 A. This program provides capital funding for feeder
12 repairs that are extensive enough to necessitate
13 capitalization of the work.

14 Q. What did your review find for this program?

15 A. The Company's response to DPS-40 shows that in
16 some years actual expenditure levels were lower
17 than budgeted and in some years actual
18 expenditures were higher than budgeted. For
19 example, in 2007, \$4 million was budgeted, but
20 only approximately \$1.8 million was expended; in
21 2006, \$4 million was budgeted while
22 approximately \$6.5 million was expended.

23 Q. What is your recommendation?

24 A. We recommend using an average of the actual

1 expenditure levels for the three years, 2005,
2 2006, and 2007, to establish the forecasted
3 annual expenditure allowance in this case. That
4 results in a \$1 million reduction to the
5 Company's budgeted figure.

6 Substation Operations

7 Q. What level of capital expenditures has the
8 Company proposed for Substation Operations -
9 Support Economic Growth?

10 A. For Substation Operations - Support Economic
11 Growth, as shown on the Company's pre-filed
12 Exhibit___(IIP-2), page 1 of 7, for years 2009,
13 2010, and 2011, the Company proposes capital
14 expenditures of \$317 million, \$263 million, and
15 \$127 million, respectively.

16 Q. Do you propose adjustments in this area?

17 A. Yes, we propose a \$3.0 million reduction to the
18 Astor-Establish New Area Substation project.

19 Q. Please provide a brief description of this
20 project.

21 A. As shown on the Company's pre-filed
22 Exhibit___(IIP-10), page 2 of 19, the project
23 entitled "Astor-Establish New Area Substation"
24 would construct a five bank area substation on

1 the west side of Manhattan. Construction of the
2 area substation includes the installation of a
3 transformer for each of the five banks. The
4 cost of installing each transformer, including
5 the \$1.4 million purchase price of the
6 transformer, labor including the connection to a
7 supply feeder of \$1 million, and overheads of
8 \$600,000, totals \$3 million.

9 Q. What did your review find for this project?

10 A. Based on discussions with the Company and its
11 response to IRs DPS-76 and DPS-288, installation
12 of the fifth transformer has been deferred to
13 2013 as a result of demand side reduction
14 programs. However, records show that the
15 transformer purchase was made prior to Con
16 Edison's decision to defer its installation.
17 The response further indicates that the
18 purchased transformer has now been relocated to
19 the Astoria Yard as a spare unit under the Spare
20 Transformer Inventory program.

21 Q. What is your recommendation?

22 A. Since the transformer is now being stored at the
23 Astoria Yard and is charged to the Spare
24 Transformer program, we recommend a reduction of

1 \$3.0 million to the Astor-Establish New Area
2 Substation project.

3 Q. What level of capital expenditures has the
4 Company proposed for Substation Operations -
5 System and Component Performance?

6 A. For Substation Operations - System and Component
7 Performance, as shown on the Company's pre-filed
8 Exhibit___(IIP-2), page 2 of 7, for years 2009,
9 2010, and 2011, the capital expenditures total
10 \$199.615 million, \$194.045 million, and \$165.435
11 million, respectively.

12 Q. Do you propose adjustments in this area in
13 addition to those based on historic spending
14 levels?

15 A. No. However, we are concerned with the limited
16 level of work the Company has performed on the
17 Elmsford Substation Refurbishment project.

18 Q. Please provide a brief description of the
19 Elmsford Substation Refurbishment project.

20 A. As shown on the Company's pre-filed
21 Exhibit___(IIP-13), page 3 of 76, the project
22 entitled "Elmsford Substation Refurbishment" is
23 intended to refurbish the area substation that
24 is over 49 years old. A new building is to be

1 constructed to house a control room, battery
2 room, communication room, and a relay room.
3 Other equipment to be upgraded or replaced
4 includes the switchgear enclosures, capacitor
5 banks, breakers, foundations, and equipment
6 supporting structures.

7 Q. What did your review of this project find?

8 A. Based on our discussions with the Company and
9 its response to IR DPS-96, this project is
10 necessary due to the potential structural
11 instability of transformer bank enclosures and
12 aged housings that support and safeguard the
13 equipment in this substation. A review of the
14 photos provided by the Company in response to
15 DPS-287 reveals that the equipment has been
16 compromised due to water seepage, aged
17 foundation causing unevenness on switchgear
18 housings, and structural damages to transformer
19 bank enclosures. We are concerned that none of
20 the physical site work has been started given
21 the severity of these problems.

22 Electric Operations

23 Q. Have you reviewed the capital projects under
24 Electric Operations?

1 A. Yes. Projects were reviewed under the category
2 of Support Economic Growth, System and Component
3 Performance, Advanced Technology, Storm
4 Hardening and Response, Process Improvement, and
5 Public Safety and Environmental.

6 Q. Are all the capital projects under Electric
7 Operations justified by the Company?

8 A. Yes, after a thorough review of the Company's
9 filing, responses to IRs, and interviews with
10 Company personnel, we found the Electric
11 Operations capital projects to be necessary.

12 Q. Do you recommend any adjustments for projects
13 listed under each Electric Operations category?

14 A. No. We recommend no adjustments for projects
15 listed under Electric Operations - Support
16 Economic Growth.

17 Q. Why are there no adjustments to projects listed
18 under Support Economic Growth?

19 A. Projects categorized under Support Economic
20 Growth support the load transfer work of the
21 existing area substations and those that were
22 put in service during 2008, and scheduled to be
23 put in service during 2009 through 2011. The
24 load transfer work will provide the necessary

1 system capacity to meet the increasing electric
2 demands of customers. In addition, these
3 projects are needed to reinforce and relieve
4 overloaded conditions on several networks. In
5 order to prevent overloads and relieve the
6 stress on the networks under second contingency
7 conditions, programs such as Primary Feeder
8 Relief, Network Transformer Relief, Overhead
9 Transformer Relief, and Secondary Main Relief
10 are necessary.

11 Q. Please describe the specific adjustments you are
12 recommending to projects that are not captured
13 under the historic spending adjustment or
14 historic hiring rate adjustment you discussed
15 earlier in this testimony.

16 A. We will begin with programs under System and
17 Component Performance. The first program we
18 will discuss is the Underground Secondary
19 Reliability program, for which the Company has
20 budgeted \$55.266 million, \$50.612 million, and
21 \$57.181 million in 2009, 2010, and 2011,
22 respectively. This program entails the
23 replacement of aging secondary cables and the
24 replacement of all metal service box covers with

1 covers constructed of composite material. The
2 replacement of service box covers is a new
3 addition to the Underground Secondary
4 Reliability program. The Underground Secondary
5 Reliability program increases the reliability of
6 the secondary grid and improves public safety by
7 mitigating the potential existence of stray
8 voltage conditions in the underground system.
9 We support the continuation of the secondary
10 cable replacement and the addition of the
11 service box cover replacement within the
12 Underground Secondary Reliability program.
13 However, the Company's proposed level of rate
14 year expenditures is not in line with its
15 historic or year-to-date expenditure levels.

16 Q. Is the Company's proposed rate year expenditure
17 level higher than its historic expenditure level
18 for this program?

19 A. Yes. Con Edison has under spent its budget
20 every year since 2004. In response to DPS-194
21 and DPS-486, the Company indicates that, as of
22 May 2008, it has replaced 545 cable sections,
23 including obstructed sections, and 106 structure
24 conductor upgrades, a pace well short of its

1 2007 replacement pace. Yet, the Company is now
2 budgeting \$12.832 million more than it budgeted
3 in 2008 for this program. We do not believe
4 that the Company will be able to accomplish the
5 level of work it proposes. Moreover, we
6 expected the Company to be fully committed to
7 this program.

8 Q. Please explain.

9 A. During the Washington Heights and Long Island
10 City investigations, Staff determined that there
11 were many undetected conditions along the
12 secondary main runs and congestion in structures
13 that house the secondary mains along with
14 primary feeders. Undetected damaged cable
15 sections on the secondary mains create
16 weaknesses in the secondary system that can
17 result in manhole events, such as explosions and
18 fires, which can cause public injury. Staff
19 recommended approval of the level of funding
20 each year since 2004 on the basis of the
21 critical nature of these issues, and for the
22 same reasons we would expect the Company to
23 spend that level of funding.

24 Q. Please continue.

1 A. In regard to the service box cover replacements,
2 Staff has supported the Company throughout the
3 R&D effort to develop a composite material cover
4 that would ultimately improve public safety.
5 However, Con Edison's replacement rate to date
6 does not appear to reflect the Company's claimed
7 commitment to this program. According to its
8 response to DPS-486, the Company replaced only
9 1,951 covers as of May 2008, well short of its
10 proposed replacement of 11,400 during 2009 and
11 21,000 during 2010.

12 Q. What is your recommendation?

13 A. In light of the Company's historic expenditure
14 levels, we propose reductions of \$16 million in
15 2009, \$8 million in 2010, and \$4 million in 2011
16 to the Underground Secondary Reliability
17 program. These reduced funding levels are based
18 on the Company's average historical spending
19 including 2008, but, taking into account the
20 importance of this program, would allow the
21 Company to ramp up its expenditure levels to
22 \$70.727 million by 2012.

23 Q. Please discuss your next program adjustment.

24 A. We propose an adjustment to the Company's

1 Network Reliability program. As shown on the
2 Company's pre-filed Exhibit___(IIP-15), page 22
3 of 43, the Network Reliability program is
4 intended to establish new feeder positions by
5 de-bifurcating existing feeders. De-bifurcation
6 is the process by which a single feeder with two
7 main runs, or legs, is separated into two
8 distinct, single leg feeders. The de-
9 bifurcation process provides balanced loading
10 during normal conditions and increases the
11 number of feeders available during multiple
12 contingencies. Con Edison budgeted \$25.206
13 million, \$25.723 million, and \$26.545 million in
14 2009, 2010, and 2011, respectively.

15 Q. What did your review of this project find?

16 A. Similar to the Underground Secondary Reliability
17 program, we question the Company's commitment to
18 this program. Staff has supported this program
19 during the Company's R&D effort under the
20 Washington Heights implementation plan in Case
21 99-E-0930; however, the results to date show
22 minimal progress by the Company. Additionally,
23 based on its response to DPS-197, Con Edison has
24 under spent its budget in each of the last three

1 years and, currently, under spent its 2008
2 budget of \$42.434 million by \$18.196 million.
3 Moreover, based on its response to DPS-197 and
4 DPS-501, we are not convinced that the Company
5 will be able to complete the work it has
6 scheduled for 2008.

7 Q. What is your recommendation?

8 A. We recommend a reduction of \$24 million, \$12
9 million, and \$6 million in 2009, 2010 and 2011,
10 respectively.

11 Q. What capital adjustments are you recommending
12 for the Transformer Purchase program?

13 A. The Company proposes spending levels of \$150
14 million, \$147 million, and \$147 million for the
15 rate years ending March 31, 2010, 2011, and
16 2012, respectively. We recommend a reduction
17 based on an incorrect cost for shunt reactor
18 purchases, which should be \$3.385 million, not
19 \$6.385 million. Our review of the Company's
20 pre-filed Exhibit___(IIP-15), page 21 and 26 of
21 43, and its response to DPS-198 indicates a cost
22 of \$3.385 million under the Shunt Reactor
23 program. This program is funded by the
24 Transformer Purchase program. A review of the

1 Transformer Purchase program reveals a budgeted
2 cost of \$6.385 million. Our adjustment corrects
3 Con Edison's erroneous reflection of an
4 additional \$3 million in the Transformer
5 Purchase program.

6 Q. What capital adjustments are you recommending to
7 projects categorized under Advanced Technology?

8 A. We do not recommend specific adjustments to
9 projects under Advanced Technology. Instead, we
10 accept the capital spending levels proposed by
11 the Company, as adjusted by the Staff Accounting
12 Panel, in order to allow Con Edison to take full
13 advantage of improvements in the industry
14 regarding monitoring, modeling, and data
15 processing to benefit the operation of its
16 electric system. To ensure that Con Edison
17 properly allocates funding to the Advanced
18 Technology programs, we further recommend that
19 if, at the conclusion of the rate year, an
20 amount less than those cumulative levels
21 proposed by the Company, as adjusted by the
22 Staff Accounting Panel, for Advanced Technology
23 programs are actually spent, the Commission
24 should require Con Edison to refund to customers

1 the incremental carrying charges associated with
2 the reduced level of investment.

3 Q. Please discuss a few of the programs that will
4 benefit the operation of the electric system
5 through improved monitoring, modeling, and data
6 processing.

7 A. The Secondary Monitoring (Secondary Model
8 Validation) program provides for the retrieval
9 of near real-time secondary grid load flows in a
10 network through installation of 3,500 micro
11 Remote Terminal Units. The information gathered
12 will be used to confirm secondary load flow
13 models created by Con Edison. Any significant
14 differences between the estimated loadings and
15 actual load values will be used to help identify
16 the causes of those differences, such as open
17 mains. The Company budgeted \$4.0 million for
18 the purchase and installation of 500 units
19 during the rate year.

20 Q. Please continue.

21 A. Another Advanced Technology project is the
22 Distribution Engineering Workstation. This
23 project uses software to integrate the
24 transmission, distribution, and customer load

1 information into one model allowing more
2 accurate analysis than the current segregated
3 models the Company uses. The model is intended
4 to serve as the foundation for Con Edison's
5 Smart Grid of the Future system. It will also
6 likely be used to more accurately identify
7 locations for transformer replacement, balancing
8 the load and minimizing the losses, particularly
9 in Staten Island and Westchester, where the
10 Company currently does not have a load flow
11 model. The Company budgeted \$2.5 million for
12 this program in the rate year.

13 Q. What adjustments were made to capital programs
14 under Storm Hardening and Response?

15 A. Overall, our adjustments to Storm Hardening and
16 Response consist of a combination of adjustments
17 based on historic spending levels and the
18 justification provided by the Company. Con
19 Edison budgeted \$32.453 million for projects
20 under the Storm Hardening and Response category.
21 We recommend a reduction of \$6.403 million,
22 resulting in \$26.050 million in funding for
23 Storm Hardening and Response projects. The
24 breakdown of this adjustment can be found in

1 Exhibit___(SIIP-4).

2 Q. Do you have any further comments regarding
3 adjustments to Storm Hardening and Response?

4 A. Yes. Similar to Advanced Technology, we
5 recommend that if, at the conclusion of the rate
6 year, an amount less than those cumulative
7 levels proposed by us for Storm Hardening and
8 Response programs are actually spent, the
9 Commission should require Con Edison to refund
10 to customers the incremental carrying charges
11 associated with the reduced level of investment.

12 Q. What adjustments were made by the Panel to
13 capital programs under Process Improvements?

14 A. We propose an adjustment to the Work Management
15 Systems project, which covers the implementation
16 of a comprehensive work management system that
17 is intended to track work and time spent into a
18 common platform. The Company budgeted \$1.5
19 million, \$13.5 million, and \$18 million over the
20 next three years. We find that, while this
21 program does provide a benefit on a day-to-day
22 basis, its completion date can be extended
23 without jeopardizing the electric system or
24 significantly hindering daily work tasks.

1 Therefore, we recommend an allowance of \$1.5
2 million for the rate year, and \$7 million and
3 \$7.5 million, respectively, if a second and
4 third rate year were to be added to the rate
5 plan. This will in effect double the length of
6 time to complete but provide funding levels that
7 ensure continued progress can be made on a
8 yearly basis.

9 Q. What adjustments are you proposing to capital
10 programs under Public Safety and Environmental?

11 A. We recommend an adjustment to the Company's
12 Vented Manhole Cover program. This program has
13 been ongoing for the last several years and is
14 planned to be completed in the rate year. The
15 program entails replacing existing round solid
16 covers with vented covers, designed to prevent
17 the build up of combustible gas in manholes
18 caused by the breakdown of cable insulation.
19 The breakdown of the cable insulation can lead
20 to fires, and in some cases, explosions, in the
21 manhole enclosures. The Company budgeted \$10
22 million in 2009 for the program.

23 Q. What is your recommendation regarding this
24 program?

1 A. From the perspective of public safety, it is
2 imperative that this program be completed.
3 However, in reviewing the historic spending
4 levels in this area that the Company provided in
5 response to DPS-40, the largest amount the
6 Company expended in a single prior year was
7 \$8.66 million in 2005. As a result, we
8 recommend an adjustment from \$10 million to \$8.7
9 million for the rate year.

10 Q. What are your recommendations regarding the
11 Streetlight Isolation Transformer program?

12 A. The Streetlight Isolation Transformer program
13 entails installing isolation transformers and
14 associated connectors in underground structures
15 supplying streetlamps and traffic signals. The
16 installation of these devices should effectively
17 eliminate stray voltage conditions at these
18 locations, where many of the potentially
19 hazardous conditions related to stray voltage
20 exist. The program was only recently initiated,
21 and as a result, no historic spending levels are
22 available. The Company budgeted \$4.1 million
23 for this program in 2008 and \$7.814 million in
24 2009. Given the fact that no historic spending

1 patterns have been established, an approximate
2 doubling of the budget from one year to the next
3 seems excessive. Because of the significance
4 of this program with respect to public safety, a
5 concerted effort should be made to complete it
6 as soon as possible. The Company has set
7 aggressive targets for installation of the
8 units, with approximately 12,500 forecast for
9 2009. However, no historic basis exists for a
10 determination that the Company can accomplish
11 these goals, thus a more moderate increase in
12 the budget is warranted until a baseline level
13 of performance can be demonstrated through
14 actual experience. As a result, we recommend
15 that an adjustment of \$1.857 million be made to
16 Con Edison's rate year proposal, and that an
17 allowance of \$5.957 million be made for the rate
18 year. We recommend a \$5.957 million allowance
19 for this program for a second and third rate
20 year, if added to the rate plan, as well.

21 Q. Do you show any capital adjustments on your
22 Exhibit___(SIIP-4) that are sponsored by other
23 Staff panels?

24 A. Yes. Exhibit___(SIIP-4), page 7 of 8, also

1 includes adjustments to two projects (Area
2 Profile System and Energy Efficiency IT Systems
3 Development) that are sponsored by the Staff
4 Accounting Panel. Those adjustments are
5 included in the overall reduction to the T&D
6 plant in service levels that we recommend in our
7 testimony.

8

9

O&M Adjustments

10 Q. Have you reviewed the O&M projects under Systems
11 and Transmission Operations?

12 A. Yes. In addition to \$3.472 million in
13 reductions due to historical spending and hiring
14 practices, we are recommending adjustments to
15 one other line item in the Company's budget.
16 The Company budgeted \$2.322 million for
17 normalized human resources for the rate year
18 ending March 31, 2010, as well as rate years
19 ending March 31, 2011 and 2012. The Staff
20 Accounting Panel testimony will address the
21 normalization. Therefore, we removed the line
22 item for Normalized Human Resources from our
23 Exhibit___ (SIIP-5) to avoid any confusion.

24 Q. Have you reviewed the O&M projects under

1 Substation Operations?

2 A. Yes. In addition to \$0.374 million in
3 reductions due to historical spending and hiring
4 practices, we are recommending adjustments to
5 two other line items in the Company's budget.
6 The Company budgeted \$1.4 million for corrective
7 maintenance normalization for the rate year
8 ending March 31, 2010. The Company budgeted the
9 same amount for each additional year assuming
10 rate years ending March 31, 2011 and 2012. The
11 Staff Accounting Panel testimony addresses this
12 normalization. Accordingly, we removed the line
13 item for Corrective Maintenance Normalization
14 from our Exhibit___(SIIP-5) to avoid any
15 confusion. The Company budgeted \$2.475 million
16 for the rate year ending March 31, 2010 and,
17 assuming additional rate years, \$2.320 million
18 and \$2.000 million for the rate years ending
19 March 31, 2011 and 2012, respectively, for the
20 program, Structural Integrity/Station
21 Betterment. In the Company's response to DPS-
22 476, the Company provided estimates for specific
23 projects over the three years totaling \$4.690
24 million. We consequently recommend a reduction

1 of \$0.765 million for the rate year ending March
2 31, 2010. If a second and third rate year is
3 added to the rate plan, we recommend reductions
4 of \$0.720 million and \$0.620 million in the rate
5 years ending March 31, 2011 and 2012,
6 respectively, to equal the Company's proposed
7 budget of \$4.690 million for this program over
8 three years.

9 Q. Have you reviewed the O&M projects under
10 Electric Operations?

11 A. Yes. Projects were reviewed under the category
12 of Support Economic Growth, System and Component
13 Performance, Advanced Technology, Storm
14 Hardening and Response, Process Improvement, and
15 Public Safety and Environmental.

16 Q. Based on your review, what have you found?

17 A. We have found that electric operations O&M
18 program expenditures have increased in the
19 categories of System and Component Performance,
20 Storm Hardening and Response, and Process
21 Improvement. Many of these programs are new or
22 being expanded. The new programs are designed
23 to improve overall system reliability while the
24 existing programs call for the expansion of

1 resources and labor as well as increased amounts
2 of scheduled work.

3 Q. Please indicate where you propose adjustments.

4 A. We are not recommending program adjustments
5 under Support Economic Growth. However, we
6 propose adjustments under each of the other
7 categories in order to reflect our findings
8 based on the Company's historical spending
9 levels and rate of hiring, which we discussed
10 earlier in our testimony.

11 Q. What adjustments are you recommending?

12 A. The Company proposes an increase in O&M funding
13 for Enhanced Project Planning as part of Process
14 Improvement totaling \$9.358 million. This
15 additional funding would provide for increased
16 staffing for Regional Distribution Engineering
17 in order to enhance project planning and
18 oversight for Electric Operations. We recommend
19 that the funding level be set at the levels the
20 Company actually spent in 2007, \$7.822 million.
21 Our adjustment is based on the Company's
22 response to DPS-219, where it did not
23 sufficiently demonstrate that an increase in
24 staffing will not result in duplications of

1 roles and responsibilities, thereby detracting
2 from the increased productivity claimed by Con
3 Edison.

4 Q. Are there any other programs under Process
5 Improvement to which you propose adjustments?

6 A. Yes. Con Edison implemented an Edison program
7 intended to develop and deploy adaptive business
8 intelligence software focused on managing
9 business risk and eliminating inefficiencies.
10 Electric Operations Process Management includes
11 an increase of Distribution Engineering staffing
12 to ensure that the new processes under the
13 Edison program are incorporated into the
14 Company's processes as well as integrated into
15 the day-to-day work practices of its field
16 personnel. The Company budgeted \$0.8 million to
17 cover labor and overhead expense. Although the
18 intent of the program is to improve business
19 efficiency, until the Company can illustrate
20 actual results achieved under this initiative,
21 and thus, the value of this program, we do not
22 recommend funding for the full staffing level
23 proposed. Rather, we recommend \$0.51 million in
24 funding to allow for approximately half of the

1 proposed staffing level.

2 Q. Is there an adjustment being proposed to the
3 Company's Area System Profile Program?

4 A. Yes. The adjustment is being sponsored by the
5 Staff Accounting Panel. Accordingly, we removed
6 the line item for Area System Profile Program
7 from our Exhibit___(SIIP-5) to avoid any
8 confusion.

9 Q. For programs under the category of Public Safety
10 and Environmental, please explain the large
11 increase in expenditures for the Mobile Stray
12 Voltage Inspection Program, included as part of
13 the Public Safety and Environmental Programs.

14 A. Pursuant to the Commission's Order in Case 07-E-
15 0523 (the 2008 Rate Order), the Company was
16 required to increase the total number of system
17 scans undertaken as part of this program from
18 the planned five to twelve for the rate year.
19 As a result, the total amount budgeted by the
20 Company was substantially increased to a total
21 of approximately \$21 million for the rate year.

22 Q. Is this amount justified in light of the 2008
23 Rate Order?

24 A. In order for the Company to comply with the 2008

1 Rate Order, increased expenditures should be
2 allowed in the budget. However, in order to
3 bring the projected expenditures more in-line
4 with historic spending levels, we are
5 recommending a reduction of \$414,000.

6

7 Net Plant Cap and Cost Variance Reporting

8 Q. Staff witness Padula recommends a cap on net
9 plant assumed for ratemaking purposes and cost
10 variance reporting. Do you support such
11 mechanisms to ensure that Con Edison is
12 effectively managing its capital investments?

13 A. Yes. The plant in service levels we propose in
14 our testimony should be construed to be the cap,
15 or maximum limit, on the amount of T&D plant
16 used for ratemaking purposes. If, at the
17 conclusion of the rate year, an amount less than
18 those levels recommended by us were actually
19 added to the Company's plant accounts, the
20 Commission should require Con Edison to refund
21 to customers the incremental carrying charges
22 associated with the reduced level of investment.
23 If the amount of plant added to the Company's
24 plant accounts during the rate year exceeds

1 those levels recommended in this testimony, the
2 Company should not be allowed to prospectively
3 recover the associated carrying charges in its
4 next rate case until it fully justifies the need
5 for and cost of the projects which caused the
6 plant accounts to exceed the levels proposed in
7 our testimony. With regard to the project cost
8 variance reporting recommended by Staff witness
9 Padula, we recommend that for every project
10 addressed in the Company's Infrastructure
11 Investment Panel's pre-filed testimony that
12 varies by 10%, plus or minus, from the current
13 projected cost, Con Edison be required to
14 indentify the causes of the variance and report
15 such quarterly to the Director of the Office of
16 Electric, Gas, and Water. This reporting
17 requirement is recommended because it supports
18 Staff's on-going review of the Company's
19 projects and programs to ensure the Company
20 undertakes the projects it has identified in
21 this proceeding at a reasonable cost. The
22 Commission should direct Con Edison to also
23 identify any new T&D projects it undertakes that
24 were not addressed in its filing in this

1 proceeding. Justification of the need for and
2 cost of these projects should also be provided.
3 On this point, the Company should be aware of
4 the fact that, for ratemaking purposes, it would
5 be subject to the previously discussed cap on
6 its plant accounts.

7

8 Generation Interconnection

9 Q. Please generally describe the generator
10 interconnection issues.

11 A. New generator interconnections generally involve
12 the need to address two basic issues: 1) the
13 design of a reliable interconnection; and 2) the
14 allocation of costs, which result from the
15 project's design needs amongst the parties for
16 whom the projects is required. These costs may
17 arise due to needed system upgrades and/or re-
18 configurations needed to allow for a safe and
19 reliable interconnection. New York State has a
20 formal process whereby the Transmission Owner
21 (TO), the New York Independent System Operator
22 (NYISO), and the Generation Developer
23 (Generator) work together to develop the
24 interconnection design needed to resolve these

1 two broad issues.

2 Q. Please provide background for the generator
3 interconnection issues pertaining to this case.

4 A. The Company's response to DPS-296 references a
5 document entitled "Con Edison Fault Current
6 Management Plan Presentation to the NYISO
7 Management Committee June 20, 2001" that details
8 the Company's engineering and reliability system
9 needs in support of a number of proposed
10 Generators interconnecting to its system
11 reliably and safely. On the page entitled
12 "Milestone Schedule," under the year 2004 of the
13 document, Astoria Energy (a/k/a SCS Astoria)
14 1,000 megawatts (MW) is indicated. To date, of
15 the 1,000 MW of generation proposed by Astoria
16 Energy, it has constructed and placed in service
17 approximately half that level, or 500 MW (Phase
18 1). The second half, 500 MW (Phase 2), of the
19 initial project has not yet been constructed.
20 However, in anticipation of Astoria Energy's
21 Phase 2 construction in the near future, two of
22 the projects listed on page 14 this document,
23 namely, "The Phase Angle Regulator At Astoria
24 East" and the "Bus Tie Reactor At Corona," are

1 proposed in this case, as shown on the Company's
2 pre-filed Exhibit___(IIP-10). These projects,
3 at a cost of \$64 million, will allow Astoria
4 Energy's Phase 2 unit to interconnect.

5 Q. Please continue.

6 A. In a press release dated April 29, 2008, the New
7 York Power Authority (NYPA) announced that it
8 had authorized the selection of Astoria Energy
9 to build a new, natural gas-fueled generating
10 plant to help compensate for the scheduled
11 retirement in January 2010 of the Charles
12 Poletti Power Project (Poletti). That same
13 announcement states that this "provides for
14 Astoria Energy's implementation of the next
15 phase with the construction of the second 500-MW
16 facility." DPS-135, which we have included in
17 Exhibit___(SIIP-1), contains the press release's
18 Web link. The retiring Poletti unit is
19 interconnected at NYPA's 345 kV switch yard
20 located at Astoria and interconnected to Con
21 Edison's 345 kV transmission system. The
22 Astoria Energy 500 MW (Phase 1) plant, on the
23 other hand, is connected at the Astoria 138 kV
24 east yard. The 500 MW (Phase 2) plant was

1 originally proposed to be interconnected to the
2 138 kV transmission system with the agreed upon
3 system upgrades and reconfigurations that are
4 currently projected to cost \$64 million in
5 capital and are reflected in the Company's
6 capital projections in this case.

7 Q. Does interconnecting the 500 MW (Phase 2) unit
8 give rise to any other concerns besides the \$64
9 million capital expenditure?

10 A. Yes, it does. Part of the Company's response to
11 DPS-541 contains a document prepared by Con
12 Edison entitled, "System Reliability Impact
13 Study for NYPA's 500 MW Combined Cycle
14 Generation Project at Poletti (Alternative
15 interconnection to Astoria West) April 8, 2002."
16 On page 15 of this study, with both Phases of
17 Astoria Energy completed (1000 MW total), the
18 Company states that "800 MW of generation could
19 be bottled up at the Astoria East bus, due to
20 limited transmission capacity." In simple
21 terms, this means that while the unit is safely
22 and reliably interconnected, there is
23 insufficient outlet capability to accommodate
24 all the available generation interconnected at

1 the Astoria East 138 kV yard. However, if
2 Astoria Energy were to reach an agreement with
3 NYPA to interconnect the second unit at
4 Poletti's existing interconnection point, the
5 unit's generation output would be not be bottled
6 or curtailed due to insufficient transmission
7 capability.

8 Q. What is the Company's response concerning this
9 matter?

10 A. The Company, in response to DPS-135, states that
11 it is continuing discussions with NYPA regarding
12 the point of interconnection, and prefers a
13 point of interconnection that ensures the full
14 output and deliverability of the unit.

15 Q. What is your recommendation?

16 A. We recommend that the Commission strongly urge
17 the three affected parties, Con Edison, NYPA,
18 and Astoria Energy, to work together towards a
19 solution that minimizes the costs to customers
20 of interconnecting and allows the unit's
21 unconstrained output be available to the system.

22

23 Increased Productivity Adjustment

24 Q. Please explain your proposal regarding the

1 Company's productivity adjustment.

2 A. We are supporting an increase to the Company's
3 productivity adjustment, as reflected in the
4 testimony of the Staff Accounting Panel. During
5 the past five years, the Company has made
6 significant investments in its electric system
7 infrastructure. Its current proposal
8 essentially maintains this high level of
9 infrastructure investment during the ensuing
10 five years, as well. Such continual,
11 substantial investments to upgrade and reinforce
12 its electrical system will not only provide for
13 increased reliability, enhanced customer
14 service, but produce increased operational
15 efficiencies as well. As the Company's electric
16 system is reinforced and operated under less
17 stressful conditions, the likelihood of
18 unforeseen events will be reduced, as will the
19 necessity to make costly reactionary repairs.
20 For this reason, we expect the Company will
21 become more productive in its core business, the
22 delivery of electricity. This supports a
23 greater productivity adjustment.

24 Q. What types of savings are generally intended to

1 be captured by the application of a productivity
2 adjustment?

3 A. Productivity adjustments have historically been
4 used to capture all types of savings, specific
5 enhancements resulting in operational
6 efficiencies, as well as cost reductions that
7 can not be specifically foreseen or quantified
8 at the time rates are set. The Commission has
9 previously utilized 1% as a productivity
10 adjustment. This level was typically applied in
11 times of more limited (or normal) infrastructure
12 investment. However, because of the recent and
13 proposed substantial increased investments in
14 both infrastructure and the personnel needed to
15 operate and maintain that infrastructure, we
16 recommend that the Commission consider adopting
17 a productivity adjustment that reflects the
18 productivity savings that should be expected as
19 a result of the substantial increases in both
20 capital and O&M project and program expenditures
21 the Company has incurred in the recent past and
22 proposes for the foreseeable future.

23 Q. Has the Company identified potential cost
24 savings associated with the projects and

1 programs it is proposing?

2 A. In most circumstances, the Company has not
3 identified or quantified potential savings
4 associated with its capital and O&M programs.
5 Rather, the Company has only generally described
6 the projects' benefits, as shown in the
7 Company's pre-filed exhibits, as reducing
8 failures and maintenance, improving operational
9 response, or improving efficiency. When asked
10 to specifically indentify any associated cost
11 savings, the Company simply responded that there
12 will be no direct cost savings or any cost
13 savings realized during the next few years.

14 Q. What is the current productivity adjustment used
15 for ratemaking purposes and what level are you
16 proposing?

17 A. Under the 2008 Rate Order, the productivity
18 adjustment used for ratemaking purposes is 1%.
19 This is a minimal productivity adjustment used
20 to generically capture broad savings in all
21 areas that are typically not identifiable and
22 quantifiable at the time rates are set. In
23 light of the Company's significant capital and
24 O&M investment, we recommend that the current 1%

1 productivity adjustment used for ratemaking
2 purposes be increased to 2%.

3 Q. Is your proposed 2% productivity adjustment
4 based on any studies or supporting data?

5 A. No. We do not know the exact projects or
6 programs from which, or the exact levels of, the
7 potential efficiencies and savings will be
8 derived. However, in light of the fact that 1%
9 has commonly been used during periods of much
10 more limited (normal) infrastructure
11 investments, this level would seem to be
12 understated in relation to the Company's current
13 expenditure levels. A conservative increase of
14 a single percentage point should be sufficient
15 to capture the Company's as yet unacknowledged
16 operational efficiencies related to all aspects
17 of the Company's business, including its
18 significant investment in capital and O&M
19 projects and programs, and encourage the Company
20 to continually seek to operate in the most cost
21 effective and efficient manner possible.

22 Q. Does this conclude your testimony at this time?

23 A. Yes, it does.