

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
Central Hudson Gas & Electric Corporation
Cases 09-E-0588 & 09-G-0589
November 2009

Prepared Testimony of:
Electric Infrastructure Panel

John J. Quackenbush III
Utility Engineer 1

Karl F. Roenick
Utility Engineer 2

Vijay Puran
Utility Engineer 3

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

1 Q. Please state your names, employer and business
2 address.

3 A. Vijay Puran, John J. Quackenbush III, and Karl
4 F. Roenick. We are all employed by the New York
5 State Department of Public Service (Department)
6 and are located at Three Empire State Plaza,
7 Albany, New York 12223-1350.

8 Q. Mr. Puran, what is your current position?

9 A. I am a Utility Engineer 3 in the Office of
10 Electric, Gas and Water.

11 Q. Please summarize your educational background and
12 professional experience.

13 A. I graduated from the University of Guyana in
14 October 1987 with a Bachelor of Engineering
15 Degree in Electrical Engineering. In February
16 1993, I graduated from the City College of New
17 York with a Master of Engineering Degree in
18 Electrical Engineering. I received a Master of
19 Public Administration Degree from the Nelson A.
20 Rockefeller College, University at Albany, in
21 December 2001. I accepted employment with the
22 Department of Public Service in November 1994.
23 My duties include the technical analysis of

1 utility rate filings, focusing on capital
2 projects and budgets. I have worked in the
3 Department's Electric Rates section and
4 currently work in the Bulk Electric System
5 section.

6 Q. Have you previously testified before the
7 Commission?

8 A. Yes, I have testified in Cases 02-E-0198, 02-E-
9 0551, 03-E-0765 and Central Hudson Gas and
10 Electric Corporation's (Central Hudson or the
11 Company) last electric rate proceeding, Case 08-
12 E-0887.

13 Q. Mr. Roenick, what is your position with the
14 Department?

15 A. I am employed as a Utility Engineer 2 in the
16 Office of Electric, Gas, and Water.

17 Q. Please summarize your educational background and
18 professional experience.

19 A. I graduated from the Polytechnic Institute of
20 Brooklyn in 1973 with a Bachelor of Science
21 degree in Mechanical Engineering. After a two-
22 year tour in the US Army, I worked as a project
23 planner for several power plant projects. In

1 1984, I joined the Department to monitor
2 construction of the Nine Mile Point 2 Nuclear
3 Plant. I have worked in several areas while at
4 the Department and have spent most of my time in
5 the electric distribution area.

6 Q. Have you previously testified before the
7 Commission?

8 A. Yes. I have testified in a number of
9 proceedings, including the last Central Hudson
10 rate proceeding, Case 08-E-0887.

11 Q. Mr. Quackenbush, what is your position at the
12 Department?

13 A. I am a Utility Engineer 1 in the Office of
14 Electric, Gas, and Water.

15 Q. Please summarize your educational background and
16 professional experience.

17 A. I attended Hudson Valley Community College in
18 Troy, New York and received an Associate in
19 General Studies degree, as well as an Associate
20 in Applied Science degree in civil engineering
21 technology. Thereafter, I continued my
22 education at the State University of New York
23 Institute of Technology (SUNYIT) in Utica, New

1 York and graduated with a Bachelor of Science
2 degree in civil engineering technology. I was
3 employed by Clough, Harbour, & Associates LLP as
4 a Drafting & Design Technician from 2000 until
5 November 2006. During this time, I was a member
6 of the Wireless, Transportation, and Facility
7 Services departments. In February 2007, I
8 joined the Staff of the Electric Distribution
9 Section in the Office of Electric, Gas, and
10 Water where I have performed electric utility
11 inspections to assess infrastructure conditions,
12 investigated various electric utility customer
13 reliability complaints, and reviewed utility
14 reliability reports.

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

17 A. Yes. I testified in Case 08-E-0887, Central
18 Hudson's last electric rate case, as well as
19 Case 09-E-0428, the Consolidated Edison Company
20 of New York, Inc. electric rate proceeding.

21 Q. What is the purpose of the Panel's testimony?

22 A. The purpose of our testimony is to provide
23 findings from our review of the projects Central

1 Hudson has included in its electric and common
2 capital budget for the calendar years 2010
3 through 2013 for electric production,
4 transmission, substation, distribution, and
5 common facilities. Additionally, we will
6 discuss our findings concerning the Company's
7 electric Operations and Maintenance (O&M)
8 programs and projects. We are recommending
9 adjustments which cumulatively reduce the
10 Company's rate year T&D plant in service. We
11 are also recommending adjustments to the
12 Company's proposed rate year transmission and
13 distribution (T&D) O&M expense levels.

14 Q. How will you address the Company's capital
15 projects and O&M expense programs in this
16 testimony?

17 A. First, we will summarize the Company's overall
18 capital and common budget and our proposed
19 adjustments. Second, we will describe the
20 Company's major capital programs. We will then
21 discuss the Company's O&M programs and our
22 proposed adjustments. Thereafter, we will
23 provide an explanation of our proposed net plant

1 cap and downward reconciliation. Last, we will
2 discuss our proposal regarding the Company's
3 proposed Smart Grid Initiative.

4 Q. In your testimony, will you refer to, or
5 otherwise rely upon, any information obtained
6 during the discovery phase of this proceeding?

7 A. Yes, we will refer to, and have relied upon,
8 several responses to Department of Public
9 Service Staff (DPS) Interrogatory Requests (IR).
10 These responses are contained within Exhibit__
11 (EIP-1).

12 Q. Will any other exhibits be provided with your
13 testimony?

14 A. Yes. We have also provided Exhibit__(EIP-2)
15 entitled "Staff Estimated Average Net Plant,
16 Twelve Month Average." This exhibit contains
17 our electric net plant forecast for the rate
18 year ending June 30, 2011 and for the rate years
19 ending June 30, 2012 and June 30, 2013. We have
20 also provided Exhibit__(EIP-3) entitled
21 "Electric Plant Target Summary." This exhibit
22 describes the calculation of the electric plant
23 target for the rate year ending June 30, 2011.

1 Q. Please summarize the impact your recommended
2 adjustments to the Company's T&D capital budget
3 will have on the level of electric plant to be
4 used for ratemaking purposes in this case.

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

22 Q. If the Company completes projects, which it
23 deems appropriate to provide safe and adequate

1 service, at higher spending levels than
2 forecasted, will customers be exposed to higher
3 electric rates than this testimony would
4 otherwise recommend?

5 A. No. The rates to be paid by customers will be
6 set in accordance with the level of forecasted
7 net plant that the Commission adopts in this
8 proceeding, as well as other cost of service
9 items. If the Company adds plant at levels in
10 excess of the forecasted level than rates are
11 based upon, there are no provisions for
12 automatically adjusting rates associated with
13 that increased level of plant. Conversely, if
14 the Company adds plant at levels less than the
15 forecasted level rates are based upon, we are
16 recommending that the Company credit customers
17 the revenue requirement impact of the shortfall
18 in net plant relative to the target levels.

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 T&D capital adjustments we recommend will
23 reduce the amount of electric plant added to

1 plant-in-service by approximately \$4.4 million
2 in the rate year ending June 30, 2011. We
3 incorporated our project specific capital
4 adjustments, which are made on a calendar year
5 basis, into the Company's plant-in-service
6 forecast model to develop an average net plant
7 amount to be used for ratemaking purposes for
8 the rate year. The average net plant amount we
9 are recommending is shown in Exhibit___(EIP-2).
10 We then provided the average net plant amount to
11 the Staff Accounting Panel, which used the
12 average net plant amount to develop the
13 Company's overall revenue requirement.

14 Q. Please explain what you mean by "the level of
15 T&D plant to be used for ratemaking purposes."

16 A. The Company presents its capital budgets on a
17 calendar year basis, which reflects the amount
18 of spending it expects to incur for capital
19 projects during that calendar year. For many of
20 its large capital projects, the Company budgets
21 expenditures over several years. When the
22 project is completed, and thus is used and
23 useful, the total dollars expended on that

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

1 rate year is the level that is reflected in rate
2 base.

3 Q. How is the amount of plant to be placed in
4 service during the rate year determined from
5 Central Hudson's capital budgets?

6 A. Capital projects are added to the Company's
7 plant accounts using two different methods-- at
8 a single point in time or ratably. When a large
9 capital project, like a substation, is
10 completed, it is added to the Company's plant
11 accounts at that single point in time. For
12 instance, if a substation is expected to be
13 completed and placed into service in May 2011,
14 the total amount expended on that project will
15 be added to the Company's plant accounts in May
16 2011. For projects with specific in-service
17 dates, the amount of plant expected to be placed
18 in service during the rate year is determined
19 from the Company's capital budgets over a number
20 of years by identifying the total cost of the
21 project and the month it will be used and
22 useful.

23 Q. Please continue.

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

1 The amount included in rates to recover the cost
2 of the plant, the depreciation of the plant, and
3 property taxes related to the plant is generally
4 referred to as the carrying charges on the
5 investment.

6 Q. Before you explain your specific T&D capital
7 adjustments, please describe the general nature
8 of your adjustments.

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

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Production Projects

Q. Please summarize the major production projects proposed by Central Hudson.

A. Central Hudson proposes to install rubber bladder flashboards at its Sturgeon Pool hydroelectric plant and refurbish its Coxsackie and South Cairo combustion turbine plants.

Q. Please describe the project at the Sturgeon Pool hydroelectric plant.

A. The Company proposes to replace the wooden flashboards on the dam crest with rubber bladder flashboards. The proposed scope of the project is to install a 326-foot section of remotely controlled rubber crest gate, a 110-foot section of manually controlled rubber crest gate and a 36-foot section of crest sluice in the spillway section of the dam. The intent of this project is to improve worker safety by negating the need to manually adjust, repair and replace wooden flashboards; increase the safety level to the dam itself; improve pond control during flooding conditions, thereby reducing flooding of upstream properties; and to avoid loss of

1 generation caused by loss of the wooden
2 flashboards. Central Hudson estimates the
3 project may increase annual energy output of the
4 hydro plant by thirty percent (30%), which,
5 along with annual flashboard material savings of
6 \$20,000, would result in net customer savings of
7 \$1.0 million per year. This project is
8 justified based upon the improvement in safety
9 and the avoidance of significant amounts of lost
10 generation from a renewable resource.
11 Design and planning for the project started in
12 2002. The Company proposes to expend \$1.28
13 million in 2010 and \$1.802 million in 2011. The
14 project is scheduled for completion in December
15 2011. Based on our review, we find the
16 Company's proposal to be reasonable and are not
17 proposing any adjustments at this time.

18 Q. Please describe the project proposed for the
19 Coxsackie and South Cairo combustion turbine
20 plants.

21 A. Central Hudson proposes to refurbish the
22 Coxsackie and South Cairo combustion turbine
23 plants by replacing the plants' fuel modules and

1 stacks. The Company also proposes to install
2 improved emission controls and monitoring
3 equipment at both plants. In addition, the
4 Company proposes to replace the South Cairo's
5 air compressor. Central Hudson conducted a
6 financial analysis and determined that
7 refurbishing the plants is more cost-beneficial
8 than replacing them or building transmission
9 alternatives. This project is necessary to
10 maintain service reliability to customers in the
11 Northwest section of Central Hudson's service
12 territory. The Company proposes to expend
13 \$177,000, \$360,000, \$3.488 million, and \$3.378
14 million in the years 2010 through 2013,
15 respectively. The project is scheduled for
16 completion in December 2013. Based on our
17 review, we find the Company's proposal to be
18 reasonable and are not proposing any adjustments
19 at this time.

20 **Transmission Line Projects**

21 Q. Please summarize the major transmission projects
22 proposed by Central Hudson.

23 A. Central Hudson proposes a Transmission Sag

1 Mitigation project to address the sag on
2 transmission line spans that do not meet
3 required ground clearance and to rebuild the
4 "WM" transmission line.

5 A. Please describe the Transmission Sag Mitigation
6 project.

7 A. In 2006, Central Hudson performed a system-wide
8 LiDAR, which is a Light Detection and Ranging
9 system that can determine relative heights of
10 transmission facilities and the adjacent
11 environment using helicopter flyovers to survey
12 the transmission system. With the aid of
13 computer modeling, the results of the survey
14 indicated that a number of the Company's
15 transmission circuits do not meet National
16 Electric Safety Code clearance requirements for
17 pedestrian paths, roadways and other facilities.
18 Clearances can change for various reasons:
19 assumptions used in the original circuit design
20 may no longer be consistent with current field
21 conditions as a result of fill being added,
22 usage under the conductor changing, or conductor
23 creep (elongation) occurring due to aging.

1 Q. Please continue.

2 A. In its previous rate case, Case 08-E-0887,
3 Central Hudson identified 624 spans that did not
4 meet the required clearance and proposed to fix
5 108 spans by re-tensioning and the remaining 516
6 spans by structure/conductor replacement.
7 However, upon analysis of some of the detailed
8 designs, the Company found that re-tensioning a
9 span would necessitate equalizing the tension of
10 the line in the entire ruling span, thereby,
11 requiring mobilization at each structure within
12 the ruling span. This caused the cost of re-
13 tensioning a span to increase from the original
14 estimate of \$31,000 to \$106,000. As a result,
15 the Company now proposes to address the 624
16 spans by structure/conductor replacement.

17 Q. Please continue.

18 A. In its supplemental response to Staff IR DPS-
19 207, as provided in Exhibit___(EIP-1), Central
20 Hudson indicated that 28 additional spans,
21 mainly those not meeting pedestrian clearances,
22 were added to the program. Consequently, 652
23 spans are now targeted for mitigation during the

1 five-year program ending in 2013. The
2 Transmission Sag Mitigation program is necessary
3 to meet mandated safety requirements and to
4 reduce the risk of accidents occurring at the
5 identified spans.

6 Q. Please discuss the capital expenditures
7 associated with the Transmission Sag Mitigation
8 program.

9 A. In Mr. Haering's testimony at page 7, Central
10 Hudson initially proposed to expend
11 \$37.781 million for the Transmission Sag
12 Mitigation program over the five years ending
13 2013. However, in its supplemental response to
14 Staff IR DPS-207, as provided in Exhibit___(EIP-
15 1), the Company indicated that based on its
16 September 2009 review, it now estimates the
17 project would cost \$31.221 million over the
18 five-year period ending 2013. The new
19 projection is based on Central Hudson's review
20 of actual work completed and current work in
21 progress. The Company determined that the
22 structure to span ratio for the project would be
23 about 1.24 instead of the 1.6 used to develop

1 the initial estimate. This resulted in a
2 reduction of the number of structures to be
3 replaced from 1,000 to 807 and the concomitant
4 reduction in capital expenditures from
5 \$37.781 million to \$31.221 million. This will
6 reduce the program cost to 82.6 percent of the
7 initially proposed spending level.

8 Q. Are you proposing an adjustment to the
9 Transmission Sag Mitigation program?

10 A. Yes. We reviewed and accept the updated \$31.221
11 million capital expenditure funding level for
12 the Transmission Sag Mitigation program for
13 years 2009 through 2013. Consequently, we
14 propose to adjust each year's program cost, as
15 reflected in the Company's plant-in-service
16 model, to 82.6 percent of the level initially
17 proposed. This updated funding level reduces
18 the Company's forecasted plant additions by
19 \$1.182 million, \$1.241 million, and \$1.304
20 million during the rate years ending June 30,
21 2011, 2012, and 2013, respectively.

22 Q. Please describe the "WM" transmission line
23 project.

1 A. Central Hudson proposes to rebuild all
2 11.5 miles of the 69 kV "WM" line in Orange
3 County with 795 Aluminum Conductor Steel
4 Reinforced (ACSR) conductors. The planning and
5 permitting work on the "WM" line rebuild project
6 started in 2006. The "WM" line serves the
7 Maybrook, Montgomery and Walden (NYSEG)
8 Substations. The "WM" line is supplied by two
9 inputs, the East Walden 115/69 kV transformer to
10 the north and the Rock Tavern 115/69 kV
11 transformer to the south. The Company states
12 that with one of these two inputs out-of-
13 service, the "WM" line is only capable of
14 serving 44 MVA without shedding load. The total
15 "WM" line loads were 52 MVA, 48 MVA, 44 MVA and
16 44.5 MVA during the summer coincident peak in
17 years 2006, 2007, 2008 and 2009, respectively.
18 Therefore, under a first contingency condition
19 (loss of one input) at peak periods during these
20 years, load shedding may have been necessary.

21 Q. Please continue.

22 A. Central Hudson also conducted an analysis to
23 determine when the "WM" line load is forecasted

1 to operate over its maximum rating for a
2 significant number of hours during the summer
3 and the associated risk. The result of the
4 Company's risk analysis shows that by year 2011,
5 the "WM" line is forecasted to be over its
6 maximum rating during the summer for a
7 significant number of hours. The Company
8 concluded that the associated risk is higher
9 than the allowed risk established by the Company
10 as part of its local transmission planning
11 process. Therefore, remedial action on the "WM"
12 line is necessary before 2011.

13 Q. Did the Company consider alternatives to the
14 proposed rebuild of the "WM" line?

15 A. Yes. The Company considered alternatives such
16 as building a third supply feed into the area,
17 reconductoring or rebuilding limiting sections
18 of the "WM" line and demand side management
19 solutions. However, the proposed rebuild of the
20 entire line appears to be the least costly
21 option. Central Hudson proposes to rebuild the
22 "WM" line in phases; the southern section of the
23 line is scheduled for completion in December

1 2010, the northern section is scheduled for
2 completion in December 2011 and the middle
3 section is scheduled for completion in December
4 2012. The Company estimates that the "WM" line
5 will be capable of serving 113 MVA after
6 completion of the project, which will sustain a
7 first contingency condition. This project is
8 necessary to replace aging infrastructure,
9 including 1930 vintage wood poles, and to
10 increase the capability to reliably serve
11 anticipated load growth in the area under a
12 first contingency condition.

13 The Company proposes to expend \$1.441 million in
14 2009, \$3.386 million in 2010, \$3.331 million in
15 2011 and \$6.599 million in 2012 to rebuild the
16 "WM" transmission line. Central Hudson
17 estimates that the total cost of the project,
18 which is scheduled for completion in December
19 2012, will be about \$16.6 million. Based on our
20 review, we find the Company's proposal to be
21 reasonable and we are not proposing any
22 adjustments at this time.

23

1 technology and/or unavailability of replacement
2 parts; and other factors such as coordination
3 with other substation projects. The Company,
4 which has a detailed replacement plan,
5 emphasizes that this is a "living process," and
6 that additional types of circuit breakers and/or
7 modifications to the replacement order may be
8 required in the future due to changes in system
9 conditions, failures and indication of problems
10 resulting from poor test reports. While age is
11 not necessarily the primary determinant, the
12 plan shows many breakers of 1950's vintage with
13 some breakers going back to the 1920's and
14 1930's. Through this program, by the end of
15 2009, the Company anticipates the replacement of
16 three 345 kV breakers, seven 115 kV breakers,
17 and thirty-four 15 kV breakers. The Company
18 plans on replacing eight 345 kV breakers,
19 eighteen 115 kV breakers, fourteen 69 kV
20 breakers, and one hundred twelve 15 kV breakers
21 between 2010 and 2014. The Company notes that
22 two 115 kV breakers at Reynolds Hill were
23 completed ahead of plan and that two 69 kV

1 breakers at Neversink were not completed as
2 planned and will be completed in 2010.

3 Q. Are you proposing any adjustments to the
4 Company's substation capital programs?

5 A. Yes, we are proposing an adjustment to reflect
6 the current estimated in service date for the
7 Spackenkill substation.

8 Q. Please clarify the Company's current estimate
9 for placing the Spackenkill substation in-
10 service.

11 A. Central Hudson's plant-in-service model has the
12 Spackenkill Substation being placed in service
13 in June 2010. However, as shown in the response
14 to Staff IR DPS-238, provided in
15 Exhibit__(EIP1), the Company now estimates a
16 November 2010 in-service date. We have
17 reflected this new in service date in our plant
18 targets.

19 **Distribution Capital Projects**

20 Q. Please summarize the major distribution capital
21 projects proposed by Central Hudson.

22 A. Central Hudson's major programs include
23 Distribution Improvement Blankets, which include

1 the distribution projects needed for daily
2 operations, and a multi-year infrastructure
3 improvement based program. The components of the
4 infrastructure improvement program are related
5 to equipment age and/or reliability and are part
6 of what appears to be a general shift in Company
7 spending from growth-related projects, as load
8 growth has slowed.

9 Q. What is the Company's forecasted level of
10 expenditures for budget category 15,
11 Distribution Improvements?

12 A. For calendar years 2010, 2011, and 2012 it is
13 forecasting to spend \$17.5 million, \$17.8
14 million, and \$18.1 million, respectively. These
15 forecasts are in-line with the current rate year
16 level.

17 Q. Is there a concern with utility infrastructure
18 in general?

19 A. Yes. We are concerned generally with an aging
20 infrastructure. In fact, as an outgrowth of the
21 ongoing process to develop a comprehensive New
22 York State Energy Plan, Staff has received
23 condition assessments of electric transmission

1 and distribution infrastructure from all the New
2 York regulated utilities.

3 Q. What types of expenditures are included in the
4 Company's Distribution Improvements program?

5 A. The Distribution Improvements program includes
6 the addition of 16 automated load transfer (ALT)
7 switch locations, replacement of 322
8 distribution poles annually, replacement of 13
9 hydraulic reclosers annually, replacement of old
10 aerial and underground paper insulated lead
11 cable, and a reliability program focused on
12 customers who have been interrupted more than
13 ten times a year. Combined, the programs are
14 estimated by the Company to cost \$21 million
15 through 2014. The Company plans to spend about
16 \$5.1 million, \$3.9 million, and \$3.9 million on
17 these projects in calendar years 2010, 2011, and
18 2012, respectively.

19 Q. What is your opinion of these programs?

20 A. Based on our review of the Company's workpapers,
21 responses to information requests and
22 presentations, we conclude that these programs
23 are worthwhile to help shore up the Company's

1 infrastructure and reliability. We also
2 recognize that the Company will likely use
3 experience gleaned as the programs go forward to
4 optimize them. We recommend that the Company
5 continue to include with its reporting
6 requirements a narrative discussion of its
7 progress with these ongoing distribution
8 improvement programs. Any slippage in the
9 progress of these programs will be captured in
10 our proposed Plant Targets.

11 Q. Are you proposing any adjustments to the
12 Company's proposed distribution capital
13 projects?

14 A. No, we are not at this time.

15 **T&D O&M Projects**

16 Q. What has the Company proposed for its rate year
17 O&M budget, for each of the major O&M
18 categories?

19 A. The Company proposes rate year stray voltage
20 expenses of \$2.565 million, transmission ROW
21 (right of way) maintenance expenses of \$1.651
22 million, distribution line clearance expenses of
23 \$16.701 million, and transmission enhanced

1 infrastructure maintenance expenses of \$0.700
2 million. By comparison, the actual amounts
3 spent on these categories during the test year
4 were \$1.045 million on stray voltage expenses,
5 \$2.511 million on transmission ROW maintenance
6 expenses, and \$9.2 million on distribution line
7 clearance expenses. The Company did not expend
8 funds to the enhanced infrastructure maintenance
9 program during the test year. According to the
10 Company's response to Staff IR DPS-33, as
11 provided in Exhibit__(EIP-1), the activities
12 associated with the Transmission Enhanced
13 Infrastructure Maintenance program were planned
14 to commence on July 1, 2009, but were
15 subsequently deferred as part of Central
16 Hudson's Austerity Filing.

17 Q. Please describe why the Company's proposed stray
18 voltage expenses are higher than those in the
19 test year?

20 A. The cost increase to the Company's stray voltage
21 program is a result of new regulations and
22 Commission mandates which assert that all
23 metallic objects within 30 feet of any detected

1 stray voltage occurrence be tested and that the
2 initial and any detected stray voltage
3 occurrence be reduced to 1 volt.

4 Q. Please describe the reason for the increase in
5 the Company's distribution line clearance
6 expense.

7 A. The increase of the Company's distribution line
8 clearance program is primarily due to its
9 proposed increase in distribution trimming miles
10 for the rate year and the significant increase
11 in unit cost of this program.

12 Q. Why are distribution line clearance expenses a
13 concern in this rate case?

14 A. The total cost for distribution line clearance
15 in the rate year ending June 30, 2011 is
16 forecast by the Company to be \$16.7 million, 62%
17 more than the \$10.3 million approved in last
18 year's rate case (Case 08-E-0887) for the
19 current rate year ending June 30, 2010.

20 Q. What is the primary driver for this forecast
21 increase?

22 A. The Company states the primary driver of this
23 forecast increase is an increase in tree density

1 being experienced in 2009 by Central Hudson's
2 contractors as they seek to establish an
3 improved system-wide trimming specification,
4 also known as "modified enhanced." As a result
5 of the tree density, there are higher unit rates
6 per mile than previously experienced.

7 Q. Is that the only effect from the higher tree
8 density?

9 A. No. The current line clearance program was
10 designed around a four-year cycle, which means
11 that all distribution circuits will be trimmed
12 within a four-year window. Because the Company
13 is not spending more on tree trimming than it
14 has budgeted as an outgrowth of rate case
15 orders, a shortfall of miles trimmed compared to
16 expected levels has resulted.

17 Q. How does this shortfall factor in the large
18 forecast increase?

19 A. The large forecast increase has a "catch up"
20 component with the Company seeking to achieve
21 completion of the first four-year cycle under
22 the new trimming specification roughly on
23 schedule during the Rate Year. The Company

1 estimates that 1,831 of on-road miles and 501
2 miles of off-road miles will have to be
3 completed during the rate year, compared with
4 1,363 miles and 426 miles respectively for a
5 normal year in a four-year cycle.

6 Q. What had been the Company's experience prior to
7 2009 with costs relating to trimming to this
8 specification?

9 A. The Company's experience with trimming to this
10 specification, which began in March 2007, has
11 been \$2,975/mile on-road and \$5,979/mile off-
12 road in calendar year 2008, as shown in the
13 responses to Staff IR DPS-150 and DPS-151,
14 Exhibit__(EIP-1).

15 Q. What are the unit rates projected by the Company
16 for the rate year in this case?

17 A. The Company is now forecasting \$4,445/mile and
18 \$8,307/mile, increases of 49% and 39%
19 respectively, for on and off road trimming.

20 Q. Was the Company's experience in calendar year
21 2007 similar to 2008?

22 A. Yes, the unit rates for 2007 and 2008 were very
23 similar while taking into account that trimming

1 for two months in 2007 was performed to the old
2 specification.

3 Q. Has the Company provided any reasons in
4 testimony or discovery for the increase in tree
5 density in 2009 vs. 2008?

6 A. No, it merely states that it initially
7 underestimated the cost of transitioning to the
8 new specification, and that in 2009 it is
9 experiencing higher unit rates, as shown in the
10 responses to Staff IR DPS-150 and DPS-151,
11 Exhibit__(EIP-1).

12 Q. Has the Company provided any other reasons for
13 the increase in tree density?

14 A. Anecdotally, the Company has told Staff that the
15 increase could be related to the prioritization
16 of circuits slated to be trimmed by reliability
17 impact so that the less-loaded circuits would
18 drop down on the list. Also, the Company told
19 Staff that the low level of trimming clearances
20 observed on these less-loaded circuits required
21 greater effort to bring them into conformance
22 with the new specification.

23 Q. Do you have any confidence in the current unit

1 rate forecast?

2 A. No. Staff looks questionably at the change in
3 rates requested only one year after the last
4 rate case. The Company's unit rate forecast is
5 based on only four months of data and fails to
6 account for the first two years of the four-year
7 program. Additionally, the Company has not
8 inventoried tree growth along the circuits to be
9 trimmed to establish whether the conditions
10 observed will continue.

11 Q. What is your opinion of the revised
12 specification?

13 A. Staff noted in the last rate case that a major
14 feature of the specification eliminating
15 overhanging branches to the maximum extent makes
16 intuitive sense. The other features include
17 increased side clearance, removal of tall-
18 growing species within the distribution right-
19 of-way, and identifying danger trees outside the
20 right-of-way for future removal. Staff believes
21 that all of the aforementioned are good
22 measures.

23 Q. Has the cycle length always been four years?

- 1 A. No. Trimming on the last full cycle under the
2 previous specification was performed on a three-
3 year cycle.
- 4 Q. Why did the Company choose to go to a four-year
5 cycle?
- 6 A. To keep the cost of implementation of the new
7 specification at a reasonable level. Based on a
8 pilot project, the Company estimated a 25%
9 annual increase in program costs; stretching the
10 trimming cycle to four years would levelize
11 costs to approximately what it had been. As
12 noted earlier, while this assumption held true
13 for the first two years of the program,
14 unfortunately, this apparently is no longer the
15 case in 2009.
- 16 Q. What is your opinion of the four-year cycle?
- 17 A. As discussed in the previous rate case, Case 08-
18 E-0887, while re-growth was projected by the
19 Company not to be a major factor after
20 implementation of the revised trimming
21 specification, the lengthening of the cycle from
22 three years to four years might still have some
23 future unforeseen effects.

1 Q. Are you proposing an adjustment?

2 A. Yes, we recommend a rate allowance of
3 \$12,567,330 for the line clearance program,
4 compared to the \$16,700,928 proposed by the
5 Company, and compared to the current rate
6 allowance of \$10,263,000.

7 Q. Please discuss your adjustment.

8 A. We propose reducing both the unit rate and miles
9 trimmed for normal trimming, as well as the
10 associated on-road flagging forecast. Instead
11 of using the Company's estimate which is based
12 on the first four months of 2009, we used a
13 composite of the first nine months of 2009, as
14 shown in the responses to Staff IR DPS-35,
15 Exhibit__(EIP-1), and three months of average
16 2008 unit rates.

17 Q. What is the basis for the miles trimmed
18 reduction?

19 A. We are projecting what would be trimmed in a
20 normal one year cycle, that is, one-quarter of
21 the total miles to be trimmed and not building
22 in any "catch up." There is the possibility
23 that more miles could be trimmed if the unit

1 rate should shift in a more favorable direction.
2 Also, the fact that the Company managed to
3 historically trim approximately on schedule and
4 budget for a four-year cycle for two years
5 supports that the Company can continue to trim
6 at this level.

7 Q. Do you propose an adjustment for normal on-road
8 flagging?

9 A. Yes. We propose to reduce it based on the
10 number of on-road miles that we are predicting.

11 Q. Do you propose any other adjustment?

12 A. No.

13 Q. In a general way, please describe the Company's
14 enhanced trimming program.

15 A. This program targets specific highly-loaded
16 feeders that can have great impact on
17 reliability. The specification for this
18 program, developed in concert with the Company's
19 line clearance consultant and which has been on-
20 going for several years, pre-dates and is
21 similar to, but is a more aggressive version of,
22 the revised specification described earlier.
23 The Company had been achieving 100 miles

1 annually but increased the target to 150 miles.
2 This program has been a component of the
3 Company's Electric Reliability Performance
4 Mechanism (EPRM).

5 Q. Please discuss the Company's planned changes for
6 the enhanced trimming program for the new rate
7 year.

8 A. In the new rate year, the Company is planning to
9 reduce the current 150 miles it trims annually
10 to 100 miles, so that the remaining 300 miles of
11 feeders targeted by its clearance consultant
12 will be completed in three years.

13 Q. Why is the Company doing this?

14 A. Company witness DuBois has testified that it is
15 to help defray the transition cost to the normal
16 trimming specification.

17 Q. Do you have an opinion regarding the enhanced
18 line clearance program and the EPRM?

19 A. Yes. While the enhanced line clearance program
20 seems to be worthwhile and has been supported by
21 Staff, in the light of the difficulties the
22 Company appears to be experiencing in
23 transitioning to the revised normal clearance

1 specification continuing to include it in an
2 ERPM may no longer be productive.

3 Q. Please explain.

4 A. The Company may be facing some management
5 choices regarding the transition to the revised
6 normal clearance specification. The current
7 ERPM, while encouraging a worthwhile line
8 clearance program, also limits the Company's
9 options somewhat.

10 Q. What do you recommend?

11 A. We recommend that the enhanced line clearance
12 component of the EPRM be eliminated, and, in
13 order to continue encouragement of the Company's
14 overall attention to reliability, also recommend
15 that the revenue adjustment be re-assigned to
16 the reliability statistics portion of the
17 mechanism. This will allow the Company to have
18 more flexibility to manage its overall line
19 clearance program in light of the difficulties
20 it appears to have to transitioning to the
21 revised normal trimming specification.

22 Q. Please describe the transmission ROW (right of
23 way) maintenance program.

1 A. The transmission ROW maintenance program is
2 comprised of four activities: routine
3 maintenance, danger tree removal, hot spot
4 trimming, and legal and environmental. As
5 previously indicated, the maintenance expenses
6 was reduced from a level of \$2.511 million to
7 \$1.651 million.

8 Q. Is the panel in agreement with the reduction in
9 spending?

10 A. Yes. The majority of the reduction is associated
11 with the completion of the ROW Edge Encroachment
12 Reclamation activity. The amount forecasted is
13 at an appropriate level to maintain the right of
14 ways on a five-year cycle.

15 Q. Do you have any more recommendations regarding
16 the distribution line clearance and transmission
17 ROW programs?

18 A. Yes. We recommend a deferral for ratepayer
19 benefit of any shortfall in spending for the
20 distribution line clearance and the transmission
21 right of way maintenance programs during the
22 rate year ending June 30, 2011 and the rate
23 years ending June 30, 2012 and June 30, 2013.

1 levels proposed with this testimony should be
2 the cap, or maximum level, on the amount of
3 electric plant used for ratemaking purposes. We
4 believe that if the actual amounts added to the
5 Company's plant account at the conclusion of the
6 rate year are less than our recommended levels
7 contained in Exhibit__(EIP-2), then the
8 Commission should require Central Hudson to
9 credit customers the revenue requirement impact
10 of the shortfall in net plant relative to the
11 target levels. If the amount of added plant
12 exceeds the plant target levels recommended in
13 our testimony as provided in Exhibit__(EIP-2),
14 we recommend that the Company only be allowed to
15 recover the revenue requirement associated with
16 the plant upon inclusion of the plant in rate
17 base in its next rate case provided that the
18 Company fully justifies the cause of exceeding
19 the plant target levels proposed in our
20 testimony.

21 Q. In addition to plant targets for the rate year
22 ending June 30, 2011, have you provided plant
23 targets for the rate years ending June 30, 2012

1 and June 30, 2013?

2 A. Yes, these have also been provided in
3 Exhibit__(EIP-2). As proposed by the Staff
4 Policy Panel, the Company should submit a staged
5 filing for the rate years ending June 30, 2012
6 and 2013, which would include capital
7 expenditure forecasts. However, we propose that
8 those forecasts should not result in plant
9 additions that would exceed those shown in
10 Exhibit__(EIP-2) and that the down-ward only
11 reconciliation also be applied to rate years 2
12 and 3.

13 **Smart Grid Initiative**

14 Q. Please briefly describe Central Hudson's Smart
15 Grid Initiative as proposed by the Company's
16 Smart Grid Panel.

17 A. The Company's Smart Grid Initiative project
18 would encompass many Smart Grid elements and
19 technology applications. It would create ten
20 "intelligent" circuits from source to end user
21 combining smart metering technologies,
22 distribution equipment upgrades and automation,
23 and data system modernization to enhance

1 operational efficiency in the distribution grid,
2 and, when coupled with dynamic rate offerings,
3 allow greater energy consumption control by
4 consumers. With its Smart Grid Initiative
5 project, the Company seeks to deploy systems
6 that are cost-effective, scalable, adaptable,
7 open to technology and vendor neutrality, and
8 provide reliable and secure transmission of
9 data. Technology applications of the Company's
10 Smart Grid Initiative would include: Home Area
11 Networks (HAN), Meter Data Management System
12 (MDMS), Electric Distribution Automation, Data
13 Monitoring and Engineering Analysis Software
14 Tools, Distributed Resources, Natural Gas
15 Equipment Monitoring and Customer Programs.

16 Q. Has the Company sought approval and funding for
17 its Smart Grid Initiative in another proceeding
18 before the Commission?

19 A. Yes, on July 2, 2009, Central Hudson filed its
20 Smart Grid Initiative with the Commission in
21 Case 09-E-0310, In the Matter of the American
22 Recovery and Reinvestment Act of 2009 - Utility
23 Filings for New York Economic Stimulus.

1 Q. Please explain the American Recovery and
2 Reinvestment Act of 2009 (ARRA)(Public Law 111-
3 05).

4 A. Among other things, the ARRA provides funding to
5 the U.S. Department of Energy (DOE) to award
6 grants to various entities to facilitate
7 projects that test and deploy smart technology
8 for the electric grid, promote investment in
9 renewable energy sources, drive innovation in
10 the fossil energy industry, and adapt electric
11 facilities to the needs of the future. Due to
12 the cost sharing requirements of the grants,
13 utilities filed their project proposals with the
14 Commission seeking ratepayer funding for the
15 balance of project costs.

16 Q. Did the Commission act on the Company's proposal
17 prior to the Company's rate case filing?

18 A. No. The Commission's Order in Case 09-E-0310
19 was issued after the Company's rate case filing.
20 However, by Order issued on July 27, 2009, in
21 Case 09-E-0310, et. al., the Commission approved
22 among other things and with certain conditions,
23 Central Hudson's Smart Grid Initiative proposal.

1 Approval was conditioned, however, on the
2 Company's receipt of ARRA funding.

3 Q. Has the Company received ARRA funding for its
4 Smart Grid Initiative?

5 A. No. Staff has been informed that the DOE has
6 denied approval of Central Hudson's requested
7 funding.

8 Q. Should project funding be considered in this
9 proceeding?

10 A. No. To ensure consistency among Smart Grid
11 projects, this project should be considered in
12 Case 09-E-0310. Thus, we recommend that it not
13 be addressed in this rate proceeding.

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

15 A. Yes.