

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

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

Case 09-E-0428

August 2009

Prepared Testimony of:

John Quackenbush
Utility Engineer 1
Office of Electric, Gas, and Water

State of New York
Department of Public Service
Empire State Plaza
Albany, NY 12223

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

3 A. John Quackenbush. I am employed by the New York
4 State Department of Public Service (Department).
5 My business address is Empire State Plaza,
6 Albany, New York.

7 Q. Mr. Quackenbush, what is your position at the
8 Department?

9 A. I am a Utility Engineer 1 assigned to the
10 Electrical Distribution Systems section in the
11 Office of Electric, Gas, and Water.

12 Q. Please describe your educational background and
13 professional experience.

14 A. I attended Hudson Valley Community College in
15 Troy, New York and received an Associate in
16 General Studies degree, as well as an Associate
17 in Applied Science degree in civil engineering
18 technology. Thereafter, I continued my
19 education at the State University of New York
20 Institute of Technology (SUNYIT) in Utica, New
21 York and graduated with a Bachelor of Science
22 degree in civil engineering technology. I was
23 employed by Clough, Harbour, & Associates LLP as
24 a Drafting & Design Technician from 2000 until

1 November 2006. During this time, I was a member
2 of the Wireless, Transportation, and Facility
3 Services departments. In February 2007, I
4 joined the Staff of the Electric Distribution
5 Section in the Office of Electric, Gas, and
6 Water where I have performed electric utility
7 inspections to assess infrastructure conditions,
8 investigated various electric utility customer
9 reliability complaints, and reviewed utility
10 reliability reports. I am on a temporary
11 rotation assignment in the Electric Rates
12 Section.

13 Q. Mr. Quackenbush, have you previously testified
14 before the Commission?

15 A. Yes. I testified in Case 08-E-0887, Central
16 Hudson Gas & Electric Corporation electric
17 rates.

18 Q. What is the purpose of your testimony?

19 A. I will address the Research and Development
20 (R&D) programs Consolidated Edison Company of
21 New York, Inc. (Con Edison or the Company)
22 presented in its rate case filing.

23 Q. Will you refer to, or otherwise rely upon, any
24 information obtained during the discovery phase

1 of this proceeding?

2 A. Yes, I have relied upon, and will refer to,
3 several responses to Staff interrogatory
4 requests. These responses are in Exhibit_(JJQ-
5 1).

6 Q. Please describe your review process for the R&D
7 projects and programs and your recommendation.

8 A. I reviewed the exhibits and work papers
9 associated with the Company's five year historic
10 R&D project budgets and actual dollar amounts
11 spent on the R&D initiatives. This information
12 was compared with the approximate \$21 million
13 R&D expenditure that the Company has requested
14 for the rate year ending 2011 (RYE 2011 or the
15 rate year). Based on that review, I recommend
16 that the Company's R&D program request be
17 reduced by \$3,090,000.

18 Q. What types of projects are included in the
19 Company's rate year R&D program?

20 A. The Company has described projects under five
21 business areas: Administration; Institutional;
22 the Internal Program (which consists of
23 transmission and distribution); the
24 Environmental, Health, and Safety Program; and,

1 the Customer Operations Program. In the rate
2 year, the Company will perform work that spans
3 across these five project areas. This includes
4 work related to smart grid projects, improved
5 network reliability and monitoring, demand
6 response, Electric Power Research Institute
7 (EPRI) Base programs, and projects related to
8 plug-in hybrid electric vehicles.

9 Q. Please describe the purpose of the Institutional
10 category and state the overall cost of the
11 activities and programs which the Company has
12 classified under this heading.

13 A. The Institutional category contains two
14 subheadings entitled Electric Power Research
15 Institute (EPRI) Base Program and Central
16 Electricity Authority (CEA) Power Delivery
17 Projects. The Company has estimated
18 expenditures in the Institutional category
19 totaling \$4.2 million or 20% of the overall
20 estimated R&D budget. This is an increase of
21 approximately \$1 million compared to the
22 historical year spending on this program. The
23 majority of the spending in this category
24 consists of a \$4 million allocation to the EPRI

1 Base Program. This spending is associated with
2 membership funds in EPRI research and
3 information programs which the Company claims
4 provides current information on new and ongoing
5 collaborative electric research initiatives.

6 Q. Has Con Edison explained how it proposes to
7 spend this additional funding in the EPRI Base
8 Program?

9 A. In response to DPS-63, Exhibit_(JJQ-1), the
10 Company explained that the proposed additional
11 \$1 million would be used to fund the EPRI Energy
12 Utilization program (\$475,000), the Intelligrid
13 program (\$200,000), the Integration of
14 Distributed Renewables program (\$175,000), and
15 the Energy Storage program (\$150,000).

16 Q. What is your recommendation regarding this
17 requested funding?

18 A. I recommend that the Commission not allow
19 funding for three of these programs.

20 Q. Please identify those programs and explain the
21 basis for your recommendation?

22 A. Of the proposed \$4 million dollars allocated to
23 the EPRI Base Program, my recommended reductions
24 amount to \$800,000 for the rate year. The EPRI

1 Energy Utilization program (\$475,000) should not
2 be funded. As revealed by the Company's
3 response to DPS-63 (Exhibit_(JJQ-1)), funding of
4 these programs depends on the outcome of the
5 Company's request for this funding in the Energy
6 Efficiency Portfolio Standard (EEPS) proceeding.
7 The purpose of the EEPS proceeding is to
8 consider funding of programs of this type. It
9 is unnecessary to allocate money to these
10 programs through the Company's R&D program at
11 the same time that the Company will be
12 requesting funding through the EEPS proceeding.
13 Therefore, my recommended adjustment should be
14 adopted by the Commission.

15 Q. Please describe your additional adjustments in
16 this area.

17 A. I recommend that funding not be provided for the
18 Integration of Distributed Renewables program
19 (\$175,000) and the Energy Storage program
20 (\$150,000) under the EPRI Base Program category.
21 Con Edison has duplicated the identification and
22 itemization of these two programs under the
23 Smart Grid / System of the Future Projects
24 heading in Exhibit_(AK-1) where it has proposed

1 spending for the Integration of Distributed
2 Renewables of \$500,000 for the rate year and
3 proposed spending for the Energy Storage program
4 of \$550,000 for the rate year. The Company has
5 requested funding for identical programs listed
6 within two entirely separate business area
7 categories as shown on Exhibit_(AK-1).
8 Therefore, my recommended adjustments should be
9 adopted. Based on my three recommended
10 reductions described above, the EPRI Base
11 program funding should be reduced by \$800,000
12 for the rate year.

13 Q. Has the Company addressed the potential rate
14 recovery in this proceeding of R&D programs that
15 it has sought cost recovery for in the EEPS
16 proceeding?

17 A. Yes. The programs in this category include:
18 Electric Power Research Institute (EPRI)
19 Assessment of Energy Efficiency Power Supplies;
20 Energy Efficiency and Demand Response; Lighting
21 Research Center Program Services; Electric Power
22 Research Institute (EPRI) National Energy
23 Efficiency Demonstration Showcase; and,
24 Miscellaneous Small Projects. The Company's

- 1 initial filing did not include a request for
2 recovery of these project costs. Company
3 witness Kressner describes (beginning) on Page
4 13 of his pre-filed testimony that if the
5 Company is unable to obtain funding in the EEPS
6 case prior to the time established for updates
7 in this case, the Company will request funding
8 of these projects in its updated request. As
9 previously discussed in regard to the other
10 program related to the EEPS, the intention of
11 the EEPS proceeding is to consider funding of
12 programs of this nature. If such programs
13 cannot be funded in the EEPS proceeding, then
14 Staff reserves its right to respond to the
15 Company's potential updated funding request and
16 justification.
- 17 Q. Please expand on the purpose and cost of the
18 programs classified under the Internal Program.
- 19 A. This category consists of the two subheadings
20 Transmission and Distribution which contain
21 further subheadings and specific programs.
- 22 Q. What is the forecasted spending for the
23 Distribution program?
- 24 A. The Company proposed Distribution Program budget

1 total for the rate year is \$9,500,000 or
2 approximately 45% of the rate year R&D budget.

3 Q. What are the major projects that contribute to
4 this significant amount of spending?

5 A. The major factors include the Network
6 Reliability and Monitoring program (\$750,000),
7 the Advanced Splices and Joints program
8 (\$250,000), the Advanced Distribution Automation
9 Tech program (\$500,000), the Advanced
10 Distribution Cables program (\$250,000), the
11 Advanced Network Switches program (\$300,000),
12 the Directional Hand-Held Stray Voltage Detector
13 Enhancement program (\$500,000), the Smart Grid
14 program (\$1,250,000), the 3G System of the
15 Future Activities program (\$500,000), the Energy
16 Storage program (\$550,000), and the Integration
17 of Distributed Renewables program (\$500,000).

18 Q. Do you have any concerns with any of the above
19 mentioned programs?

20 A. Yes. In particular, the Company has not
21 provided a cost benefit analysis or sufficient
22 justification for the Advanced Splices & Joints,
23 Advanced Distribution Automation Tech, Advanced
24 Distribution Cables, and the Advanced Network

1 Switches programs. As revealed by the Company's
2 response to DPS-62, Exhibit_(JJQ-1), if a
3 project has a "Cost Segregation Number" (CSN),
4 then a work order has been opened by the
5 Company's Accounting Department to track costs
6 associated with authorized projects and that all
7 projects that contain a CSN beginning with 92_
8 are authorized projects. Con Edison further
9 documented that projects listed in Exhibit_(AK-
10 1) with a CSN beginning with 0_ or no CSN are
11 conceptual projects that are pending
12 authorization. According to Exhibit_(AK-1),
13 these four programs have not been assigned a CSN
14 by Con Edison, yet the Company has budgeted
15 significant spending on these programs that may
16 potentially be denied by Con Edison's own
17 management.

18 Q. Did you request additional details on these four
19 programs from Con Edison?

20 A. Yes. In response to DPS-68 (Exhibit_(JJQ-1)),
21 the Company provided a conceptual program list
22 with dollar amounts associated with these
23 programs. Con Edison, however, further notes
24 that the exact details of these programs are

1 unknown at this time and that the estimates are
2 based upon the Company's experience as to the
3 effort needed to initiate such programs. Based
4 on this response, I recommend that the
5 Commission not provide funding for such programs
6 since they have not been formally approved by
7 the Company, there is no cost-benefit analysis
8 supporting them, and the Company has not
9 provided the level of detail necessary to
10 justify the requested funding levels.
11 Therefore, I recommend a reduction of \$1,300,000
12 to the Company's requested R&D funding for the
13 rate year.

14 Q. Did the Company reduce any R&D expenditures as a
15 result of its compliance filing in Cases 08-E-
16 0539 and 09-M-0435 relating to austerity
17 measures?

18 A. Yes, Con Edison noted that there will be a
19 reduction of \$3.2 million in R&D expenditures
20 for 2009. It noted that these measures will be
21 achieved through a \$1.5 million deferral of the
22 Remote Monitoring System Expansion (RMSX) -
23 Advanced Primary and Secondary Supervisory
24 Control and Data Acquisition (SCADA) program, a

1 reduction of \$1.46 million in the
2 Superconducting Cable and Fault Current Limiter
3 Demonstration at 75th and York and a reduction of
4 \$240,000 worth of Salaries and Wages in 2009.
5 The Company initially budgeted this \$240,000 to
6 fill an open engineering position and to add two
7 new-hire engineers in its R&D organization; the
8 Company claimed that this reduction will be
9 achieved by not filling these positions in 2009.
10 As revealed by the Company's response to DPS-
11 136, Exhibit_(JJQ-1), the Superconducting Cable
12 and Fault Current Limiter Demonstration at 75th
13 and York will be slowed down in 2009. Con
14 Edison further noted in a response to DPS-404,
15 Exhibit_(JJQ-1), that it anticipates spending
16 what is budgeted in Exhibit_(AK-1) for the rate
17 year on the Superconducting Cable and Fault
18 Current Limiter Demonstration at 75th and York
19 project. As also revealed by the Company's
20 response to DPS-136, Exhibit_(JJQ-1), no date
21 for reinstating the Remote Monitoring System
22 Expansion (RMSX) - Advanced Primary and
23 Secondary Supervisory Control and Data
24 Acquisition (SCADA) program has been established

1 and the positions will not be filled until an
2 undetermined future date. The Remote Monitoring
3 System Expansion (RMSX) - Advanced Primary and
4 Secondary Supervisory Control and Data
5 Acquisition (SCADA) program is directly related
6 to the Network Reliability and Monitoring
7 program listed on page 2 of Exhibit_(AK-1). As
8 indicated in DPS-67, Exhibit_(JJQ-1),
9 approximately \$300,000 of the forecasted total
10 for the Network Reliability and Monitoring
11 program will be for the development of the first
12 generation RMSX prototype system and \$450,000 of
13 the forecasted program total will be for the
14 development of advanced operator decision making
15 tools. These two spending activities are
16 associated with the efforts of the austerity
17 measures proposed by the Company within the
18 Remote Monitoring System Expansion (RMSX) -
19 Advanced Primary and Secondary Supervisory
20 Control and Data Acquisition (SCADA) program.
21 Because the Company has not established a new
22 start-up date for the activities related to the
23 Network Reliability and Monitoring program, this
24 austerity measure should continue into the rate

1 year; it is recommended that this program and
2 its associated funding of \$750,000 not be
3 provided for the rate year. I also recommend
4 that the \$240,000 reduction of funding for
5 Salaries and Wages as a result of the unfilled
6 positions be applied to the rate year since the
7 Company has not established a hiring date nor
8 identified a clear need for these positions.
9 Therefore, I recommend a \$990,000 adjustment be
10 reflected as a reduction to the Company's R&D
11 budget for these two items.

12 Q. Please summarize all of your previously stated
13 recommended adjustments to the R&D budget.

14 A. I recommend that the EPRI Energy Utilization
15 program, for which the Company has requested
16 \$475,000 for the rate year, be eliminated from
17 the EPRI Base Program. Additionally, I
18 recommend that funding not be provided for the
19 Integration of Distributed Renewables program
20 which the Company has forecasted spending of
21 \$175,000 for the rate year and the Energy
22 Storage program which the Company has budgeted
23 \$150,000 for the rate year. The total
24 recommended adjustment for the EPRI Base Program

1 is a reduction of \$800,000 for the rate year;
2 this would change the EPRI BASE Program's total
3 spending to \$3,200,000 for the rate year.
4 Additionally, I recommend that Con Edison
5 continue its proposed austerity measures.
6 Therefore, the Company should not provide
7 funding for the Network Reliability & Monitoring
8 program in the amount of \$750,000 for the rate
9 year and the Company should continue the
10 \$240,000 Salaries and Wages reduction by not
11 filling the anticipated positions for the rate
12 year. The recommended continuing austerity
13 measures total \$990,000 for the rate year. I
14 also recommend that the Commission reduce Con
15 Edison's R&D Distribution Program by \$1,300,000
16 by not funding the Advanced Splices and Joints,
17 the Advanced Distribution Automation Tech, the
18 Advanced Distribution Cables, and the Advanced
19 Network Switches programs for the rate year.
20 This in conjunction with my proposed austerity
21 continuation recommendation for the Network
22 Reliability Monitoring program would change the
23 total Distribution program spending to
24 \$7,450,000 for the RYE 2011. My recommended R&D

1 reductions total \$3,090,000 for the rate year
2 (refer to Exhibit_(JJQ-2) for details); the R&D
3 budget would be reduced to \$17,995,000 for the
4 rate year.

5 Q. Are there any additional comments that you wish
6 to make regarding the R&D programs?

7 A. Yes, I recommend that Con Edison defer any rate
8 funding that the American Recovery and
9 Reinvestment Act stimulus package covers which
10 was initially allocated to the R&D budget in
11 Exhibit_(AK-1).

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

13 A. Yes.