

05-S-1376

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*Testimony*

February 27, 2006

**VIA HAND DELIVERY**

Hon. Jaclyn Brilling  
Secretary  
State of New York Public  
Service Commission  
Three Empire State Plaza, 14<sup>th</sup> Floor  
Albany, New York 12223-1350

2006 FEB 27 PM 4:00  
PUBLIC SERVICE  
COMMISSION  
STATE OF NEW YORK

Re: Case 05-S-1376 – Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consolidated Edison Company of New York, Inc. for Steam Service

Dear Secretary Brilling:

Please find enclosed an original and five (5) copies of the Direct Testimony and Exhibits of Dr. Alan Rosenberg filed on behalf of the City of New York in the above-captioned proceedings. Copies of the aforementioned Testimony and Exhibits are being served on the active parties list via e-mail and U.S. Mail.

Please have the extra copies of the testimony time-stamped and returned to our messenger. Please call me if you have any questions.

Very truly yours,

COUCH WHITE, LLP  
*Robert M. Loughney*  
Robert M. Loughney

RML/MHB/slg  
Enclosures

cc: ALJ Robert R. Garlin (via Hand Delivery; w/enc.)  
Kevin Lang, Esq. (via Hand Delivery; w/enc.)  
Active Party List (via e-mail and U.S. Mail; w/enc.)

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PUBLIC SERVICE  
COMMISSION  
REC'D FEB 27 2006

ORIGINAL

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Before the

**New York State Public Service Commission**

**Case No. 05-S-1376**

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**CONSOLIDATED EDISON COMPANY  
OF NEW YORK, INC.**

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Direct Testimony of

**Dr. Alan Rosenberg**

On Behalf of

**The City of New York**

February 27, 2006  
Project 8493



BRUBAKER & ASSOCIATES, INC.  
ST. LOUIS, MO 63141-2000

Before the  
New York State Public Service Commission

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Case No. 05-S-1376

Direct Testimony of Dr. Alan Rosenberg

1 Introduction/Summary

2 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3 A My name is Dr. Alan Rosenberg. My business address is 1215 Fern Ridge Parkway,  
4 Suite 208, St. Louis, Missouri 63141-2000.

5 Q WHAT IS YOUR OCCUPATION AND BY WHOM ARE YOU EMPLOYED?

6 A I am a consultant in the field of public utility regulation and a principal with the firm of  
7 Brubaker & Associates, Inc., energy, economic and regulatory consultants. My  
8 qualifications are attached hereto as Appendix A.

9 Q ON WHOSE BEHALF ARE YOU TESTIFYING?

10 A I am testifying on behalf of the City of New York ("City") to review Consolidated  
11 Edison Company of New York Inc.'s ("Con Edison" or "the Company") filing to raise  
12 steam rates that is the subject of this proceeding.

1 Q WHAT IS THE SUBJECT MATTER OF YOUR TESTIMONY?

2 A In the first section of my testimony I place Con Edison's proposed increase in  
3 perspective. I conclude that Con Edison's price of steam is becoming prohibitively  
4 expensive, especially in comparison with alternative sources of energy such as gas  
5 or electricity. If allowed to proceed in this manner, this competitive price  
6 disadvantage would frustrate the objective of "growing the steam business" that was  
7 laid out in the Steam Business Development Plan (SBDP) and found to be  
8 "meritorious" by the Commission in its recent order.<sup>1</sup> To address the growing  
9 competitive problem facing Con Edison's steam business, I recommend several  
10 adjustments to the Company's revenue requirement that will moderate the overall  
11 increase that steam customers will receive. In addition, I believe that the Commission  
12 must reexamine the relationship between the Electric and Steam Departments to  
13 ensure that the benefits that the Steam Department brings to electric customers are  
14 properly recognized. Finally, I recommend that the Commission ensure that Con  
15 Edison file a comprehensive implementation plan that will adopt the  
16 recommendations of the SBDP and the forthcoming Steam Production Study in a  
17 manner that will reverse the tide of spiraling steam prices.

18 In the second section of my testimony, I correct two errors in Con Edison's  
19 class cost of service study, and show the implications of this correction on the results  
20 of the cost study.

21 In the third section of my testimony, I propose an alternative allocation of the  
22 non-ERP revenue increase to base rates based on the corrected class cost of service  
23 study. I also explain why the ERP revenues that are now being collected through the  
24 FAC should be allocated to classes based on the demand allocator (DO1), rather

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<sup>1</sup> Page 13 of Order in Case 03-S-1672 ("SBDP Order"), issued December 5, 2005.

1 than on annual volume as Con Edison has proposed. I then show the results of this  
2 recommendation on the increases faced by each class.

3 In the fourth section of my testimony, I comment on the Company's proposed  
4 rate design for SC 2.

5 In the final section of my testimony, I recommend several modifications to  
6 Con Edison's SC 4 tariff, which is designed to provide steam backup/supplementary  
7 service to customers who utilize both Con Edison supplied steam and another energy  
8 source for the same purpose at any time during the months of November through  
9 April.

10 **Con Edison's Proposed Increase in Rates**

11 **Q WHAT IS THE MAGNITUDE OF THE INCREASE THAT CON EDISON IS**  
12 **REQUESTING IN THIS CASE?**

13 **A** Con Edison is requesting a total base rate increase of \$102 million, as noted in the  
14 testimony of Mr. Yaegel, page 16. Moreover, the requested rate relief follows a base  
15 rate increase of almost \$50 million in October 2004 and \$27.4 million increase in  
16 October 2005. Base rate increases, of course, do not include any increases in the  
17 cost of fuel. Because fuel is expected to be much more expensive going forward  
18 than it was in the historic rate year (twelve months ended June 30, 2005), the total bill  
19 impact on customers will be amplified.

1 Q WHY DO YOU CHARACTERIZE THE INCREASE AS \$102 MILLION WHEN THERE  
2 WILL BE AN OFFSETTING DECREASE OF SOME \$33 OR \$34 MILLION IN THE  
3 FAC?

4 A I characterize it that way because that is only way to view the genuine impact of Con  
5 Edison's proposal on its steam customers. While it is true that \$33 or \$34 million of  
6 the \$102 million increase represents a roll-in of East River Repowering Project  
7 (ERRP) costs from the FAC into base rates, those carrying costs began to be  
8 recovered in the FAC effective only nine months ago.<sup>2</sup>

9 Q DO YOU CONSIDER THIS A LARGE INCREASE?

10 A There is no other way to consider it. The base revenue for the twelve months ending  
11 June 30, 2005, excluding the base cost of fuel (which is more or less an arbitrary  
12 number and has no impact whatsoever on Con Edison's total revenue requirement or  
13 its total earnings), was \$260 million. Thus, the requested increase is close to 40%.  
14 That is a large increase by any yardstick. (And remember, the \$260 million itself  
15 represents a 40% plus increase over the non-fuel base revenues that were in effect  
16 less than two years ago.) Moreover, Con Edison is proposing, in addition to this  
17 \$102 million, an additional base rate increase of more than \$27 million in the  
18 subsequent two years. In addition, the benefit of the sale of the First Avenue  
19 properties will be amortized over three years. At the end of that amortization period,  
20 Steam rates will increase by the amount of that annual benefit (approximately \$26  
21 million).

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<sup>2</sup> According to the response to City Question No. 71, the ERRP costs were first recovered in the steam FAC effective May 12, 2005.

1 Q WHAT HAS BEEN THE DIRECTION OF CON EDISON'S STEAM RATES IN  
2 RECENT HISTORY?

3 A I have put together a graph of the delivered cost of steam on Con Edison's system  
4 from 1999 to the present. This is shown on Schedule 1. The last data point on the  
5 graph shows the requested increase for the twelve months ended September 2007.  
6 Note that even by Con Edison's own figures, the rate increase sought here would  
7 bring the average cost of steam to \$27 per Mlbs, more than twice the price of steam  
8 in 1999. Again, this does not even reflect the additional increases Con Edison is  
9 requesting for 2008 and 2009, nor does it reflect potential increases in the cost of  
10 fuel over what Con Edison is forecasting. For example, in January and February of  
11 this year, the steam FAC was approximately \$13.50 per Mlbs. If the proposed SC 2  
12 rates had been in effect, an SC 2 customer would have paid at least \$34.74 per  
13 additional 1,000 lbs. of steam. On a heating equivalent, that is equivalent to paying  
14 approximately \$35.00 per MMBtu of gas, a level that has never been reached even  
15 when gas prices exhibited their greatest volatility.

16 Q DOES THIS MAKE STEAM UNCOMPETITIVE WITH ALTERNATIVE SOURCES OF  
17 ENERGY?

18 A Yes. According to Con Edison, at the proposed rates, operating costs for steam heat  
19 for a typical office building in 2007 (750,000 square feet) would be about \$136,000  
20 per year, or 42% more than for a package boiler.<sup>3</sup> This cost disadvantage of steam  
21 grows more pronounced as the size of the building gets larger. This is shown on  
22 Schedule 2, which is a graph reproduced from page 68 of the SBDP.

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<sup>3</sup> This information is derived from the response to City Question No. 87.

1           In the air conditioning market, the requested rate relief would make the cost  
2           disadvantage of steam even worse. In fact, Con Edison acknowledges that for a  
3           typical office building, steam air conditioning does not compete with an all-electric air  
4           conditioning system.<sup>4</sup> And as the SBDP noted:

5                     Steam-only cooling is not cost competitive for full requirements  
6                     applications under current market conditions. Con Edison steam has  
7                     won only about 10 percent of new cooling business historically and  
8                     little or none recently.<sup>5</sup>

9   **Q     WHAT ARE THE IMPLICATIONS OF THESE PRICE COMPARISONS?**

10  A     The implications are that Con Edison's steam system is in imminent danger of  
11  entering into a "death spiral". Left unchecked, extremely high rates will ultimately  
12  induce customers to use other sources of energy for their heating and cooling. As  
13  customers leave the system, Con Edison will be forced to cover its fixed costs from a  
14  reduced steam load, driving rates higher, which will lead to even greater migration  
15  from the steam system, and so forth.

16  
17  **Q     WHAT REVENUE REQUIREMENT ADJUSTMENTS ARE YOU PROPOSING?**

18  A     The Commission should reject Con Edison's proposal to increase its depreciation  
19  rates. This will reduce the revenue requirement for the rate year by \$25.7 million.

20  **Q     IS CON EDISON SEEKING AN INCREASE IN ITS DEPRECIATION RATES?**

21  A     Yes. Con Edison witness Charles D. Hutcheson is proposing an increase in the  
22  depreciation rates and expenses for its steam production investment, distribution  
23  investment, and the ERRP investment. Con Edison's proposed changes to the

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<sup>4</sup> This information is derived from the response to City Question No. 88.

<sup>5</sup> SBDP, page 16.

1 depreciation rates increase the test year depreciation expense by approximately  
2 \$9.4 million. In addition, Con Edison is proposing an adjustment to reflect the  
3 amortization of the reserve deficiency produced by revising the depreciation  
4 parameters, which are life characteristics and net salvage ratios. The amortization of  
5 the reserve deficiency increases the amortization expense by another \$16.3 million.  
6 As a result, Con Edison is proposing an increase in depreciation and amortization  
7 expense of \$25.7 million (Exhibit \_\_\_ (AP-11), Schedule 3, Page 2 of 2).

8 **Q HAVE YOU REVIEWED CON EDISON'S DEPRECIATION STUDY?**

9 A I have not reviewed Con Edison's depreciation study in detail. I take no position on  
10 the results of the depreciation parameter studies, which are life characteristics and  
11 net salvage, presented in this case.

12 **Q WHAT IS YOUR RECOMMENDATION REGARDING CON EDISON'S PROPOSED**  
13 **CHANGES IN DEPRECIATION RATES?**

14 A I am recommending the Commission continue to utilize Con Edison's current  
15 depreciation rates for purposes of establishing steam rates.

16 **Q WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

17 A The basis for my recommendation is two-fold. First, as elaborated earlier in this  
18 testimony, the steam system is in immediate danger of entering into a death spiral. If  
19 Con Edison is going to take steps to attract new business and retain existing  
20 customers, as set out in the SBDP endorsed by the Commission in its SBDP Order,  
21 steps should be taken to limit the rate increase as much as possible. Therefore,  
22 given the precarious competitive situation that the Company is in, the Commission

1 should reject Con Edison's proposal to increase its depreciation rates in this  
2 proceeding. Second, depreciation rates were just adjusted within the last two years  
3 and the impact of the proposed change in depreciation rates is simply not tolerable  
4 given current competitive conditions.

5 **Q WHEN WERE CON EDISON'S CURRENT DEPRECIATION RATES APPROVED?**

6 A Con Edison's current depreciation rates were approved as a result of a settlement  
7 reached in Con Edison's last rate proceeding, Case No. 03-S-1672. In that case, the  
8 Company prepared studies similar to those presented in this case, and the data used  
9 for those cases was based on data as of December 31, 2002. Therefore, the  
10 depreciation rates that are currently in place were based on a study that is only two  
11 years old. The proposed depreciation rates in this case utilize a study period ending  
12 December 31, 2004.

13 **Q IS CON EDISON PROPOSING A SIGNIFICANT INCREASE IN ITS DEPRECIATION**  
14 **AND AMORTIZATION EXPENSE?**

15 A Yes. The change in depreciation rates, coupled with the amortization of the  
16 depreciation reserve deficiency, produces a 50% increase in its depreciation and  
17 amortization expense. Because the current depreciation rates are only a little over  
18 two years old, it seems inappropriate at this time to make significant changes in  
19 rates, particularly given already noncompetitive steam prices. Therefore, I propose  
20 that current depreciation rates continue to be used. As noted earlier, this will reduce  
21 the revenue requirement by approximately \$25.7 million.

1 Q DO YOU HAVE ANY FURTHER SUGGESTIONS FOR DEALING WITH THE  
2 REVENUE REQUIREMENT?

3 A Yes. I urge the Commission to reject completely the second and third steps of the  
4 requested steam increases -- the increases for 2008 and 2009. Given the potential  
5 magnitude of this increase, and what hopefully will be the implementation of  
6 recommendations for improvement from the SBDP and the pending Steam  
7 Production Study, I believe that it is premature to grant increases that far in advance.

8 Q WHAT OTHER ISSUES SHOULD THE COMMISSION BE CONSIDERING TO  
9 MITIGATE THESE SEEMINGLY NEVER-ENDING INCREASES?

10 A In this case, a major impetus for the increase is the fixed costs of electric-steam units  
11 that are being transferred to the steam customers. The fixed costs of the ERRP  
12 project accounts for \$34 million of the \$102 million requested. Furthermore, as noted  
13 by Con Edison witness Mr. Bozgo, the elimination of the rent paid by the Electric  
14 Department for the 74<sup>th</sup> and 59<sup>th</sup> Street plants, adds another \$24.2 million to the rate  
15 request ("Transferred Plant Costs"). Thus, over half of the requested increase,  
16 approximately \$58 million, is attributable to the manner in which costs are shared  
17 between the Electric and Steam Departments. At a minimum, the Commission  
18 should review whether the Transferred Plant Costs associated with the 74<sup>th</sup> and 59<sup>th</sup>  
19 Street plants should be placed into steam base rates without a more thorough  
20 analysis of how the benefits, that the Steam Department provides to the Electric  
21 Department, are being recognized.

1 Q WHAT IS THE BASIS FOR YOUR CONCERN?

2 A As I have stated, steam costs are spiraling out of control, possibly leading to a death  
3 spiral. Once customers have made capital investment decisions to use an energy  
4 source other than steam for their heating or cooling needs, they will not return to the  
5 steam system, at least for the life of the new or refurbished equipment. Thus, Con  
6 Edison, and its remaining steam customers, cannot afford to put these increases in  
7 place precipitously. Furthermore, the Commission must carefully weigh the potential  
8 for the Transferred Plant Costs to exacerbate the death spiral.

9 More importantly, I do not believe that adequate analysis has been presented  
10 to compare the relative and interacting benefits between the Steam and Electric  
11 Departments. The Commission should be concerned about transferring the  
12 Transferred Plant Costs to the Steam Department before ensuring that there is an  
13 equitable recognition of those benefits.

14 Q COULD YOU PLEASE EXPAND ON THAT LAST POINT?

15 A Yes. Electric customers benefit from the steam system in at least two ways. First,  
16 they get the benefit of sales of energy, capacity and ancillary services into the New  
17 York ISO at Zone J prices. For the 288 MW ERRP plant, these revenues are  
18 considerable. Second, as noted in the SBDP:

19 In addition to the direct value provided to its customers, the steam  
20 system reduces the need for peak summer electricity capacity by  
21 about 375 megawatts, benefiting all electric customers in the  
22 southeast New York market. The system also avoids the need for  
23 additional in-City electricity and natural gas infrastructure and other  
24 associate energy costs (e.g. electric energy) and customer expenses  
25 that would be incurred were the steam system unavailable.<sup>6</sup>

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<sup>6</sup> SBDP, page 14.

1 Clearly, the continued viability of the Steam Department provides significant benefits  
2 for the Electric Department, and it is not clear how those benefits will be accounted  
3 for going forward.

4 **Q IF THE COMMISSION DECIDED TO FORESTALL THE TRANSFER OF SOME OR**  
5 **ALL OF THE TRANSFERRED PLANT COSTS, WOULD THAT ADVERSELY**  
6 **IMPACT CON EDISON'S FINANCIAL INTEGRITY?**

7 A No. Con Edison could accrue carrying costs on the portion of these costs that is not  
8 immediately passed through to the electric customers via the MAC rider. (I am  
9 implicitly assuming that these costs and the ERRP costs are found to be used and  
10 useful and prudently incurred. My testimony does not address these questions.)

11 **Q WERE THE TRANSFERRED PLANT COSTS ADDRESSED IN THE JOINT**  
12 **PROPOSAL ADOPTED IN CASE 03-S-1672?**

13 A Yes, and I acknowledge that the Company's proposed handling of these Transferred  
14 Plant Costs appears to be consistent with what was expressed in that Joint Proposal.

15 **Q WHY THEN DO YOU BELIEVE THAT IT IS APPROPRIATE FOR THE**  
16 **COMMISSION TO REVISIT THIS ISSUE?**

17 A As I stated above, I do not believe that the benefits of the Steam Department are  
18 properly accounted for, and this should be addressed. Also, the dire circumstances  
19 of the Steam business warrant an immediate investigation to ensure that all is being  
20 done to hold down the price of steam. As reflected in Schedule 2, Con Edison's  
21 proposed rates are 38% higher than what they were as late as 2003, the first full year  
22 before the JP was signed. I would also note that in the Order approving the JP, the

1 Commission rejected Westchester's effort to transfer some of the Transferred Plant  
2 Costs in the last proceeding, in large part due to the potential rate impact on Steam  
3 customers (Order, p. 28). The same customer impact concerns are present here,  
4 except they are worse now.

5 It is highly relevant here that the concerns expressed by the City in 2004 over  
6 large-scale steam rate increases, summarized by the Commission in the Order in  
7 Case 03-S-1672 (Order, p. 20), were, if anything, understated in light of the  
8 subsequent exponential rise in steam costs. Accordingly, the underlying rationale for  
9 rejecting a transfer of the Transferred Plant Costs in Case 03-S-1672 is, if anything,  
10 stronger here, given the likely consequences for the continued viability of the steam  
11 system.

12 **Q DO YOU HAVE ANY OTHER RECOMMENDATIONS?**

13 **A** Yes. As a result of the last proceeding, the Company and interested stakeholders,  
14 including the City, have worked on the SBDP and continue to work on a Steam  
15 Production Plan. Once the Steam Production Plan is completed, the Company should  
16 be required to file a comprehensive implementation plan to adopt the  
17 recommendations of those studies in a manner that will make the Steam business  
18 more competitive. The work of all the parties will be in vain without a meaningful,  
19 immediate effort to implement the results of the studies. In this regard, the  
20 Commission may want to consider imposing incentives, such as imputing growth  
21 revenues, to ensure that the Company complies.

1 **Corrections to Con Edison's Class Cost of Service Study**

2 **Q HAVE YOU REVIEWED THE CLASS EMBEDDED COST OF SERVICE STUDY**  
3 **(ECOS)?**

4 **A** Yes.

5 **Q WHAT ARE THE RESULTS OF YOUR ANALYSIS?**

6 **A** Con Edison made two errors that should be corrected to improve the accuracy of the  
7 study. The first relates to Con Edison's calculation of the allocation factor for  
8 demand related costs, DO1. The second error concerns Con Edison's failure to  
9 allocate the fuel expense related to steam losses in an appropriate fashion.

10 **Q PLEASE DESCRIBE THE DEMAND ALLOCATOR, DO1, AND ITS PURPOSE.**

11 **A** DO1 is used to allocate production demand and distribution demand related costs,  
12 i.e., those caused by the need to respond to peak demands on the system, rather  
13 than the number of customers on the system or the amount of steam used on an  
14 annual basis. The allocator Con Edison used is the average demand, per hour (Mlbs  
15 per hour), from 6 AM through 11 AM, on the system peak day.

16 **Q DO YOU OBJECT TO THE CHOICE OF THE FIVE-HOUR AVERAGE DEMAND ON**  
17 **A PEAK DAY AS THE APPROPRIATE ALLOCATOR FOR THE DEMAND**  
18 **RELATED COSTS?**

19 **A** Conceptually, no. The peak use of steam is highly sensitive to cold weather, and  
20 Con Edison must design and build its system to accommodate this peak usage.  
21 However, I am skeptical of the accuracy of the DO1 allocator.

1 Q WHAT IS THE BASIS OF YOUR SKEPTICISM?

2 A Because peak demand is so sensitive to heating usage, it follows that the classes  
3 that are most weather sensitive will have the lowest load factor. Load factor is  
4 defined as peak usage (in this case the average use from 6 AM through 11 AM)  
5 divided by average hourly usage. Furthermore, the classes that are most weather  
6 sensitive will have the highest ratio of peak month usage (when heating usage is  
7 highest) to minimum month usage (when heating usage is lowest).

8 Q WHAT ARE THE RATIOS OF MAXIMUM MONTH USAGE TO MINIMUM MONTH  
9 USAGE OF THE VARIOUS CLASSES?

10 A The ratios of maximum steam usage divided by minimum steam usage are depicted  
11 on the following Table:

<u>Year</u>	<u>SC 1</u>	<u>SC 2</u>	<u>SC 3</u>
2002	17.7	2.3	3.4
2003	23.0	3.1	3.7
2004	22.9	3.0	3.8
2005	26.5	3.1	3.3

12 As can be seen, in each and every year the SC 1 class has the highest  
13 max/min ratio, the SC 3 class has the second highest max/min ratio and the SC 2  
14 class has the smallest max/min ratio. Consequently, we should expect that the SC 1  
15 class should have the lowest load factor and that the SC 2 class should have the  
16 highest load factor.

1 Q IS THERE ANY OTHER REASON WHY THE SC 2 CLASS SHOULD EXHIBIT THE  
2 HIGHEST LOAD FACTOR?

3 A Yes. The SC 2 class is the only class that exhibits a marked and significant cooling  
4 usage. The SC 2 class summer usage shows a distinct rise during the months of  
5 June, July, August and September compared to the months of May or October.  
6 Because this cooling usage increases annual usage, but has no impact on heating  
7 usage, this is another reason why the SC 2 class should exhibit the highest load  
8 factor.

9 Q WERE THESE EXPECTATIONS CORROBORATED BY CON EDISON'S PEAK  
10 DAY ANALYSIS?

11 A No. The DO1 allocator used by Con Edison implies the following class load factors:

<u>Class</u>	<u>Load Factor</u>
SC 1	17.7%
SC 2	30.4%
SC 3	35.4%

12 As Table 2 shows, Con Edison's calculation of peak usage produces an  
13 anomalous result, namely that the SC 2 class has a lower load factor than the SC 3  
14 class, when its load factor should obviously be higher than the SC 3 class. This  
15 clearly indicates that Con Edison's calculations are in error.

1 Q DID YOU DO ANY FURTHER ANALYSIS TO CONFIRM THE PROBLEM WITH THE  
2 DO1 ALLOCATOR?

3 A Yes. By using techniques that are commonly used in gas cost of service studies, I  
4 developed a peak day allocator. This analysis involves determining the correlation of  
5 usage with Heating Degree Days and Cooling Degree Days. I then compared the  
6 share of each class of the peak day with a) the share of the five-hour peak and b) the  
7 share of the peak month. The results are summarized in Table 3.

<u>Allocation Factor</u>	<u>System</u>	<u>SC 1</u>	<u>SC 2</u>	<u>SC 3</u>
DO1 (per Con Edison)	100.00%	4.59%	69.86%	25.54%
Peak Month	100.00%	4.12%	64.54%	31.34%
Peak Day (by Correlation)	100.00%	4.96%	63.39%	31.65%

8 As can be seen, the DO1 allocator derived by Con Edison is a distinct outlier  
9 and should not be utilized.

10 Q WHAT IS YOUR SUGGESTION TO REMEDY THIS ERROR IN THE DO1  
11 ALLOCATOR?

12 A The use of either the Peak Month or Peak Day would be a more accurate indicator of  
13 demand-related responsibility. While the Peak Day is superior from a conceptual  
14 perspective, there is more certainty with the Peak Month allocator. Thus, it is my  
15 recommendation that in this case the Peak Month shares be used to derive the DO1  
16 allocator. Actually, the Peak Month allocator is an average of the two highest  
17 months, thereby conferring another "benefit of the doubt" to the lower load factor  
18 classes.

1 Q WHAT IS THE SECOND ERROR THAT SHOULD BE CORRECTED IN THE CON  
2 EDISON STUDY?

3 A The Company allocated all fuel costs on the basis of annual usage. This is the  
4 Company's EO1 allocator in the cost of service study.

5 Q WHY IS THAT AN ERROR?

6 A In Con Edison's last steam case, the undisputed evidence was that a significant  
7 portion of heat loss was fixed in nature, and attributable to heat escaping from the  
8 steam mains. The cost implication of this fact is that the fuel expended to generate  
9 this lost heat is not directly related to the volumes of steam consumed by customers,  
10 but rather is proportional to the footage of mains needed to serve these customers.  
11 Consequently, the segment of fuel related to these fixed losses should not be  
12 allocated on a volumetric basis because such an allocation is at direct odds with cost  
13 causation principles.

14 Q IN THAT CASE, WHAT ALLOCATION FACTOR WOULD MORE CLOSELY  
15 REFLECT THE ACTUAL COST CAUSATION OF THESE EXPENSES DUE TO  
16 LOSSES?

17 A I suggest using the allocation factor C06, or "Allocation – Footage of Mains".  
18 According to the description in the cost study, this factor is based on a customer  
19 frontage study using a 100% sample of steam customers. Clearly, this is the most  
20 appropriate and logical factor to allocate steam losses that are fixed in nature.

1 Q IN YOUR CORRECTED STUDY, HOW MUCH FUEL RELATED TO FIXED LOSSES  
2 DID YOU ALLOCATE ON THE BASIS OF THE C06 ALLOCATOR?

3 A I allocated only \$4.4 million of costs associated with fixed line losses on the basis of  
4 the "Footage of Mains" allocator. The recovery of \$4.4 million of fuel costs via a fixed  
5 customer charge was established in Case 03-S-1672.

6 Q IS THAT THE TOTALITY OF STEAM LOSSES?

7 A No. The Company's experience with steam losses runs between approximately 13%  
8 and 15% of sendout. Based on the \$340 million of fuel costs included in the study, I  
9 estimate that approximately \$48 million of fuel costs is related to line losses. Thus, I  
10 allocated less than 10% of these costs based on the "Footage of Mains" allocator.

11 Q WHAT ARE THE RESULTS OF THE CORRECTED STUDY AND HOW DO THEY  
12 COMPARE TO THE COMPANY STUDY?

13 A The results of my corrected cost study are shown on Exhibit AER-1, Schedule 3. I  
14 corrected for the DO1 allocator and the steam loss allocation. Note that the flawed  
15 Con Edison cost study most seriously over-allocated costs to the SC 2 service class.  
16 I believe that the Commission should use my corrected cost study for purposes of  
17 allocating revenues and designing rates in this proceeding.

18 **An Alternative Allocation of the Base Rate Increase**  
19 **Predicated on the Corrected Cost of Service Study**

20 Q HOW DID THE COMPANY ALLOCATE THE INCREASE?

21 A The Company allocated the increase in two stages. The first stage allocated the  
22 base rate increase excluding the roll-in of the ERRP. The second stage addressed

1 the roll-in of the ERRP into base rates. The Rate Panel treated these two  
2 components independently of each other.

3 **Q DO YOU AGREE WITH THIS TWO-STAGE PROCESS OF ALLOCATING THE**  
4 **INCREASE?**

5 A Yes, I do. In the first place, the ERRP is not reflected in the cost of service study.  
6 Because the cost of service study is a guide for the non-ERRP component of the  
7 increase, I would agree that we could do a better job of following cost causation by  
8 this two-stage process.

9 **Q HOW DID THE COMPANY PROPOSE TO ALLOCATE THE NON-ERRP**  
10 **INCREASE?**

11 A It appears the Company has proposed to allocate the non-ERRP increase in  
12 proportion to pure base revenue, but as adjusted for the ECOS study results. Pure  
13 base revenues are service class base revenues less the base cost of fuel.

14 **Q IS THAT A REASONABLE MANNER IN WHICH TO ALLOCATE THIS**  
15 **COMPONENT OF THE INCREASE?**

16 A No. The first problem is that the Panel used an erroneous cost of service study, as I  
17 have explained previously. While the Company study did not show any surplus or  
18 deficiency (outside of a plus or minus 10% tolerance bandwidth) for the SC 2 or SC 3  
19 classes, and a small (7% of pure base revenues) deficiency for SC 1, the corrected  
20 cost of service study shows that current rates are not that closely aligned with cost of  
21 service, as shown on Schedule 2. The second problem is that allocating an increase  
22 on base revenue does not keep the relative rates of return constant. While pure

1 base revenue is not totally unreasonable as an allocator, using the rate base in the  
2 ECOS is more accurate, assuming of course that one wants to preserve the relative  
3 rates of return.

4 **Q HOW DO YOU PROPOSE ALLOCATING THE NON-ERRP COMPONENT OF THE**  
5 **BASE RATE INCREASE IN VIEW OF THE CORRECTED ECOS STUDY**  
6 **RESULTS?**

7 A It only requires a two-step process. In the first step, I would propose eliminating the  
8 surplus or deficiency of each class. This requires an increase for the SC 1 and SC 3  
9 classes and a decrease for the SC 2 class, as shown in Column 4 of Schedule 3.  
10 This step results in a net increase to the system of \$1.9 million. Since the total non-  
11 ERRP that the Company is requesting is \$66 million, the remaining increase to be  
12 allocated after the first step is \$66 million less \$1.9 million or \$64.1 million. I then  
13 allocated this increase in proportion to rate base, as explained above. (In actual  
14 practice, one would also have to subtract the increase to the SC 4 class from that  
15 total as well. The reason for this extra step is that the SC 4 class is not included in  
16 the ECOS and should be calculated separately.<sup>7</sup> I have not done this in my  
17 illustrative increase for purposes of clarity. This expedient would not have a material  
18 impact on the final results.)

---

<sup>7</sup> The proper manner of calculating the SC 4 rate is discussed in the subsequent section of this testimony.

1 Q HOW DID THE COMPANY PROPOSE ALLOCATING THE ERRP ROLL-IN TO  
2 BASE RATES?

3 A The Company proposed allocating this increase simply on the basis of annual  
4 volumes.

5 Q WHAT WAS THE STATED REASON FOR THIS TREATMENT OF THIS  
6 COMPONENT OF THE RATE?

7 A The only rationale that I saw for this proposal was that, because the ERRP costs  
8 currently are collected through the FAC, which is volumetric, this approach would  
9 keep the base rates "revenue neutral" to the customers.

10 Q DO YOU AGREE WITH THIS EXPLANATION?

11 A No, I do not. In the first place, there is no requirement, that I am aware of, for a base  
12 rate increase to be "revenue neutral". Consequently the Panel's entire objective is  
13 questionable.

14 In the second place, even if one were to accept "revenue neutrality" as a valid  
15 objective, which I do not, the Company's method only achieves revenue neutrality  
16 vis-à-vis the current method of collecting these costs. These costs first appeared in  
17 base rates in May of 2005. Consequently, if we use pre-May 2005 as our  
18 benchmark, the only way to keep customers "revenue neutral" would be not to charge  
19 this cost at all.

20 Finally, the Company method gives absolutely no recognition to cost of  
21 service. Had the ERRP carrying costs been included in the cost study, they would  
22 have been allocated on the basis of the D01 allocator, just as the Company did for all  
23 other production plant.

1 Q HOW WOULD YOU PROPOSE TO ALLOCATE THE INCREASE RELATED TO  
2 ANY APPROVED ROLL-IN OF ERRP FIXED COSTS?

3 A The ERRP costs are fixed plant investment, plain and simple. Cost causation  
4 principles mandate that these costs be allocated just as all other production plant  
5 investment is allocated, on the basis of the D01 allocator.

6 Q WHAT IS THE NET RESULT OF YOUR RECOMMENDED TWO STAGE  
7 ALLOCATION OF THE INCREASE AS EXPLAINED AND SUPPORTED ABOVE?

8 A The results are shown in Schedule 4.

9 Q HOW DOES YOUR RECOMMENDED ALLOCATION OF THE INCREASE  
10 COMPARE TO THE COMPANY PROPOSAL?

11 A This is shown on Schedule 5.

12 Q HAVE YOU MADE ANY MODIFICATIONS TO YOUR ALLOCATION PROCESS TO  
13 ACCOUNT FOR RATE MODERATION, OR PREVENTING ANY ONE CLASS FROM  
14 BEARING A DISPROPORTIONATE SHARE OF THE INCREASE?

15 A I found that it was not necessary. My recommended base rate increases in this case  
16 range from 0.83 times the system average to 1.35 times the system average.  
17 I believe these relative increases are well within the parameters this Commission has  
18 historically approved as proportionate. While those figures may change if the size of  
19 the increase is smaller than that requested, I believe that if moderation is duly  
20 accounted for with a large increase, it should certainly not pose a problem with a

1 smaller increase. Note also that all classes would share in any decrease from the  
2 Company request.

3 **SC 2 Rate Design**

4 **Q HAVE YOU REVIEWED THE COMPANY'S PROPOSED RATE DESIGN FOR SC 2?**

5 A Yes.

6 **Q DO YOU HAVE ANY COMMENTS ON THE SC 2 RATE DESIGN?**

7 A Yes. The Company appears to have increased each block's usage charge by 25.8%.  
8 This design is not appropriate. In the first place, I do not believe the declining block  
9 rates give enough recognition to economies of scale for serving large users.  
10 However, perhaps more importantly, as shown by the SBDP, the steam disadvantage  
11 vis-à-vis other energy sources, seems to get even worse as the size of the building  
12 increases. Consequently, it is my opinion that concentrating any increase more in  
13 the initial blocks, and perhaps even decreasing the tail blocks, could be of material  
14 assistance in the Con Edison Steam Department's efforts to penetrate the heating  
15 and cooling markets. It would also be cost based.

16 **Q DO YOU HAVE ANY COMMENTS ON THE PROPOSAL TO DEMAND BILL LARGE**  
17 **CUSTOMERS?**

18 A I have not done a cost benefit analysis to weigh the additional costs of instituting this  
19 change with the expected benefits of discouraging peak demand. Nevertheless, I  
20 agree, in principle, with the move toward demand billing. Moreover, I also concur  
21 with the Company proposal to collect only 25% of winter pure base revenue in the  
22 demand charge. I do have several caveats, however.

1 First, a demand ratchet should not be adopted. The problem with a demand  
2 ratchet is that after the customer sets an all time peak, it has less of an incentive to  
3 reduce its peak going forward because it is still going to be caught by the ratchet.

4 Second, it is very important that the new rates for the demand metered  
5 customers are designed to be revenue neutral with the approved (non-demand)  
6 rates so that neither the Company nor the customers are harmed by the move to  
7 demand metering. Of course, in this case revenue neutrality is predicated on no  
8 changes in consumption patterns by the customers. If customers can lower their  
9 demand, they should be allowed to save money because it also lowers Con Edison's  
10 costs. In fact, that is precisely the behavior that we are trying to induce with demand  
11 billing.

12 **Q DO YOU HAVE ANY COMMENTS REGARDING MR. GERRITSEN'S TESTIMONY?**

13 **A** Yes. On page 13 of his Testimony, Mr. Gerritsen testifies that Con Edison will  
14 recover costs and lost revenues associated with the demand response programs  
15 through the FAC. I assume that "lost revenues" means lost margins – Con Edison  
16 should not be able to recover costs that might otherwise be included in "lost  
17 revenues." Moreover, because Con Edison may also be gaining new business by  
18 following the recommendations of the SBDP, in my view any "lost" margins should  
19 also be offset by "found" margins.

1 **Backup and Supplementary Service**

2 Q PLEASE BRIEFLY DESCRIBE THE COMPANY'S SC 4 TARIFF FOR BACK-  
3 UP/SUPPLEMENTARY SERVICE.

4 A Unlike any of Con Edison's other rates, the SC 4 rate has a demand reservation  
5 charge, based upon the customer's maximum hourly use for steam. There is one  
6 charge for customers who may use the steam at any time, and a lesser charge for  
7 customers who can only use the steam during the off peak period.<sup>8</sup> These  
8 reservation charges would be payable to Con Edison regardless of whether or not the  
9 customer actually used steam. In addition, the customer would pay a commodity  
10 charge based on actual steam consumption.

11

12 Q WHAT ARE YOUR PRIMARY CONCERNS WITH THE SC 4 RATE AS PROPOSED  
13 BY CON EDISON?

14 A My primary concerns are that the rate is not cost-based and is not in accord with the  
15 general principles of standby service that have been endorsed by the New York PSC.  
16 As a result, the rate unnecessarily deters customers from using steam as an  
17 alternative source of energy (or overcharges them if they do).

18 Furthermore, the tariff imposes stiff penalties for customers who exceed their  
19 reservation, and unreasonable penalties if the excess is greater than 10% or for off  
20 peak customers who utilize steam during the peak period.

21 In addition, while the Company allocates cost in its filed cost of service study  
22 based on *average* hourly (over five years) usage during the peak day, the SC 4 rate  
23 charges customers on the *maximum* hourly usage that could ever be set.

---

<sup>8</sup> The on-peak period is defined as Monday through Friday, 5:00 AM to 8:00 PM, during the months of November through April. Off-peak hours are defined as all other hours.

1                   Finally, as demonstrated below, the SC 4 rate charges are excessive when  
2                   compared with a comparable customer on the general service rate.

3    **Q    HAVE YOU COMPARED CON EDISON'S PROPOSED SC 4 RATE WITH ITS**  
4    **PROPOSED GENERAL SERVICE RATE?**

5    A    Yes.   Exhibit AER-1, Schedule 6 compares the annual cost of six different  
6           hypothetical low load factor customers taking service year round under the proposed  
7           SC 2 general service rate, with the costs that they would face under the proposed SC  
8           4 on peak rate.   Exhibit AER-1, Schedule 7 compares the annual cost of six different  
9           hypothetical low load factor customers taking steam service only during the six winter  
10          months under the proposed SC 2 general service rate, with the costs that they would  
11          face under the proposed SC 4 off peak rate.   The conclusion is inescapable – the  
12          SC 4 rate charges between 51% and 718% more than the otherwise applicable  
13          general service rate for customers only using SC 4 for less than 100 hours per  
14          month.   Moreover, my exhibit most likely understates the disparity between these two  
15          tariffs because it ignores the potential for penalties under the SC 4 tariff.

16   **Q    HOW MANY OF CON EDISON'S CUSTOMERS UTILIZE BOTH STEAM AND**  
17   **ANOTHER ENERGY SOURCE FOR THE SAME PURPOSE?**

18   A    That is difficult to say.   In response to a Data Request in a Steam plan case six years  
19          ago, there allegedly were approximately 70 such customers as of 1998.   However,  
20          Con Edison's rate design workpapers identify only four customers on the SC 4 rate.

1 Q WHY ARE BACK-UP/SUPPLEMENTARY SERVICE RATES NORMALLY  
2 OFFERED?

3 A By far, the most common usage of back-up rates is for electric customers that have  
4 on-site generation. Back-up service refers to electricity taken from the utility during  
5 times of forced or planned outage of the customer's self-generation. Supplementary  
6 service refers to electricity requirements of the customer that are in excess of the  
7 capacity of the customer's on-site generation. Because the need for supplementary  
8 power is not substantially different from the provision of full requirements service to a  
9 customer that does not self-generate, supplementary power is almost always priced  
10 at the same rate as is charged for general service.

11 Q IS A SIMILAR APPROACH WARRANTED FOR STEAM RATES?

12 A Yes. The principles apply equally well to steam rates.

13 Q DOES CON EDISON'S PROPOSED SC 4 DISTINGUISH BETWEEN BACK-UP  
14 SERVICE AND SUPPLEMENTARY SERVICE?

15 A No, it does not. This is another indication that the SC 4 rate is not predicated on  
16 sound rate design principles.

1 Q IS BACK-UP SERVICE ALSO NORMALLY CHARGED AT THE SAME RATE AS  
2 GENERAL SERVICE?

3 A No. Not only is back-up service a low load factor service, it is also a sporadic  
4 service, occurring only when the customer's own source of power is unavailable. A  
5 general service rate would normally overcharge for this type of service.

6 Q ASSUMING THAT A GENERAL SERVICE RATE IS BASED ON COST OF  
7 SERVICE, WHY WOULD THAT RATE OVERCHARGE FOR BACKUP SERVICE?

8 A The simple answer is that there are two types of demands -- one that drives costs  
9 and the other that drives revenues. The demand that drives costs is coincident  
10 demand, i.e., demand that coincides with the peaks of the system. The demand that  
11 drives revenues, at least under most tariffs, are non-coincident demands, i.e.,  
12 demands that are specific to that customer, regardless of when they occur. For  
13 general service customers there is usually a predictable, empirically derived  
14 relationship<sup>9</sup> between these two measures of demand that allow rates based on non-  
15 coincident demands to be reflective of costs based on coincident demands. For  
16 back-up service, this relationship breaks down. Specifically, the random occurrence  
17 of back-up requirements means that back-up demands will have a lower coincidence  
18 factor than demands of general service customers.

19 Q WHAT ARE THE IMPLICATIONS OF THIS FOR BACKUP RATES?

20 A The implication is that property-designed back-up rates should be less expensive  
21 when compared to the rates for a general service customer with a similarly low load

---

<sup>9</sup> In fact, the ratio of coincident demand to non-coincident demand for a class or customer is referred to as the coincidence factor.

1 factor as the back-up customer.<sup>10</sup> Note the incongruity here. While normal back-up  
2 rates generally provide for a reduction from the general service rate at low load  
3 factors, the Con Edison proposed backup rate charges considerably more than the  
4 general service rate. The rate, as proposed, is unreasonable and should not be  
5 approved.

6 **Q HAS THIS COMMISSION EVER GIVEN GUIDANCE ON THE PROPER DESIGN OF**  
7 **A RATE FOR STANDBY SERVICE?**

8 A Perhaps not for steam standby service, but in Opinion No. 01-4, issued and effective  
9 October 26, 2001, the Commission did speak to appropriate guidelines for electric  
10 standby service. Although the technical aspects of steam and electric service are  
11 somewhat different, I believe the general principles set forth in Opinion No. 01-4 are  
12 equally relevant to steam standby service.

13

---

<sup>10</sup> There is a feature that many backup rates have, that the general service rates may not, usually called a minimum charge. Consequently, if the general service rate does not have either a ratchet or minimum, it is possible for the backup rate to be more expensive in a month where no service is taken.

1 Q WHAT DID OPINION NO. 01-4 STATE ON THIS ISSUE?

2 A The Order stated as follows:

3 The method for allocating costs between the contract demand and the  
4 as-used demand charge should be set forth in each utility's formal  
5 standby rate filing. Such allocations should be based on delivery  
6 system design and cost causation. Fundamentally, we would expect  
7 the utilities to apportion facilities designed on the basis of customer  
8 coincident peak loads for recovery via as-used demand charges.  
9 Similarly, delivery facilities designed on the basis of aggregate  
10 customer non-coincident peak loads should be apportioned for  
11 recovery through contract demand charges. The allocation of costs  
12 between as-used and contract demand charges for each customer  
13 class might be determined for each category of facilities used to  
14 provide delivery service to that class, or by a different method of  
15 allocation selected by the utility. (Order, Page 15)

16 Q HOW CAN THOSE GUIDELINES BE ADAPTED TO THE SC 4 STANDBY RATE?

17 A First, let me address the contract demand charge. In the Con Edison ECOS study,  
18 all demand-related facilities are allocated on the basis of *coincident* demand.  
19 Consequently, a strict interpretation of Opinion 01-4 would suggest that no costs  
20 should be recovered in the contract demand charge. However, I believe that would  
21 also be unreasonable. Consequently, it is my suggestion that the on-peak contract  
22 demand charge should recover 10% of fixed production costs and 50% of demand-  
23 related distribution costs (the customer costs would continue to be recovered in the  
24 monthly service charge).

25 I would also recommend that the off-peak contract demand charge be set at  
26 one-half of the on-peak contract demand charge. (The off-peak contract demand  
27 charge applies only to customers whose standby service is restricted to off-peak  
28 hours.)

1 Q HAVE YOU ESTIMATED WHAT THE CONTRACT DEMAND CHARGES WOULD  
2 BE IF DESIGNED UNDER THOSE GUIDELINES?

3 A Yes. Assuming full rate relief, I estimate that application of my recommended  
4 principles would result in a monthly contract demand charge of approximately \$580  
5 per 1,000 lbs. per hour (compared to Con Edison's proposed \$1,090) for an on-peak  
6 customer and half that, or \$290 per 1,000 lbs. per hour for an off-peak standby  
7 customer (compared to the Company's proposed \$821).

8 Q HOW WOULD YOU DESIGN THE "AS-USED" DEMAND CHARGE REFERRED TO  
9 IN THE ORDER?

10 A Because so few steam customers currently have demand meters, it is my  
11 recommendation that the "as-used" component of the rate be a usage charge based  
12 on the standby steam actually taken. (This is the format that Con Edison itself  
13 employs in the SC 4 tariff.) I would design these usage charges so that a full service  
14 customer on the SC 4 rate pays approximately the same as a full typical service  
15 customer would on the otherwise applicable rate, i.e., SC 2 or SC 3. This would also  
16 be in accord with my understanding of the general philosophy on standby service rate  
17 design that the New York PSC has adopted.

18 Q PLEASE ADDRESS THE PENALTY PROVISIONS OF THE PROPOSED BACK-  
19 UP/STANDBY TARIFF.

20 A The Company's proposed Back-up/Standby Tariff will impose a demand charge  
21 penalty when actual demand exceeds contract demands. The Company is  
22 requesting a penalty equal to 12 times the excess demand be charged if the  
23 maximum demand within the months of November through April exceeds the contract

1 demand by up to 10%. If the monthly maximum demand exceeds the contract  
2 demand by more than 10%, the Company requests that a penalty equal to 24 times  
3 the monthly contract demand rate for the excess in demand be applied to the monthly  
4 bill. The special provision section also imposes similar penalties.

5 **Q ARE THE COMPANY'S PROPOSED PENALTY PROVISIONS FOR THE BACK-**  
6 **UP/STANDBY RATE REASONABLE?**

7 A No. The Company's rates do not penalize customers under its general service rates  
8 if their demands exceed those expected by the Company. The Company also has  
9 not shown in its cost of service study that its proposed penalty charges are cost-  
10 based. Indeed, to the extent that its General Service demand charges do reflect the  
11 Company's cost of service, the proposed penalties would significantly over-recover its  
12 cost of service and produce unreasonable profits for shareholders. Further, the  
13 imposition of an arbitrary penalty may discourage customers from using economical  
14 and environmentally-desirable dual energy processes. In sum, the Company's  
15 proposed penalty provisions are unfair and not cost based, and should be rejected.

16 **Q HOW WOULD YOU MODIFY THE SC 4 RATE?**

17 A In addition to the rate design proposals explained and supported above, I would  
18 make the following recommendations:

19 Demand Measurement

20 First, the tariff should measure peak contract demand based on the average  
21 demand use during the peak period rather than the customer's maximum potential  
22 demand. This would make the cost foundation more in accord with the full service  
23 rates.

24 Penalties

1           Second, remove all penalty provisions that are not parallel to similar  
2 provisions in the general service tariff. This also places the SC 4 rate on par with the  
3 other tariffs and will remove a barrier to a potentially beneficial service. Moreover,  
4 Con Edison has not shown that these penalties are necessary.

5           Availability

6           Finally, make the rate optional rather than mandatory. Normally, customers  
7 are allowed to choose the tariff that provides them service in the most economic  
8 fashion. If the rates are based on cost, the SC 4 rate should be no exception. If the  
9 rate is not made optional, a minimum usage requirement should be introduced. In  
10 other words, a customer would not be forced onto the SC 4 rate unless it uses  
11 another energy source for at least 15 % of its heating and cooling requirements with  
12 the balance on steam.

13   **Q       HOW WOULD YOUR RECOMMENDATIONS AFFECT THE EXPECTED REVENUE**  
14   **FROM SC 4 CUSTOMERS?**

15   **A**The immediate impact may reduce the expected revenue from the four customers  
16 currently on SC 4, although the impact on the other customers would be nearly  
17 negligible. In the long run, I am convinced that my proposals, if adopted, would lead  
18 to incremental load on SC 4, thereby ultimately lowering the unit steam rate for all  
19 customers.

20   **Q       DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?**

21   **A**Yes.

Qualifications of Alan Rosenberg

1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2 A Alan Rosenberg. My business address is 1215 Fern Ridge Parkway, Suite 208,  
3 St. Louis, Missouri 63141.

4 Q WHAT IS YOUR OCCUPATION?

5 A I am a consultant in the field of public utility regulation and am a principal with the  
6 firm of Brubaker & Associates, Inc. (BAI), energy, economic and regulatory  
7 consultants.

8 Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

9 A I was awarded a Bachelor of Science Degree from the City College of New York in  
10 1964 and a Doctorate of Philosophy in Mathematics from Brown University in 1969.  
11 Subsequently, I held an Assistant Professorship of Mathematics at Wesleyan  
12 University in Connecticut. In the summer of 1975, I was a Visiting Fellow at Yale  
13 University. From July, 1975 through January, 1981, I was Assistant Controller and  
14 Project Manager for a division of National Steel Products Company. My  
15 responsibilities there included supervision of management accounting, cost  
16 accounting and data processing functions. I was also responsible for internal control,  
17 general ledger systems, working capital levels, budget preparation, cash flow  
18 forecasts and capital expenditure analysis.

19 I have published in major academic journals and am a member of the  
20 International Association for Energy Economics. I was an invited speaker at the  
21 NARUC Introductory Regulatory Training Program and a panelist at a conference on

1 LDC and Pipeline Ratemaking sponsored by the Institute of Gas Technology. I have  
2 presented a paper on stranded costs at the 21st Annual International Conference of  
3 the International Association for Energy Economics. I have had two papers on  
4 transmission congestion pricing published in The Electricity Journal. I am also a  
5 Certified Energy Procurement Professional by the Association of Energy Engineers.

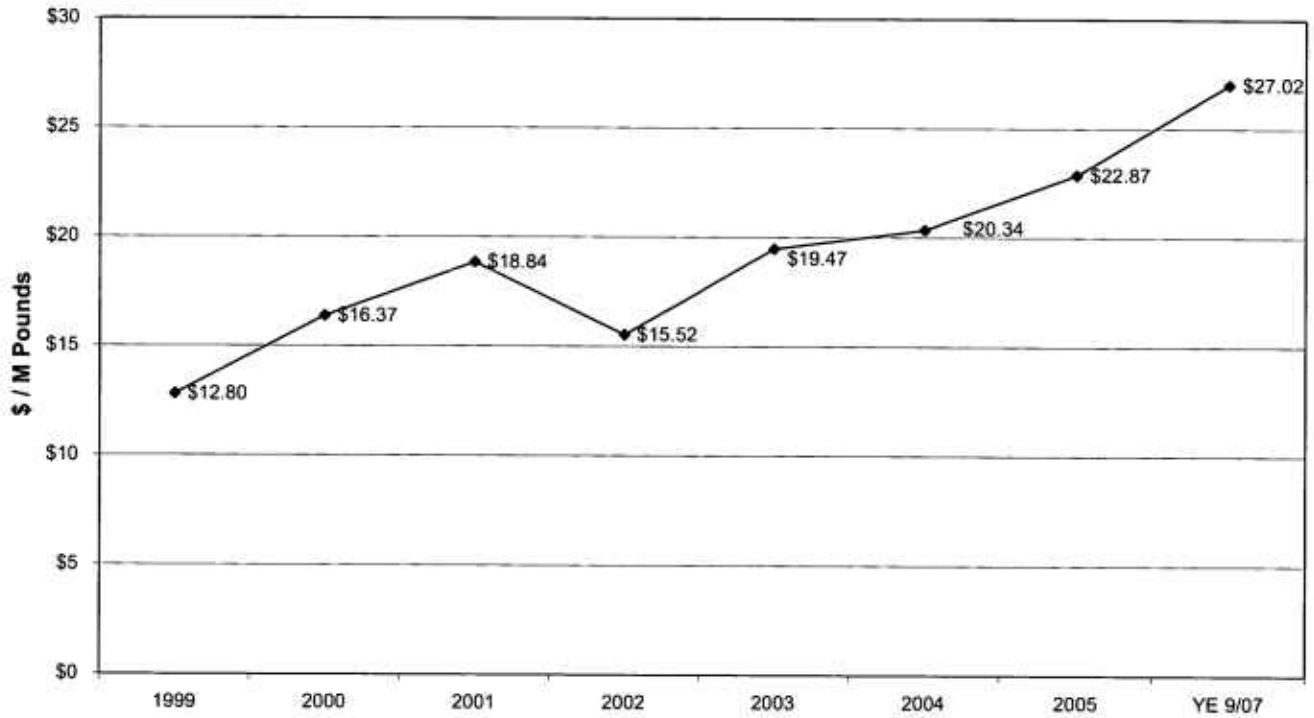
6 In January, 1982, I joined the firm of Drazen-Brubaker & Associates, Inc., the  
7 predecessor of Brubaker & Associates. Since that time, I have presented expert  
8 testimony on the subjects of industry restructuring, open access transmission,  
9 marginal and embedded class cost of service studies, prudence and used and useful  
10 issues, electric and gas rate design, revenue requirements, natural gas  
11 transportation issues, demand-side management, and forecasting.

12 I have previously testified before the Federal Energy Regulatory Commission  
13 as well as the public service commissions of Arizona, Connecticut, Delaware, Florida,  
14 Idaho, Illinois, Iowa, Massachusetts, Michigan, Montana, New Jersey, New Mexico,  
15 New York, North Carolina, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia,  
16 Wyoming and the Provinces of Alberta, British Columbia, New Brunswick, Nova  
17 Scotia, and Saskatchewan in Canada. I have also testified before the Michigan  
18 Senate Technology and Energy Committee.

19 In addition to our main office in St. Louis, the firm also has branch offices in  
20 Phoenix, Arizona; Chicago, Illinois; Corpus Christi, Texas; and Plano, Texas.

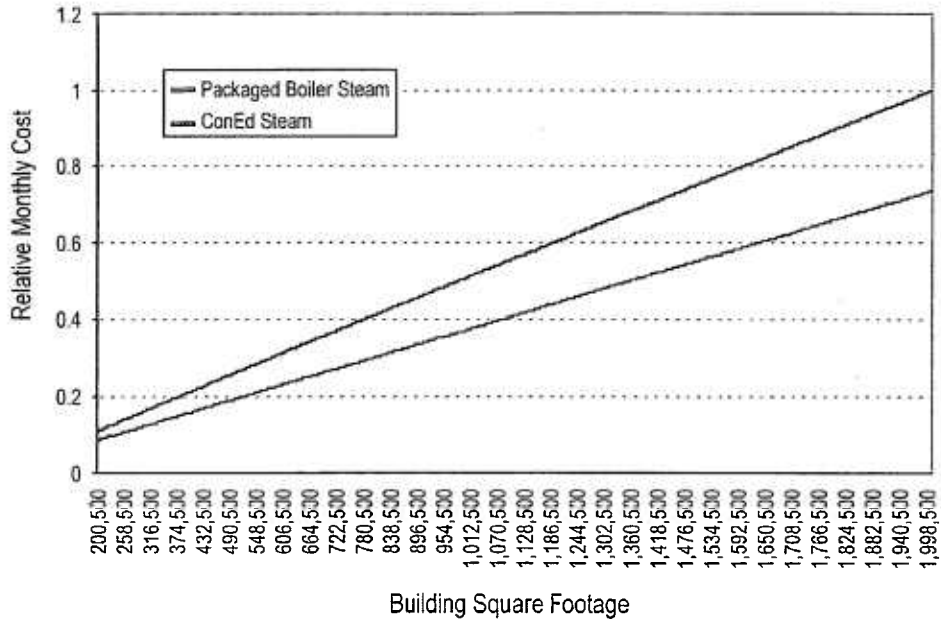
# CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

## Historical & Projected Average Cost of Steam



CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Figure 34. Relative Monthly Operating Costs of Steam and Gas Heating



Source: SBDP, Page 68

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.**

**Comparison of Con Edison Steam  
ECOS Studies**

<u>Line</u>	<u>Class</u>	<u>As Filed</u>		<u>Corrected</u>	
		<u>ROR</u> (1)	<u>Surplus / (Deficit)</u> (2)	<u>ROR</u> (3)	<u>Surplus / (Deficit)</u> (4)
1	SC 1	6.94%	\$ (903,628)	7.21%	\$ (668,893)
2	SC 2	8.97%	0	10.84%	5,322,422
3	SC 3	9.90%	0	5.93%	(6,567,974)
4	Total *	<u>9.06%</u>	<u>\$ (903,628)</u>	<u>9.06%</u>	<u>\$ (1,914,445)</u>

Note: \* Excluding Electric Dept.  
Revenue Surplus / (Deficit) is based on a plus and minus 10% tolerance band.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

**Recommended Allocation  
of Base Rate Increase**  
(all dollars in thousands)

<u>Line</u>	<u>Class</u>	<u>Existing Total Revenue</u> (1)	<u>Existing Pure Base Revenue</u> (2)	<u>Non ERRP Increase</u> (3)	<u>ERRP Increase</u> (4)	<u>Total Increase</u> (5)	<u>Percent of Total Revenue</u> (6)	<u>Percent of Base Revenue</u> (7)
1	SC 1	\$ 23,464	\$ 13,101	\$ 5,396	\$ 1,386	\$ 6,782	28.9%	51.8%
2	SC 2	397,439	174,444	34,152	21,704	55,856	14.1%	32.0%
3	SC 3	165,469	70,612	26,173	10,537	36,710	22.2%	52.0%
4	Total	<u>\$ 586,373</u>	<u>\$ 258,157</u>	<u>\$ 65,720</u>	<u>\$ 33,628</u>	<u>\$ 99,348</u>	<u>16.9%</u>	<u>38.5%</u>

Note: SC 4 class and GRT are excluded.

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Comparison of Con Edison  
Proposed Allocation of Increase  
With City Recommended Allocation  
(all dollars in thousands)

<u>Line</u>	<u>Class</u>	<u>Existing Pure Base Revenue</u> (1)	<u>Con Edison Proposed Increase Amount</u> (2)	<u>Percent</u> (3)	<u>City Recommended Allocation Amount</u> (4)	<u>Percent</u> (5)
1	SC 1	\$ 13,101	\$ 5,294	40.4%	\$ 6,782	51.8%
2	SC 2	174,444	65,873	37.8%	55,856	32.0%
3	SC 3	70,612	27,769	39.3%	36,710	52.0%
4	Total	<u>\$ 258,157</u>	<u>\$ 98,936</u>	<u>38.3%</u>	<u>\$ 99,348</u>	<u>38.5%</u>

Note: SC 4 class and GRT are excluded.

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.**

Comparison of the Annual Cost of Steam  
for a SC 2 (Annual Power Service) Customer  
with Cost under Proposed Back-Up Rate  
Usage for All Twelve Months

<u>Line</u>	<u>Contract Demand Pounds</u>	<u>Hours Use</u>	<u>Annual Cost under SC 2</u> (1)	<u>Annual Cost under SC 4</u> (2)	<u>Increase over SC 2</u>	
					<u>Amount</u> (3)	<u>Percent</u> (4)
1	40,000	10	\$89,430	\$593,180	\$503,750	563%
2	40,000	50	\$314,142	\$742,729	\$428,587	136%
3	40,000	100	\$591,990	\$929,665	\$337,675	57%
4	100,000	10	\$175,218	\$1,433,780	\$1,258,562	718%
5	100,000	50	\$724,044	\$1,807,652	\$1,083,608	150%
6	100,000	100	\$1,377,444	\$2,274,992	\$897,548	65%

**CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.**

Comparison of the Annual Cost of Steam  
for a SC 2 (Annual Power Service) Customer  
with Cost under Proposed Back-Up Rate  
Usage During Six Winter Months Only

<u>Line</u>	<u>Contract Demand Pounds</u>	<u>Hours Use</u>	<u>Annual Cost under SC 2 (1)</u>	<u>Annual Cost under SC 4 (2)</u>	<u>Increase over SC 2 Amount (3)</u>	<u>Percent (4)</u>
1	40,000	10	\$75,994	\$453,409	\$377,415	497%
2	40,000	50	\$247,071	\$560,142	\$313,071	127%
3	40,000	100	\$457,875	\$693,558	\$235,683	51%
4	100,000	10	\$141,669	\$1,084,352	\$942,684	665%
5	100,000	50	\$556,407	\$1,351,184	\$794,778	143%
6	100,000	100	\$1,042,197	\$1,684,724	\$642,528	62%