

**Before the
New York Public Service Commission**

Case No. 08-E-0539

**CONSOLIDATED EDISON COMPANY
OF NEW YORK**

Direct Testimony and Exhibits of

Dr. Alan Rosenberg

On Behalf of

**The City of New York
and
The Metropolitan Transportation Authority
and
The Port Authority of New York and New Jersey**

September 8, 2008
Project 9000



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

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TABLE OF CONTENTS

Introduction/Summary	1
Allocation of Revenue Increase Among the Classes	2
The Need for a New Shore Power Tariff	23
TCC Revenues.....	27

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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, MO 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 managing principal with
7 Brubaker & Associates, Inc. (BAI), energy, economic and regulatory consultants. My
8 qualifications are attached as Appendix A.

9 **Q ON WHOSE BEHALF ARE YOU TESTIFYING?**

10 A I have been retained by the City of New York (City or NYC) and the Metropolitan
11 Transportation Authority (MTA) and The Port Authority of New York and New Jersey
12 (Port Authority) (collectively, "NYC Governmental Customers") to review certain
13 aspects of Consolidated Edison Company of New York's (Con Edison or the
14 Company) filing to raise electric rates, which 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 will be addressing the allocation of any increase
3 that Con Edison may receive among New York Power Authority (NYPA), the EDDS
4 class, and the remaining retail rate classes of Con Edison, collectively denoted herein
5 as "CON ED." The second section of my testimony deals with the need for a Shore
6 Power service, and how a cost-based tariff for such a class of service could be
7 developed. The last section of my testimony deals with the issue of TCC revenues.

8 **Allocation of Revenue Increase Among the Classes**

9 **Q WHY IS THE ALLOCATION OF THE REVENUE INCREASE OF PARTICULAR**
10 **IMPORTANCE TO THE NYC GOVERNMENTAL CUSTOMERS?**

11 A These customers are served by NYPA for their supply needs, but they must rely on
12 the monopolistic service of Con Edison for the delivery and distribution of this supply.
13 In the past several years, the NYC Governmental Customers have seen their delivery
14 rates from Con Edison rise dramatically, at a rate much greater than Con Edison's full
15 service customers. For example, based on the Company's responses to Questions
16 24 and 25 from NYC, the full service and retail access customers of Con Edison have
17 seen an 18% increase in their delivery rates in the four years from 2004 to 2008.
18 However, in the same time frame, the NYPA customers have seen a 38% increase in
19 their delivery rates, **over twice what the other customers have experienced.**
20 Moreover, Con Edison is proposing to once again give the NYPA-supplied
21 governmental customers an above system average increase.

1 **Q WHAT IS THE COMPANY’S PROPOSAL ON THE REVENUE ALLOCATION IN**
2 **THIS CASE?**

3 A Normally, absent compelling indications to the contrary, the conventional manner of
4 allocating the increase among the various service classifications is to distribute the
5 increase uniformly across-the-board, so that all customers receive an equal
6 percentage increase over their current delivery revenue, that is, an increase equal to
7 the system average increase. However, in this case, the Company is proposing to
8 add an additional \$15 million to NYPA’s revenue first – before allocating the
9 remaining revenue requirement across-the-board. The result is that instead of getting
10 the system average increase of 15.4%, Con Edison’s Electric Rate Panel (ERP) is
11 proposing an increase of 22.4% for the NYPA class, or 45% more than the system
12 average increase.¹

13 **Q WHAT IS THE IMPACT OF THIS “EXTRA” \$15 MILLION REVENUE**
14 **REALLOCATION?**

15 A Because the \$15 million reallocation is done first, before the across-the-board
16 allocation is done (see below)), in the first year of the rate plan alone, this revenue
17 reallocation will add an extra \$27.7 million, not just \$15 million, to the electric bills of
18 the NYC Governmental Customers. Moreover, because the Company is proposing a
19 system average increase for the second year of the rate plan, this addendum results
20 in an extra \$30.8 million for Year 2. Finally, in Year 3 of the rate plan, the Company
21 is proposing another equal percent increase. In that final year of the rate plan, I
22 calculate that the NYPA Governmental Customers would be paying an extra

¹ Reference: Con Edison’s response to NYC 1, Question 5c.

1 \$33.8 million compared to using a system average increase for all three years. **Thus,**
2 **in total, the ERP is recommending a course of action that adds almost**
3 **\$92 million to the electric bills of the NYC Governmental Customers as**
4 **compared to** if the NYPA class were allocated the system average increase in year
5 one. This unjustified penalty is money that could have been used by the NYC
6 Governmental Customers to enhance services for the citizens of New York.

7 **Q WHY IS THE IMPACT TO NYPA SO MUCH GREATER THAN \$15 MILLION?**

8 A The answer lies in the way the ERP applies the \$15 million. Before allocating the
9 increase the ERP first (Step 1) adds (subtracts) the alleged deficiencies (surpluses) to
10 (from) current revenue. It then (Step 2) allocates the increase in proportion to this
11 altered revenue (instead of the actual current revenue). Finally, (Step 3) it adds
12 (subtracts) the alleged deficiencies (surpluses) to (from) the derived increase from
13 Step 2. Thus, because of the methodology used by the ERP, the NYPA class not
14 only gets hit with the \$15 million, it also receives a disproportionate share of the
15 “uniform” increases.

16 **Q DID THE ERP PRESENT A COST OF SERVICE STUDY THAT SUPPORTS THIS**
17 **ALLEGED \$15 MILLION DEFICIENCY?**

18 A No. In my experience, it is customary in New York (as it is everywhere else in North
19 America where I have testified) for the utility to file a cost of service study that
20 measures the sufficiency or inadequacy of current rates (the ones that the utility is
21 attempting to change) based on a study that measures, as nearly and as accurately
22 as possible, the cost of service that the customers are imposing on the utility.
23 However, in this proceeding, Con Edison did not do that. In fact, according to its

1 response to City IR 37, the Company has not performed any cost of service studies
2 for any year subsequent to 2005.

3 **Q HOW THEN DOES THE COMPANY ATTEMPT TO JUSTIFY THE IMPOSITION OF**
4 **AN EXTRA \$15 MILLION ADDENDUM ON THE NYPA CLASS?**

5 A In the previous rate case (Case 07-E-0523), the ERP had presented an embedded
6 cost of service study (ECOS), based on the 2005 calendar year for usage, rate base
7 and costs, updated only for rates that went into effect April 2007. That ECOS, when
8 applying a 10 percent tolerance band, indicated that the NYPA class revenues had a
9 \$30 million deficiency. Because the PSC approved a \$15 million revenue shift to the
10 NYPA class in Case 07-E-0523, the ERP simply **presumes** that a revenue deficiency
11 continues to exist and, therefore, is proposing a \$15 million revenue shift to the NYPA
12 class again in this case.

13 **Q DO YOU AGREE WITH THE ERP'S "LOGIC?"**

14 A No. In the first place, it relies on the strict application of a 10 percent tolerance band,
15 and not, for example, a 15 percent or even a 20 percent tolerance band. Certainly,
16 the Commission did not mandate the use of a 10 percent tolerance band in the
17 previous case. The second problem with the ERP's logic is that it presumes, without
18 any analytic support whatsoever, that the NYPA class would still exhibit a \$15 million
19 deficiency under an updated, properly-conducted cost of service study. Both of these
20 premises – the mandatory use of a 10 percent tolerance band, as well as the
21 relevance and accuracy of the 2005 ECOS – are unwarranted and indeed erroneous.

1 Q TURNING TO YOUR FIRST REASON FOR REJECTING THE ERP'S
2 DEDUCTIONS, WHY HAS THE NEW YORK PSC CONSISTENTLY USED A
3 TOLERANCE BAND IN REVENUE ALLOCATION DECISIONS?

4 A The succinct answer is that it recognizes that the indications of an embedded cost of
5 service study do not give a precise picture of the cost of serving the various service
6 classifications. These studies paint with a broad brush. The use of a tolerance band
7 is intended to give recognition of this potential lack of precision, Thus, if a class's
8 revenue is "close enough" to the cost indicated by the model, the PSC considers that
9 to be sufficient to comply with the objective of cost-based rates. The corollary, of
10 course, is that the less confidence that one can have in the accuracy and/or
11 relevancy of the cost study to conditions in the rate year, the wider is the acceptable
12 tolerance band. Other regulatory commissions also use tolerance bands, for the
13 same reasons.

14 Q CAN YOU PROVIDE ANY CITATIONS TO SUPPORT THE USE OF A BROADER
15 TOLERANCE BAND?

16 A Yes. A case in point is Case No. 29433, a Central Hudson electric rate case. In that
17 case, Central Hudson had argued for the retention of a 20% tolerance band. The
18 Staff had argued for a 15% tolerance band around the average rate of return. The
19 Commission in that case agreed with the Staff and found as follows:

20 In view of the more recent load study data, which were unavailable
21 when the 20% (tolerance) band was adopted, it appears that the
22 tolerance band should be reduced to 15% as staff and the Judge
23 recommend.

24 I think several conclusions are inescapable from the above example. First, even
25 when, unlike here, the Commission is presented with a timely cost of service study, a
26 20% tolerance band may be warranted when the accuracy or relevance of the data or

1 assumptions are suspect or questionable. Secondly, even *with* increased confidence
2 in the data, a 15% tolerance band may be appropriate, depending upon the
3 circumstances. In other words, the choice of the appropriate tolerance band requires
4 the exercise of a degree of judgment and discernment.

5 **Q DOES THE CON EDISON ERP AGREE THAT AN INCREASE IN THE SIZE OF**
6 **THE TOLERANCE BAND IS GENERALLY PROPORTIONAL TO THE AMOUNT OF**
7 **CONFIDENCE OR LACK OF CONFIDENCE THE ANALYST HAS IN THE**
8 **RESULTS OF A COST OF SERVICE STUDY?**

9 A Yes. Company witness Maureen Nihill of the ERP did agree with this general
10 proposition in the most recent Con Edison electric proceeding (Case 07-E-0523).²

11 **Q WHAT TOLERANCE BAND DID THE STAFF RECOMMEND IN THE MOST**
12 **RECENT CON EDISON ELECTRIC CASE?**

13 A The Staff recommended a 15% tolerance band.³

14 **Q WHAT TOLERANCE BAND DID THE COMMISSION APPROVE IN THAT CASE?**

15 A I do not recall that the Order in the last case specified a definite tolerance band.
16 However, because the Commission approved a \$15 million adjustment for NYPA, that
17 implies that the PSC used a tolerance band of between 15% and 20%.⁴

² Case 07-E-0523, Tr. 349.

³ Supra, Tr. 4888.

⁴ In my direct testimony in Case No. 07-E-0523, I presented evidence that, measured by the ERP filed by the Company (and with which I disagreed), the alleged NYPA deficiency would have been \$21.8 million using a 15% tolerance band and \$13.4 million using a 20% tolerance band.

1 **Q WHAT TOLERANCE BAND SHOULD BE USED IN THIS CASE?**

2 A If the 2005 study is taken as the standard – as proposed by the ERP – then the
3 tolerance band should be no less than 20%. The 2005 study does not reflect current
4 revenues, expenses or rate base. If the study provided by Con Edison in response to
5 Staff Question No. 245 (see below) is the measuring stick, I would still recommend a
6 15% to 20% tolerance band because of its tenuous relationship between the test year
7 and the rate year, as well as because of the problems with the underlying study itself,
8 as I will subsequently explain. In either case, there is no support for the \$15 million
9 revenue shift to the NYPA class.

10 **Q WHY DO YOU CHALLENGE THE ERP'S UNQUESTIONED RELIANCE ON THE**
11 **2005 COST OF SERVICE STUDY FOR THIS PURPOSE?**

12 A The 2005 ECOS is not only stale, it has virtually no semblance to conditions and
13 circumstances at the present time, let alone what they will be for the rate year. First
14 of all, the rates used in the 2005 ECOS are not the rates currently in effect (the rates
15 used were those in effect prior to the implementation of the rates adopted in Case 07-
16 E-0523). Second, the usage (kilowatt hours and kilowatts) numbers have not been
17 updated to reflect the most recent data available, let alone the expectations for the
18 rate year. For example, according to its sales forecast in this case, Con Edison
19 expects far more growth in NYPA usage than for CON ED. In 2010, Con Edison is
20 forecasting that NYPA's sales volume will be 7.6% greater than it was for 2005. In
21 contrast, the sales volume for CON ED is anticipated to be just 2.4% greater for that
22 same time period. This disproportionate growth in NYPA sales revenues, however, is
23 not reflected at all in the 2005 ECOS, and that alone is ample reason to either not use
24 the study here or use it with a broader tolerance band.

1 Finally, the Rate Base itself, and the Operation and Maintenance Expenses
2 for the Rate Year, all key parameters in interpreting and applying a cost of service
3 study, are light-years apart from the conditions reflected in the 2005 ECOS, as is
4 readily apparent from the following comparisons:

<u>Description</u>	<u>2005 ECOS</u>	<u>Rate Year⁵</u>
Rate Base	\$ 9.5 Billion	\$ 14.6 Billion
Operation and Maintenance	\$ 880 Million	\$ 1,742 Million

5 As can be seen, Rate Base has increased 1.5 times and O&M expenditures have
6 doubled from the 2005 test year to the Rate Year. It is not reasonable to simply
7 assume that the net result of allocating more than \$5.0 billion of assets and almost
8 \$1.0 billion of expenses will yield the same cost of service results.

9 **Q ARE YOU AWARE THAT THE COMPANY “UPDATED” ITS COST OF SERVICE**
10 **STUDY IN RESPONSE TO QUESTION NO. 245 FROM THE STAFF?**

11 A Yes, I am. I have reviewed that response.

12 **Q THE COMPANY’S RESPONSE TO THAT REQUEST INDICATES A “DEFICIENCY”**
13 **FOR THE NYPA CLASS OF \$16 MILLION. DO YOU AGREE THAT THIS FORMS**
14 **ADEQUATE SUPPORT FOR THE ERP’S PROPOSED EXTRA \$15 MILLION?**

⁵ Source: Exhibit (AP-9), Schedule 1.

1 A No. Moreover, I would note that this response to Staff Question No. 245 purports to
2 update the 2005 ECOS for one item, and one item alone -- namely to use the rates
3 currently in effect, instead of the prior rates. However, the usage data in the
4 "updated" study is still stale and the study still uses the same plant and expenses that
5 the Company had in 2005.⁶ Consequently, the response to Staff Question No. 245
6 still suffers from several of the same, major defects that I identified above and should
7 not be relied upon.

8 **Q DO YOU HAVE ANY OTHER OBSERVATIONS ABOUT THE "UPDATED" COST**
9 **STUDY?**

10 A The other thing that I would note is that the response to Staff Question No. 245
11 shows that the CON ED class, as a whole, has no surplus whatsoever, even at a 10%
12 tolerance level, and that the EDDS surplus is only \$450,000.⁷ This raises the obvious
13 question of who is really disadvantaged as a result of the alleged NYPA deficiency
14 revealed by the flawed study.

15 **Q TAKING CON EDISON'S STUDY PRODUCED IN RESPONSE TO STAFF NO. 245**
16 **AT FACE VALUE, HAVE YOU CALCULATED THE ALLEGED NYPA CLASS**
17 **DEFICIENCY AT A 15% TOLERANCE BAND?**

18 A Yes. The figure would be only \$5.5 million. Moreover, at a 20%, or even a 17.5%
19 tolerance band, the alleged deficiency would disappear entirely.

⁶ The Company model does seem to update for income taxes though.

⁷ In fact, the CON ED class would be within the tolerance band even at a 2.5% tolerance level. Thus, based on this "updated" study, it is not possible to conclude that the CON ED classes, as a whole, are paying above their true cost of service.

1 **Q HAVE YOU PREPARED A COST OF SERVICE STUDY THAT IS MORE**
2 **APPROPRIATE THAN THE CON EDISON RESPONSE TO STAFF NO. 245?**

3 A Yes. Although I was limited somewhat by the Company's lackadaisical approach, I
4 was able to improve the "updated" cost study. For example, instead of only updating
5 the 2005 ECOS by using current rates, I also updated the 2005 ECOS by using the
6 forecasted sales data for the twelve months ended December, 2009. The revenues
7 and the usage figures came from Exhibit FP-8 submitted by the Company in the
8 current filing. Unfortunately, I was unable to classify and allocate the increased rate
9 base and operating expenses and, instead, was forced to use the outdated ones from
10 the 2005 ECOS, as did the Company in response to Staff No. 245 .⁸

11 **Q WHY IS YOUR COST STUDY SUPERIOR TO THE 2005 COST STUDY OR THE**
12 **COMPANY'S "UPDATE?"**

13 A This study (City Update ECOS 1) is superior to the 2005 study and Con Edison's
14 "update" because, by updating rates and usage, at least we are replicating the
15 revenues and usage factors that are expected to exist in 2009. In other words, the
16 starting point in this updated study is more aligned with the revenues that Con Edison
17 is seeking to receive from the various classes.

18 **Q HOW DID YOU UPDATE ALL THE ALLOCATION FACTORS?**

19 A I adjusted all the factors in the study in proportion to the new usage figures. Thus,
20 for example, if a class's usage went up (or down) by X% from 2005 to 2009, I
21 adjusted all the demand allocation factors up (or down) by the same percentage.
22 Thus, I have implicitly assumed that all the load factors and coincidence/diversity

⁸ The exception is State and Federal Income taxes which are updated automatically by the model.

1 factors remained unchanged from those the Company used in the 2005 study. I
2 made similar adjustments for the customer-related factors. Absent any information to
3 the contrary, this was the best that I could do.

4 **Q WHAT WAS THE RESULT OF YOUR “2005 UPDATED RATES AND USAGE”**
5 **COST OF SERVICE STUDY?**

6 A The results of City Update ECOS 1 are summarized in Exhibit AR-1, Schedule 1. As
7 can be seen from the last line of this schedule, the more reasonable City Update
8 ECOS 1 shows that not only is there no “deficiency” attributable to NYPA at a 15% or
9 even 10% tolerance band, **there would not be any deficiency at even a 0.5%**
10 **tolerance band.** In fact, City Update ECOS 1 demonstrates that the NYPA and CON
11 ED classes have almost identical rates of return and that no revenue reallocation
12 should be attempted.

13 **Q COULD YOU MAKE ANY FURTHER UPDATES TO THE COST OF SERVICE**
14 **STUDY, OTHER THAN THE ONES REFLECTED IN CITY UPDATED ECOS 1?**

15 A Yes. Although I was unable to update the rate base and expenses from 2005 to the
16 levels that Con Edison is claiming for the rate year, by comparing Con Edison's 2005
17 and 2007 FERC Form 1s, I was able to approximate what Con Edison may have
18 shown if it went to the trouble of performing a 2007 ECOS, but again using 2009
19 forecasted sales volumes at present rates. The results are shown in Exhibit AR-1,
20 Schedule 2.

21 **Q WHY IS YOUR SECOND COST STUDY SUPERIOR TO THE 2005 COST STUDY**
22 **OR THE COMPANY'S UPDATE?**

1 A First, as with City Update ECOS 1, this study (City Update ECOS 2) reflects
2 revenues, rates and usage that are expected to exist in the rate year. In addition, as
3 one can tell from the system rate of return (7.07%), this study is certainly more
4 reflective of the conditions that Con Edison expects in the Rate Year at current rates
5 (5.23%), than the slapdash study Con Edison supplied in response to Staff Question
6 No. 245, which shows a system rate of return of 11.97%.

7 **Q WHAT TYPE OF REVENUE ALLOCATION COULD BE JUSTIFIED FROM THE**
8 **INFORMATION SUMMARIZED IN SCHEDULE 2?**

9 A As can be seen, the City Update ECOS 2 shows that not only is there no “deficiency”
10 whatsoever attributable to NYPA at any tolerance band, **the NYPA class is actually**
11 **paying above its cost of service at current rates. Accordingly, based on this**
12 **study, a smaller than system average increase to the NYPA class could well be**
13 **justified depending, of course, upon the tolerance band that is utilized.** While
14 the City is not asking for a less than system average increase for the NYPA class
15 here, clearly there is no support for Con Edison’s request to, once again, impose a
16 greater than system average increase on the NYPA class.

17 **Q DO CITY UPDATES ECOS 1 AND 2 REFLECT THE SAME METHODOLOGY AND**
18 **APPROACH SUPPORTED BY CON EDISON AND USED BY THE ERP PANEL IN**
19 **THE DEVELOPMENT OF THE 2005 ECOS?**

20 A Yes.

21 **Q DOES THAT MEAN THAT YOU APPROVE OF THAT PARTICULAR**
22 **METHODOLOGY?**

1 A No. In the last case, I noted several deficiencies and problems with the Company's
2 cost of service study which biases it against the NYPA class. The most significant
3 problem is Con Edison's incorrect and arbitrary weightings of two measures of
4 demand used to allocate low tension plant, a material component of Con Edison's
5 rate base.

6 **Q TO WHAT ALLOCATION FACTORS ARE YOU REFERRING?**

7 A I am referring to the D08 and D09 allocators in the cost of service study. These
8 allocators, which are measures of demand, are used to allocate the low tension
9 underground and the low tension overhead conduit. (The Company used the same
10 measure of demand to allocate both overhead and underground conduit.) That
11 measure of demand is actually a weighting of **two different** measures of demand.
12 The first measure is the greater of either the summer or the winter individual customer
13 maximum demand (ICMD), with each customer considered in isolation. Thus, for this
14 measure of demand, it is immaterial how a class is subdivided. The second measure
15 of demand is the class non-coincident demand (CNCD). This second measure views
16 the class as a whole and, thus, implicitly assumes that the entire class jointly uses
17 each of the elements of the distribution system. For this measure, the planner needs
18 only to look at when the class as a whole peaks to design the system, rather than
19 when individual members of the class hit their peaks.

20 **Q COULD YOU PLEASE EXPLAIN THE CIRCUMSTANCES THAT DICTATE WHICH**
21 **MEASURE OF DEMAND IS MOST DETERMINATIVE OF COST CAUSATION?**

22 A Perhaps a good explanation was provided by Con Edison itself in response to the
23 City's Question No. 88 in Case 07-E-0523.

1 As a practical matter, there are three categories of demands that are
2 used for cost allocations: individual customer maximum demand
3 (ICMD), which corresponds to billing demand, **class non-coincident**
4 **peak demand (CNCD), which is the total class peak demand,**
5 **coincident within the class** but non-coincident with the system peak,
6 and system peak demand, which is the maximum coincident demand
7 for the entire system.

8 The principal [sic] involved in selecting the appropriate allocation
9 factors is diversity of demand. At the delivery point to the customer, the
10 system is designed to meet the customer's ICMD. However, as one
11 proceeds upstream from the customer, diversity of demand is reflected
12 in system designs, and equipment is designed to meet class CNCDs.
13 (Emphasis added.)

14 Diversity of demand is the phenomenon that allows utility planners to design and
15 build the facilities that serve a large number of customers to take advantage of the
16 fact that not all customers achieve their peak demand simultaneously. Diversity is the
17 flip side of coincidence. In other words, diversity of demand is reflected most in the
18 allocation of Transmission plant, less so with High Tension plant, and even less so
19 with Low Tension plant.

20 **Q HOW DOES CON EDISON WEIGHT THOSE TWO MEASURES OF DEMAND?**

21 A For most classes it gives the two measures equal weight, i.e., it weights them 50/50.
22 However, it makes an exception for two classes, SC 1 and SC 7, for which it assigns
23 the ICMD only a 25% weighting, while it assigns the CNCD a 75% weighting. It does
24 this because Con Edison believes these two classes⁹ have more diversity than other
25 classes.

⁹ The Exhibit ERP-1 narrative refers to three classes that use a 75% weighting for non-coincident demands, but this is an error.

1 Q ARE THERE ANY QUANTITATIVE ANALYSES OR STUDIES THAT WOULD
2 SUPPORT THE 50/50 WEIGHTING FOR ALL BUT TWO CLASSES?

3 A No. Con Edison has not provided any study or analysis to support using a 50/50
4 ICMD/CNCD weighting for all but two classes. This was confirmed during the
5 cross-examination of the ERP in the previous rate case:

6 Q You also state in the (Con Edison's rebuttal) testimony the 50/50
7 weighting that you used of the two allocators is not founded on any
8 particular study either, correct?

9 A (Nihill) It's not founded on any particular study, but I would like to
10 offer that it certainly is more in line with some of the information that
11 we shared during the collaborative.¹⁰

12 * * * * *

13 Q And just to be clear: do you actually have a study that
14 demonstrates that each of these two measures are (sic) of *equal*
15 *importance* other than your observation about the collaborative?

16 A (Nihill) No, except for the fact that 50/50 is based on the
17 Company's recognition that the ICMD or billing demand and the
18 CNCD is of equal importance in allocations to (the) classes. *There is*
19 *no study*.¹¹

20

21 Q That's the company's judgment. That's not based on a study.

22 A (Nihill) That's right.

23 Q WERE YOU AN ACTIVE PARTICIPANT IN THE COST OF SERVICE STUDY
24 COLLABORATIVE PROCESS TO WHICH MS. NIHILL REFERS IN HER FIRST
25 ANSWER ABOVE?

26 A Yes.

¹⁰ Case 07-E-0523, Tr. 381-82.

¹¹ Supra, Tr. 382.

1 Q DO YOU RECALL ANY INFORMATION THAT WOULD SUGGEST THAT
2 MAXIMUM BILLING DEMANDS AND NON-COINCIDENT DEMANDS ARE OF
3 EQUAL IMPORTANCE IN THE PLANNING OR DESIGN OF THE LOW TENSION
4 SYSTEM?

5 A No. My recollection is that Con Edison made a presentation suggesting that both
6 measures of demand were considerations in designing and building the low tension
7 system. However, I do not recall any demonstration that the two factors are of equal
8 importance. In fact, as set forth below, the evidence suggests that indeed the two
9 considerations are not of equal importance, and that the ICMD is the demand
10 measure that is more important than the CNCD measure. In other words, Con Edison
11 has erred in assigning these key demand allocators and that error has infected the
12 2005 cost study and its progeny, including the Con Edison "update" and City Updates
13 ECOS 1 and 2.

14 Q WHY DO YOU SAY THAT THE ICMD IS THE MORE IMPORTANT DEMAND
15 ALLOCATOR FOR OVERHEAD AND UNDERGROUND CONDUIT?

16 A The 50/50 weighting of both demand measures for most classes is not only arbitrary,
17 but it assumes far more diversity benefits for a distribution system than most utilities
18 believe is warranted. In fact, when the Commission conducted a generic proceeding
19 on the proper rate design for standby service for customers with on-site generation,
20 the New York utilities took the position that there were relatively small diversity
21 benefits to be had in designing the distribution system, especially the secondary
22 voltage distribution system, such as the low tension system. As the Joint Statement

1 of Position of the New York State Electric Companies Regarding Standby Service
2 Issues, *which included Con Edison*, expressed it:

3 A second category of such costs, which includes ***much of the***
4 ***distribution system***, is for customer-specific facilities and/or individual
5 feeders on the delivery system. Those portions of the distribution
6 system and some portion of the transmission system are ***designed to***
7 ***meet the expected maximum requirements for individual***
8 ***customers and individual parts of the delivery system***. In this
9 regard, ***notions of coincidence*** of a customer's peak load with the
10 system peak load ***are relatively unimportant***. Rather, the distribution
11 and transmission plant that is serving the customer is highly correlated
12 with the customer's expected maximum requirements. (September 18,
13 2000, page 8, emphasis added.)

14 **Q PLEASE EXPLAIN.**

15 A What Con Edison and the other utilities are saying in the above statement is that the
16 low tension equipment is closer to the customer and thus the individual customer
17 demands should be given somewhat more weight than the class non-coincident
18 demands. Thus, the decision of the ERP to accord the ICMD and the CNCD equal
19 weight for all but two classes is not only arbitrary, **it contradicts Con Edison's own**
20 **observations on the matter in the generic Standby Rate proceeding.**

21 **Q FOR WHICH TWO CLASSES ARE THE ICMD AND CNCD DEMANDS NOT GIVEN**
22 **EQUAL WEIGHT?**

23 A For the SC 1 and SC 7 classes, the ERP weights the ICMD by only 25%, but the
24 CNCD by 75%.

25 **Q ARE THERE ANY QUANTITATIVE ANALYSES OR STUDIES THAT WOULD**
26 **SUPPORT THE 25/75 ICMD/CNCD WEIGHTING FOR THE SC 1 AND SC 7**
27 **CLASSES?**

1 A No. In response to Question No. 204 from the City in the previous case, attached as
2 Exhibit AR-1, Schedule 3, the Company states that it does not have any specific
3 study of the diversity of individual residential customer loads in multiple dwellings.
4 Thus, Con Edison has not supplied any study or analysis to support using a 25/75
5 ICMD/CNCD weighting for the SC 1 or SC 7 classes.

6 **Q DID THE STAFF RECOGNIZE THAT SHORTCOMING IN CASE NO. 07-E-0523?**

7 A Yes. In its prepared testimony in that proceeding, the Staff Rate Panel specifically
8 noted that while it is reasonable to give the CNCD more weight for residential classes
9 living in multiple unit dwellings, in recognition that these customers are less likely to
10 peak at the same time, the Company had not adequately justified the specific 25/75
11 ICMD/CNCD weighting.¹²

12 **Q HAVE YOU DEVELOPED AN ALTERNATIVE LOW TENSION DEMAND**
13 **ALLOCATOR THAT WOULD GIVE THE ICMD SOMEWHAT MORE WEIGHT THAN**
14 **THE CNCD FOR ALL CLASSES EXCEPT SC 1 AND SC 7?**

15 A Yes. To recognize that there is not a lot of diversity consideration involved in building
16 the low tension system, I accorded the ICMD more weight than the CNCD, rather
17 than weighting them equally as the Company had. Consequently, I decided that a
18 conservative weighting would be 60% for the ICMD and 40% for the CNCD. The
19 development of this Alternative Low Tension Demand Allocator is shown in Exhibit
20 AR-1, Schedule 4.

¹² Case No. 07-E-0523, Tr. 4884-88.

1 Q HOW DID YOU HANDLE THE SC 1 AND SC 7 CLASSES, WHICH CON EDISON
2 DEEMED TO HAVE MORE DIVERSITY BENEFITS THAN THE OTHER CLASSES?

3 A For those two classes, I reversed the percentages and weighted the ICMD only 40%
4 and gave a 60% weighting to the CNCD of those classes, i.e., I reversed the
5 percentages. Thus, I too have reflected the greater diversity of individual customer
6 loads in multiple dwellings, but not to the unreasonable extent that the Company did.

7 Q WHAT IS THE RESULT OF THE 2005 STUDY, UPDATED FOR 2009 USAGE AND
8 REVENUES AND 2007 PLANT AND EXPENSES, BUT USING THE ALTERNATIVE
9 LOW TENSION DEMAND ALLOCATORS THAT YOU DEVELOPED?

10 A The results are shown on Exhibit AR-1, Schedule 5. It is worth noting that,
11 measured by this alternative study, the NYPA class is above cost of service, as
12 shown by the indexed rate of return of 1.05. I would refer to the study as City Update
13 ECOS 3.

14 Q OTHER THAN THE ARBITRARY WEIGHTINGS BETWEEN CLASS
15 NON-COINCIDENT DEMAND AND THE SUM OF THE INDIVIDUAL MAXIMUM
16 DEMANDS, ARE THERE ANY OTHER FLAWS IN CON EDISON'S COST OF
17 SERVICE METHODOLOGY?

18 A There are several, but perhaps the most egregious is that the ERP did not calculate
19 any customer component of line transformers, Account 368. This error is clearly at
20 odds with the NARUC Electric Cost Allocation Manual, which states that transformers
21 should also be classified into demand and customer components using a minimum
22 system study.

1 Distribution plant Accounts 364 through 370 involve demand **and**
2 **customer** costs. (NARUC, Electric Utility Cost Allocation Manual,
3 page 90, emphasis added.)

4 Even Con Edison conceded that there is a customer component to
5 transformers. In response to NYC Question 264 (in Case 07-E-0523), the Company
6 replied, in part:

7 As to part a of this question, the addition of distribution lines and
8 transformers may be necessary to extend service to new customers
9 which Con Edison has an obligation to serve, and those costs could
10 not be avoided by demand management. (Emphasis added.)

11 Thus, not only is the ERP's failure to recognize a customer component of
12 transformers contrary to the NARUC Electricity Cost Allocation Manual, it is contrary
13 to the indications of Con Edison's engineers who agree that adding customers
14 generally entails adding new transformers, and those costs cannot be avoided by
15 reducing demand. Both of these facts were acknowledged by the ERP during
16 cross-examination in the previous case.¹³

17 **Q DID YOU OBSERVE OTHER QUESTIONABLE PRACTICES IN THE**
18 **CALCULATION OF THE D04 ALLOCATION FACTOR?**

19 A Yes. For some classes Con Edison uses the higher of summer or winter demands
20 while for other classes it uses only the summer demands.

21 **Q WHY IS THIS UNACCEPTABLE?**

22 A Typically, a non-coincident demand allocator is calculated as the highest demand of
23 each class, whenever that demand may occur. Occasionally, you may see that
24 demand confined to a more narrow time window or season if there is ample diversity

¹³ Case 07-E-0523, Tr. 358-61.

1 involved in the planning and the cost analyst wants to more closely approximate a
2 coincident demand. However, I cannot recall an instance (other than Con Edison)
3 where a cost analyst used the absolute maximum (whenever it may occur) for some
4 classes, but only use a circumscribed time frame for other classes.

5 **Q IS THERE ANY OTHER UNCERTAINTY INHERENT IN THE D04 ALLOCATION**
6 **FACTOR?**

7 A Yes. Con Edison defines the High Tension system (a much more common
8 terminology is Primary Distribution system) as those facilities operating between 2 kV
9 and 69 kV. This is an extraordinarily broad voltage level. In my experience, facilities
10 that operate at 69 kV are usually considered transmission facilities.

11

12 **Q IF CON EDISON WERE TO CONDUCT AND PRESENT A NEW COST OF**
13 **SERVICE STUDY AS PART OF ITS REBUTTAL FILING IN THIS CASE, WOULD**
14 **YOU AGREE THAT A 10% TOLERANCE BAND WOULD BE APPROPRIATE FOR**
15 **USE WITH THAT STUDY?**

16 A No. First, as a general principle, I believe it would be wholly inappropriate and unfair
17 to other parties for Con Edison to wait until rebuttal testimony to present an updated
18 cost of service study for the first time, especially for the Applicant who has the burden
19 of proof in these proceedings. Second, despite the modifications and improvements
20 implemented as a result of the last collaborative, as indicated by the ICMD/CNCD
21 weighting issue, and other issues highlighted above, there are still several major
22 problems with the cost study methodology used by Con Edison that would render the
23 results questionable. Thus, the use of 10% tolerance band is not supportable in this

1 case. (In future cases it indeed may be possible to revert to 10%, depending upon
2 the confidence that can be placed on the relevant ECOS.)

3 **Q IN VIEW OF THE COST STUDIES PRESENTED BY CON EDISON AND YOUR**
4 **UPDATES AND CORRECTIONS THERETO, WHAT IS YOUR**
5 **RECOMMENDATION?**

6 A First and foremost, I urge the Commission to explicitly reject the 2005 ECOS and the
7 Con Edison "update" because they are simply inadequate to serve any useful
8 purpose in this proceeding. In particular, neither of the cost studies proffered by Con
9 Edison in this proceeding should be relied upon to support the ERP-proposed \$15
10 million revenue shift to the NYPA class.

11 Second, to the extent that the Commission does wish to rely on a cost study
12 as a guide to the revenue allocation process, I would proffer City Update ECOS 3 as
13 the one most relevant to that purpose.

14 Third, in any case, my detailed analyses clearly demonstrates that a uniform
15 increase among CON ED, NYPA and EDDS is fully justified, with perhaps a slight
16 decrease for the EDDS class.

17 **The Need for a New Shore Power Tariff**

18 **Q WHAT IS SHORE POWER AS YOU USE THE TERM IN THE CONTEXT OF THIS**
19 **PROCEEDING?**

20 A The term Shore Power refers to supplying ships that are docked at New York City
21 piers with electricity delivered through Con Edison's transmission and distribution
22 system. This electricity would be in lieu of electricity generated by the oil-fired
23 generators aboard the ship.

1 **Q WHY IS SHORE POWER CONSIDERED TO BE IMPORTANT BY THE CITY AND**
2 **PORT AUTHORITY?**

3 A I am not an environmental engineer, but I believe that a reasonable Shore Power
4 tariff would help to lower the air pollution in the environs of the City. In the absence of
5 available electric shore power from Con Edison, my understanding is that ships self-
6 supply from on-board power, as they do at sea. This is typically done by combustion
7 of bunker fuel, otherwise known as No. 6 oil. The burning of No. 6 oil is characterized
8 by the emission of very high levels of pollutants and potentially harmful air emissions
9 such as nitrogen oxides (NOx), sulfur dioxide (SO₂), particulate matter (PM) and
10 carbon dioxide (CO₂). In a recent study¹⁴, a consultant estimated that shore power at
11 the Brooklyn Cruise Terminal would reduce annual NOx and SO₂ emissions by 100
12 tons each, PM emissions by over six tons, and CO₂ emissions by 1,500 tons.. The
13 risks associated with such emissions are of course heightened when they occur in
14 close proximity to population centers, as at the Brooklyn cruise terminal, and over an
15 extended period, as when the ships are at berth. A Shore Power rate also would
16 provide new revenues to the Company. In addition, there are potential regional
17 benefits: if cruise ships began retrofitting their ships for Shore Power at New York
18 City ports, it is likely that other ports up the coast, such as Boston and Portland, ME,
19 would follow suit.

20 **Q WHY COULD NOT THE SHIP TAKE SHORE POWER ON ONE OF THE EXISTING**
21 **TARIFFS?**

¹⁴ "Brooklyn Cruise Terminal Shore Power Feasibility Analysis" March 6, 2008 Draft Prepared for The Port Authority of NY & NJ by M.J. Bradley and Associates.

1 A There are several issues in play here. The first is that none of the current tariffs are
2 economically reasonable for the owners of the ships. Obviously, those owners would
3 only take Shore Power when the cost of the electric service from Con Edison is less
4 than the cost of generating it themselves. Electricity taken from current Con Edison
5 tariffs would cost \$1.28 million more than the ships' annual onsite generation costs,
6 according to the study referenced above.

7 The second issue is a cost of service issue. Tariffs are typically designed for
8 specific classes of customers that exhibit homogenous service characteristics. These
9 characteristics can include (1) size (maximum demand in MW), (2) load factor,
10 (3) coincidence/diversity factor, (4) on-peak versus off-peak usage, (5) voltage
11 service level, (6) transformer (or substation) ownership, (7) dedicated facilities (8)
12 seasonal versus off seasonal usage, and (9) firm versus interruptible nature of the
13 service. There could be others as well. All of these factors influence the cost of
14 providing the service. If a particular customer exhibits characteristics that are
15 markedly different from the other customers on a Service Classification tariff designed
16 with a general service profile in mind, that particular customer could be paying too
17 much (or possibly too little).

18 Finally, regulators frequently approve tariffs for special purposes that are
19 designed on a different basis from the other tariffs, if there is a social or economic
20 need for that tariff. An example is an economic development tariff that may be
21 designed on the basis of marginal costing (instead of embedded or average costing)
22 or that may be exempt from certain socialized charges to make it more attractive. Of
23 course, the consideration here is that, all things considered, the other customers on
24 the system will be better off, or at least no worse off, as a result of the special
25 purpose tariff.

1 **Q WHAT CHARACTERISTICS MIGHT DISTINGUISH SHORE POWER FROM MORE**
2 **TYPICAL FULL SERVICE TARIFFS?**

3 A The load characteristics for Shore Power are unique. First, the average load for
4 Shore Power is 14 MW, considerably larger than the average customer's load on the
5 Con Edison system. Second, the load is highly predictable, as it would follow a set
6 schedule. Third, because the ships have their own generators, the service can be
7 fully interruptible on short notice. Finally, also because the ships have their own
8 generators, the ships may want to use their own generators during the summer
9 daytime hours, but rely on system power during the lower load hours. However,
10 depending upon how the service is structured, there may be other distinguishing
11 features as well.

12 **Q CON EDISON HAS A STANDBY TARIFF FOR CUSTOMERS WITH ON-SITE**
13 **GENERATION. COULD SUCH A TARIFF NOT BE EQUALLY APPLICABLE FOR**
14 **SHORE POWER?**

15 A No, not necessarily. First, standby service is predicated on the low "probability" that
16 the backup service will be taken coincident with the system peak. This probability
17 should be proportional to the equivalent forced outage rates of the customer's on-site
18 generation. This is a random event. On the other hand, a Shore Power can be
19 specifically designed for off-peak service, since the ships can control when to run
20 their diesel generators. Secondly, the current standby rates are designated as firm,
21 whereas an interruptible rate would be more appropriate for Shore Power. Third,
22 standby service was developed on the principle of "revenue neutrality". Because
23 Shore Power is intended for an entirely new class of customers, that principle has no

1 relevance here. Nevertheless, I do agree that some of the general principles that
2 were used to develop standby service may be transferrable to Shore Power.

3 **Q ASSUMING THAT THE COMMISSION CONCURS ON THE VALUE OF HAVING A**
4 **SHORE POWER TARIFF, HOW DO YOU RECOMMEND THE COMMISSION**
5 **PROCEED?**

6 A Because there is no apparent template for such a tariff, I would recommend that a
7 technical workshop be established with the specific objective of designing such a
8 tariff. The participants could give consideration to the type of service that would
9 prove attractive, what costs such a service would impose on Con Edison, and how to
10 design a specific billing structure that would be appropriate. I would recommend that,
11 in addition to Con Edison personnel, the Staff and representatives of the City's
12 Economic Development Corporation (EDC) and the Port Authority be represented in
13 the workshop. I would also recommend that Con Edison reach out to other utilities
14 and municipalities that have adopted Shore Power rates (such as Los Angeles) to
15 learn best practices in this area. I further recommend that the members of the
16 workshop issue a report on their findings and recommendations to the PSC, no later
17 than 6 months subsequent to the date of the Decision in this case.

18 **TCC Revenues**

19 **Q, ARE YOU FAMILIAR WITH WHAT THE COMMISSION DECIDED TO DO WITH**
20 **TCC REVENUES IN THE LAST ELECTRIC RATE CASE?**

21 A Yes. Although no party put in any testimony to support such an outcome, the
22 Commission decided to reverse its decision in Case 07-E-0523 and not allow the
23 NYPA class to share in any portion of the net TCC revenues that Con Edison

1 receives. In Case 04-E-0572, the Commission approved a Joint Proposal that
2 allocated to NYPA a proportionate share of the first \$60 million of the TCC revenues.
3 This last minute adjustment imposed a penalty on the NYPA class by adding over
4 \$10 million to its already onerous rate increase (i.e., above beyond the \$15 million
5 revenue reallocation discussed above).

6 **Q SHOULD THE NYPA CLASS RECEIVE A SHARE OF NET TCC REVENUES?**

7 A Absolutely. Although NYPA is reimbursed for its NYISO congestion costs by Con
8 Edison, Con Edison receives the rents from the associated TCCs. These rents have
9 been running about two times the congestion costs. As a result of the Order in the
10 last rate case, the entire net balance of TCC revenues is flowed through the Monthly
11 Adjustment Clause (“MAC”), which prevents the NYPA class from sharing in any part
12 of it. This is wrong – the NYPA class pays its share of Con Edison transmission
13 costs, in accordance with the DO3 Allocator, and therefore is entitled to a 14.13%
14 share of the net TCC revenues.

15 **Q DO YOU HAVE ANYTHING ELSE TO ADD?**

16 A I have reviewed the more complete testimony of the NYPA Panel on this issue and
17 endorse it. For the reasons set forth here and in the NYPA Panel testimony, the
18 Commission should correct its error from the last rate case and reinstate the
19 allocation of TCC revenues to NYPA.

20 **Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

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 managing principal
6 with the 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 and one paper on reorganizing markets published in
5 *The Electricity Journal*. I am also a Certified Energy Procurement Professional by the
6 Association of Energy Engineers. In January, 1982, I joined the firm of
7 Drazen-Brubaker & Associates, Inc., the predecessor of Brubaker & Associates.
8 Since that time, I have presented expert testimony on the subjects of industry
9 restructuring, open access transmission, marginal and embedded class cost of
10 service studies, prudence and used and useful issues, electric and gas rate design,
11 revenue requirements, natural gas transportation issues, demand-side management,
12 and forecasting.

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

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