

BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of
ORANGE AND ROCKLAND UTILITIES, INC.

Case 07-E-0949

December 2007

Prepared Testimony of:

Staff Rate Panel

Marco L. Padula
Utility Supervisor
Office of Electric, Gas and
Water

Liliya A. Randt
Utility Engineer 2
Office of Electric, Gas and
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State of New York
Department of Public Service
Three Empire State Plaza
Albany, New York, 12223-1350

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

3 A. Marco L. Padula, Utility Supervisor; Liliya A.
4 Randt, Utility Engineer 2; Michael J. Rieder,
5 Utility Engineer 3. We are employed by the New
6 York State Department of Public Service
7 (Department). Our business address is Three
8 Empire State Plaza, Albany, New York 12223-1350.

9 Q. Mr. Padula, please briefly state your
10 educational background and professional
11 experience.

12 A. I received a Bachelor of Science Degree in
13 Electrical Engineering from Northeastern
14 University in 1990 and Master of Business
15 Administration from Rensselaer Polytechnic
16 Institute in 1998. From 1990 to 1994 I was
17 employed by IBM as an Electrical Engineer
18 responsible for the design and development of
19 high performance power/thermal control systems
20 for mainframe computers. In 1994 I joined the
21 Department.

22 Q. Please briefly describe your current
23 responsibilities with the Department.

24 A. My current responsibilities include electric and

1 steam utility revenue allocation and rate
2 design, computer simulation of electricity
3 production, transmission and pricing, and
4 wholesale electric market issues. I am also
5 serving as Staff co-leader on the on-going Con
6 Edison electric and steam rate cases.

7 Q. Have you previously testified before the New
8 York State Public Service Commission
9 (Commission)?

10 A. Yes. I have testified on operating and
11 maintenance expenses in Cases 94-G-0885 and 03-
12 S-1672 and on embedded cost of service studies
13 and rate design in Case 04-E-0572, Case 05-S-
14 1376, Case 07-E-0523 and the Stand-by Service
15 proceedings.

16 Q. Ms. Randt, please briefly state your educational
17 background and professional experience.

18 A. I graduated magna cum laude from the State
19 University of New York Institute of Technology
20 at Utica with a Bachelor of Science Degree in
21 Mechanical Engineering Technology in May 2004.
22 I also received a Master Degree in Civil
23 Engineering from Poltava Technical University,
24 Ukraine in 1997. I began my employment with the

1 Department in April 2005 and currently hold the
2 title of Utility Engineer 2. While with the
3 Department, I have prepared, analyzed, and
4 reviewed reports and studies involving operating
5 revenues, sales forecasts, operation and
6 maintenance expenses, embedded costs, revenue
7 allocation, and rate design. My duties include
8 engineering analyses of utility rate, pricing,
9 and tariff proposals.

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

12 A. Yes, I testified in the Consolidated Edison
13 Company of New York, Inc. steam rate case (05-S-
14 1376) and electric rate case (07-E-0523)
15 regarding the embedded cost of service study,
16 rate design, and other revenue requirement
17 issues. I also testified in the Freeport
18 Electric rate case (06-E-0911) regarding capital
19 expenditures, depreciation, and rate design and
20 in the recent Orange and Rockland Utilities,
21 Inc. (Orange and Rockland or the Company)
22 electric rate case (06-E-1433) regarding the
23 delivery revenue forecast.

24 Q. Mr. Rieder, have you already discussed your

1 educational background, professional and
2 testimonial experience, and responsibilities?

3 A. Yes, that information is included in my
4 individual testimony in this proceeding.

5 Q. What is the scope of the Staff Rate Panel's
6 testimony in this proceeding?

7 A. Our testimony will address the following: (1)
8 Staff's adjustment to the Company's Embedded
9 Cost of Service (ECOS) study; (2) revenue
10 allocation; (3) Staff's proposed rate design;
11 and (4) the implementation of a revenue
12 decoupling mechanism.

13 Q. Will your testimony refer to, or otherwise rely
14 upon, any information produced during the
15 discovery phase of this proceeding?

16 A. Yes. We have relied upon and will refer to
17 Company responses to several Staff Information
18 Requests. We are sponsoring copies of those as
19 Exhibit__(SRP-1).

20 Q. Is the panel sponsoring any other exhibits?

21 A. Yes. We are sponsoring Exhibit__(SRP-2),
22 Exhibit__(SRP-3), Exhibit__(SRP-4),
23 Exhibit__(SRP-5), and Exhibit__(SRP-6).

24

1 **Embedded Cost of Service Study**

2 Q. Did the Panel examine the ECOS study submitted
3 by the Company?

4 A. Yes.

5 Q. Please briefly describe the purpose of the ECOS
6 study.

7 A. The ECOS study allocates the Company's costs to
8 its customer service classifications based on an
9 analysis of the rate base and operating expenses
10 for the calendar year 2004. There are three
11 major steps included in an ECOS study: (1) the
12 functionalization of costs, such as
13 transmission, distribution, or customer-related;
14 (2) the classification of costs among demand,
15 energy, or number of customers; and (3) the
16 allocation of each classified function to the
17 individual service classes based on selected
18 characteristics. The final output of the ECOS
19 study is a summary of the overall system average
20 and individual class rates of return. This
21 provides an indication of the extent to which
22 each class contributes to the total system rate
23 of return.

- 1 Q. Please describe the functional classifications
2 used in the Company's study.
- 3 A. The Company's primary functional classifications
4 are Merchant Function, Transmission, Substation,
5 High Tension, Transformers, Low Tension -
6 Demand, Low Tension - Customer Services, Meter
7 and Meter Installation, Installation on Customer
8 Premises, Street Lighting, Customer Accounting,
9 Uncollectibles, Customer Service, and System
10 Benefits Charge and Demand-Side Management
11 (SBC/DSM). Certain of these primary functions
12 are further broken down into sub-functions.
- 13 Q. What class characteristics does the Company use
14 to allocate the costs, in each of the defined
15 functions, to each class?
- 16 A. The Company's specific allocation factors are
17 presented in Table 7 of the Company's
18 Exhibit__(E-12). The general characteristics
19 used are: the summer system peak responsibility
20 (based on the highest five-day, four-hour
21 averages); the annual kilowatt-hour (kWh) send-
22 out, the class maximum non-coincident (non-
23 coincident with the system peak) demand (NCP),
24 the class sum of individual customer billing

1 demands (ICMD), the number of services installed
2 for each class, and the number of customers in
3 each class.

4 Q. Please summarize the results of the Company's
5 ECOS study.

6 A. The main results of the ECOS study are the rates
7 of return for the various service classes and
8 the total system rate of return. The study
9 provides a measure of how well the revenues of
10 each service class are proportionally
11 contributing to total revenues and, hence, the
12 total rate of return of the system. Class
13 revenue responsibilities have historically been
14 judged using a +/-10% tolerance band around the
15 total system rate of return. If the class
16 return falls outside the band, that class is
17 considered to be deficient or surplus by the
18 revenue amount needed to bring the class back
19 within the band. The Company has chosen to
20 apply the traditional +/-10% tolerance band
21 approach, as just described, and its results
22 show, for example, that the Residential SC1
23 General class is within the +/-10% tolerance
24 band, the Commercial and Industrial (C&I) SC2

1 Secondary class produces a \$2,059,422 surplus,
2 the C&I SC2 Primary class produces a \$309,909
3 surplus, and the C&I SC3 Primary class produces
4 a \$1,094,901 deficiency.

5 Q. What is meant by describing a class as producing
6 either a surplus or a deficiency?

7 A. This means that for the historical test period,
8 in this case calendar year 2004, classes that
9 produce a deficiency underpaid their fair share
10 of the costs to serve them, and classes that
11 were found to produce a surplus contributed more
12 than their fair share, as measured by each
13 class' contribution to the total system average
14 rate of return.

15 Q. Does the Panel take issue with any aspect of the
16 Company's ECOS study?

17 A. Yes, we take issue with the Company's
18 classification of line transformer costs. The
19 Company classifies the total cost of line
20 transformers as demand-related costs. We
21 believe that a portion of line transformer costs
22 should be classified as customer-related.

1 Q. Why do you believe a portion of transformer
2 costs should be classified as customer-related
3 costs?

4 A. According to the NARUC Electric Utility Cost
5 Allocation Manual, total dollars in Account 368
6 - Line Transformers should be assigned to
7 customer and demand components. The NARUC
8 manual suggests two different methods to
9 determine such classifications, the Minimum-Size
10 Method and the Minimum-Intercept Method.

11 Q. What does the Panel recommend?

12 A. We recommend that transformer costs be
13 classified into customer and demand components
14 using a minimum-size method. We recommend
15 applying the same method that is already used by
16 the Company in classifying other distribution
17 plant, such as underground and overhead
18 conductors, into customer and demand components.
19 For those plant costs, the Company applies a
20 minimum-size method. Based on the available
21 transformer cost data, and to be consistent in
22 determining the total costs of the theoretical
23 minimum system, it would be a natural extension

1 to apply the minimum-size method to line
2 transformers.

3 Q. Have you performed your recommended
4 classification of transformer costs and examined
5 the results?

6 A. Yes. In response to DPS-139, the Company
7 provided data on historic transformer book
8 costs. Based on the 2005 data provided, we
9 calculated the average book cost of installed
10 transformers that were sized up to 25 kVA. We
11 chose 25 kVA and smaller transformers to ensure
12 that the average book cost used in our analysis
13 was based upon a significant quantity of
14 transformers installed and represented the
15 smallest sizes of transformers installed. We
16 then multiplied the average book cost so derived
17 by the total number of transformers in the
18 account in arriving at the total dollars that we
19 would classify as customer-related. We did this
20 calculation separately for overhead and
21 underground transformers. The total dollars in
22 the account, minus the amount we classified as
23 customer-related, are the dollars that we would
24 classify as demand related. Taking these two

1 totals, we determined the percentage split
2 between customer and demand, which we then
3 applied in the ECOS study. The customer-related
4 portion of overhead transformer costs was
5 calculated to be 80% and the demand-related
6 portion was 20%; for underground transformers,
7 the split was 72% customer and 28% demand.

8 Q. Using your proposed customer and demand re-
9 classification percentages for line transformer
10 costs, how do the results of the ECOS study
11 change?

12 A. Staff Exhibit__(SRP-2) presents the results of
13 using its customer and demand re-classification
14 percentages for line transformer costs. As
15 shown in Exhibit__(SRP-2), the Residential SC1
16 General class now produces a slight deficiency
17 of \$25,978 and the C&I SC2 Secondary class
18 produces a \$3,572,908 surplus. The C&I SC2
19 Primary class and SC3 Primary class results were
20 unchanged.

21

22 **Revenue Allocation**

23 Q. Have you reviewed the Company's proposed
24 delivery revenue allocation?

1 A. Yes. The Company first adjusts the surplus
2 revenue amounts for those classes that were
3 found to produce a surplus on an across-the-
4 board percentage basis, in order to bring total
5 surplus revenues equal to the total deficient
6 revenue amounts, thus ensuring revenue
7 neutrality. The Company then re-aligns each
8 class' rate year delivery revenues, at current
9 rate levels, to reflect the ECOS surpluses and
10 deficiencies. The proposed delivery revenue
11 increase, excluding gross receipts taxes, is
12 then allocated to each class based on the
13 proportion of each class' respective re-aligned
14 rate year delivery revenues to the total rate
15 year delivery revenues. Specific class
16 deficiencies or surpluses are then added or
17 subtracted to the revenue increase previously
18 determined for each class in arriving at the
19 total revenue increase for each class. Lastly,
20 the Company applies a mitigation adjustment to
21 assure the delivery increase percentage to any
22 customer class is limited to no more than 1.5
23 times the overall percentage increase in
24 delivery rates. Any adjustments required at

1 this step are then redistributed on an across-
2 the-board basis, thus ensuring the overall
3 revenue requirement target is satisfied.

4 Q. Does the Panel agree with this approach?

5 A. Yes. This approach recognizes the results of
6 the ECOS and balances allocation of the rate
7 increase to all classes. In addition, the
8 mitigation adjustment ensures that no class
9 receives an increase greater than 150% of the
10 system-average increase.

11 Q. Has the Panel allocated revenues based on
12 Staff's proposed revenue requirement?

13 A. Yes, we allocated Staff's recommended revenue
14 requirement increase, provided by the Staff
15 Accounting Panel, using the same general
16 approach as described above and based on the
17 results of the Staff adjusted ECOS. To further
18 balance the overall increase, we also included
19 an additional revenue allocation adjustment to
20 ensure that no class received an increase less
21 than 50% of the system-average increase.

22 Q. Is Staff's revenue allocation provided herein as
23 an Exhibit?

1 A. Yes, Staff's revenue allocation is presented in
2 Exhibit__(SRP-2) and Exhibit__(SRP-3).
3 Exhibit__(SRP-2) shows the class revenues re-
4 aligned to reflect the results of the modified
5 ECOS. Exhibit__(SRP-3) shows the approximate
6 recommended increases resulting for each service
7 class. Staff's revenue requirement results in
8 an overall 9.09% increase in total delivery
9 revenue.

10

11 **Rate Design**

12 Q. Please summarize the Company's proposed rate
13 design.

14 A. The Company has generally proposed to apply the
15 overall percentage increase applicable to each
16 service class to each of the class' charges
17 (i.e., the customer, demand, and usage charges,
18 as applicable).

19 Q. Is Staff proposing an alternative rate design
20 method?

21 A. Yes. For certain classes, Staff is proposing to
22 increase the customer charge by twice the
23 overall percentage increase that is applicable
24 to that class. By applying a greater increase

1 to the customer charge, the resulting customer
2 charges better reflect the level of customer
3 related costs as identified in the Staff
4 adjusted ECOS. In addition, this rate design
5 proposal will ensure that a greater level of
6 fixed costs are recovered from fixed rate
7 components, such as the customer charge, and
8 that volumetric usage charges better reflect
9 primarily variable cost recoveries.

10 Q. Please explain the details of your proposed rate
11 design.

12 A. Staff proposes to apply a greater increase to
13 the customer charges in the following service
14 classes: SC1, SC19, SC3, SC9, SC21 and SC22.
15 Rather than applying the class-specific
16 percentage average increase to the customer
17 charge, as proposed by the Company, Staff
18 proposes to increase the customer charge by
19 twice the class-specific percentage increase.
20 For those classes where we are applying an
21 above-average increase to the customer charge,
22 we propose a concomitant below-average increase
23 to the volumetric usage charges, in order to
24 satisfy each class' revenue target. Demand

1 charges, where applicable, have been increased
2 by the overall class-specific percentage change.

3 Q. How does your proposed increase to the
4 Residential Customer Charge differ from that
5 proposed by the Company?

6 A. Using Staff's proposed revenue requirement, the
7 Company's proposed customer charge for SC 1 -
8 Residential would increase by \$0.36 per month.
9 Under our proposal to apply twice the class-
10 specific percentage increase, the residential
11 customer charge will increase by \$0.73 per
12 month.

13 Q. Are you proposing a greater increase to the
14 customer charges for each service class?

15 A. No. In addition to accepting the Company's
16 proposed rate design for the lighting classes
17 (SC Nos. 4, 5 and 16), we also accept the
18 Company's proposed customer charge for SC2 un-
19 metered service. Further, we propose no
20 increase to the current customer charges for SC2
21 metered service and the SC20 customer class.
22 While these classes receive an overall increase
23 in delivery revenues, the portion of their
24 delivery revenues from which their customer

1 charges are derived (the non-competitive
2 delivery revenues) is being decreased. Thus,
3 rather than applying a decrease to their
4 customer charge, we propose that the customer
5 charges remain at current levels and that the
6 non-competitive delivery revenue decrease be
7 reflected as a decrease in the class' usage
8 charges.

9 Q. Has the Staff Rate Panel prepared exhibits that
10 present the results of your proposed rate design
11 changes?

12 A. Yes. Staff Exhibit__(SRP-4) presents a
13 comparison of present and proposed rates, based
14 on Staff's proposed revenue requirement and rate
15 design changes. Staff Exhibit__(SRP-5) presents
16 the impacts that Staff's proposed rates will
17 have on bills to full service customers at
18 various levels of consumption.

19

20 **Revenue Decoupling Mechanism**

21 Q. Please describe the Company's proposal to
22 implement revenue decoupling in this proceeding.

23 A. On page 46 of his pre-filed testimony, Company
24 Witness Kane explains that "it is the Company's

1 understanding that the implementation of a
2 revenue decoupling mechanism will be addressed
3 as part of a separate phase in Case 06-E-1433."

4 Q. Do you agree with the Company's understanding?

5 A. Yes. At this time, it is our understanding that
6 a determination regarding the implementation of
7 a revenue decoupling mechanism by the Company
8 will be made in Case 06-E-1433. However, in the
9 event a decision regarding revenue decoupling
10 made in that proceeding does not explicitly
11 address the operation of a revenue decoupling
12 mechanism during the rate term covered by this
13 proceeding, the Commission will need to render a
14 decision in this case.

15 Q. What did Staff recommend in Case 06-E-1433?

16 A. Staff recommended that a total revenue
17 reconciliation mechanism be implemented for each
18 customer service classification, with the
19 exception of the lighting, buyback, individually
20 negotiated contract, and standby service
21 classifications, rather than a revenue per-
22 customer mechanism as proposed by the Company.
23 Exhibit ____ (SRP-6) contains Staff's Proposed
24 Revenue Decoupling Mechanism, dated October 19,

1 2007, as it was submitted to the Administrative
2 Law Judge in Case 06-E-1433.

3 Q. In its October 19, 2007 proposal, did Staff
4 express any concerns with the Company's proposed
5 revenue-per customer (RPC) mechanism?

6 A. Yes. Staff expressed concerns related to the
7 potential gaming of the forecasted number of
8 customers and the application of average
9 revenues per customer effectively being used as
10 an incentive for the Company to promote economic
11 development. Specifically, Staff does not
12 believe the Company needs to retain 100% of the
13 incremental average revenues associated with
14 customer growth above forecasted levels that
15 would otherwise be captured under the RPC
16 method.

17 Q. Please explain.

18 A. Under the RPC method, an RPC factor for each
19 class is developed by dividing the total class
20 revenue requirement by the forecasted number of
21 customers for that class. The RPC (average
22 revenue) factor is then multiplied by the actual
23 number of customers to calculate the Company's
24 allowed revenues, which are then reconciled

1 against actual revenues. Under this method, the
2 Company retains 100% of the average revenue for
3 each customer over and above the forecasted
4 level, regardless of the actual incremental
5 level of revenues actually generated by the
6 additional customer or, more importantly, the
7 Company's incremental costs of serving that
8 additional customer. Allowing the Company to
9 retain 100% of the average revenue each
10 additional customer produces above the forecast
11 over-compensates the Company for the incremental
12 costs of serving those additional customers.

13 Q. Does Staff's proposed total revenue
14 reconciliation methodology account for such
15 incremental costs associated with adding
16 customers above the levels in the forecast?

17 A. No, it does do not, which could perceive it as
18 discouraging the Company from promoting economic
19 development within its service territory.
20 However, the subsidy created by the use of the
21 RPC method outweighs any concern we may have
22 about a potential disincentive caused by using
23 the total revenue reconciliation methodology.

24 Q. Could Staff's proposed total revenue

1 reconciliation methodology be modified to
2 account for the potential incremental costs
3 caused by adding customers in amounts above
4 forecasted levels?

5 A. Yes. If it is determined that the total revenue
6 methodology discourages the Company from adding
7 customers, a separate mechanism could be created
8 that would allow the Company to retain a portion
9 of the excess revenues that would otherwise be
10 identified under Staff's total class revenue
11 reconciliation method and fully returned to
12 ratepayers. Such amount retained would more
13 closely approximate the marginal cost incurred
14 by the Company to serve new customers rather
15 than the class average revenue.

16 Q. Please explain.

17 A. In cases where actual revenues relative to those
18 forecasted produce an excess, a separate
19 calculation could be performed. The forecasted
20 numbers of customers would be reconciled against
21 the actual numbers of customers, and, in the
22 event actual numbers of customers exceeded the
23 forecast levels, the difference would be
24 multiplied by the marginal customer cost to

1 calculate an amount of excess revenues that
2 would be retained by the Company. The resulting
3 revenues would thereby be netted out of the
4 total revenue reconciliation when a credit to
5 customers is to be implemented. This
6 modification to Staff's proposed total revenue
7 reconciliation mechanism would more properly
8 compensate the Company for adding customers
9 beyond those assumed in the forecast.

10 Q. How is the marginal customer cost derived?

11 A. An updated marginal cost study would need to be
12 performed in order to derive marginal customer
13 costs for each of the Company's various service
14 classes. Absent an updated marginal cost study,
15 the embedded customer cost could be used as a
16 proxy to at least approximate the cost principle
17 intended by this testimony.

18 Q. Does this conclude your testimony?

19 A. Yes.