BEFORE THE
STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

In the Matter of

Orange and Rockland

Case 07-E-0949

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Prepared Testimony of:

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Q. Please state your name and business address.
A. My name is Gregory P. Stella and my business address is Three Empire State Plaza, Albany, NY 12223.

Q. By whom are you employed and in what capacity?
A. I am employed by the New York State Department of Public Service as an Associate Economist in the Office of Accounting, Finance and Economics.

Q. Please briefly describe your educational background and professional experience.
A. I hold a Ph.D. in Ecological Economics (2003) from Rensselaer Polytechnic Institute. Previously, I received Bachelor of Science and Master of Arts degrees in Economics from the State University of New York at Albany. My initial work in the field of energy sales forecasting was as an employee of the New York State Energy Office, assisting in the development of a residential-sector end-use model as part of the State's Energy Master Plan process. Prior to joining the Department in 2006, my most recent work involved teaching

applied forecasting techniques as part of a course in Managerial Economics at SUNY Albany in 2004 and 2005.

Q. Have you previously filed testimony before the New York State Public Service Commission?

A. Yes, in case 06-E-0911.

Q. What is the purpose of your testimony?

A. The purpose is to present Staff's projections of electricity sales and sendout for Orange and Rockland Utilities, Inc. (henceforth "Orange and Rockland" or the "Company"), in response to testimony put forth by the Company's Forecasting Panel.

Q. Please describe the methodology underlying Staff's projections.

A. Staff uses a "bottom-up" forecasting approach. Six category-specific sales equations - Residential, Small Commercial (i.e., Secondary and Small Primary), Large Primary, Lighting, West Point (i.e., Public Authorities), and Unbilled sales - were estimated as either

standard multiple regressions or, in the case of Residential, as a “varying parameter” model. Staff then uses the resulting equations to do individual sales projections. When all these projections are combined with a projection of the Company’s own use, they yield (by construction) sendout net of distribution losses. Total sendout is derived by factoring in the projected losses.

Q. Is Staff’s forecasting approach identical to that used by the Company?

A. No. While both make use of category-specific regressions, the Company’s approach can be more aptly described as “top-down.” The Company projects sendout from a single equation. After accounting for projected losses and Company own-use, its five additional category-specific equations then effectively act to apportion what remains into corresponding (billed) sales categories. Finally, any residual (positive or negative) is assigned to unbilled sales. As a consequence, a change to an individual class-specific projection does not automatically

feed back into projected net sendout. A new categorical sales projection, for example, stemming from the associated forecasting equation being re-estimated would in turn affect projected unbilled sales by an offsetting amount - while not affecting the Company's projection of sendout. Under Staff's approach, unbilled sales would be unaffected by such a change and its sendout projection would necessarily be revised.

Q. What are the merits of each approach to forecasting sendout?

A. The Company's approach has the advantage of simplicity. Less information (both actual and projected) is required, and the key economic variable that drives its projection, namely employment, is also calendar- (as opposed to billing cycle-) based. Staff's approach has the advantage of a more microeconomic-based foundation, as it allows independent variables – price, specifically - to impact different customer classes (and hence sendout) at different time lags, as well as the ability to

tie the effect of a given variable (e.g., real income) to a particular customer class (e.g., residential). Such a level of detail is difficult to duplicate when forecasting sendout as a single equation; including all such variables simultaneously in a single equation is econometrically impractical due to the presence of correlation among current and past values of these variables.

Q. Please discuss Staff's categorical forecasting equations in comparison to the Company's.

A. Like the Company, Staff's independent variables include combinations of electricity price, heating and cooling degree-days, employment, billing cycle length, and seasonal (quarterly) dummy variables. Staff also relies on real personal income and additional historical price deflators to develop its own independent variables. Not all variables appear in every equation; detailed regression results, including individual coefficient values and model statistics, are shown in Exhibit___(GPS-1). Unlike the Company, Staff's Residential and

Small Commercial regression models estimate billed usage on a per-customer basis. In addition, Staff developed separate regression models for the number of customers in these classes (driven by population and employment projections, respectively). For the Large Primary sales category, Staff makes use of dummy variables to account for a customer switching to self-supply starting in February, 2006. The impact on sales is thus accounted for econometrically within the model, and no out-of-model adjustments are necessary. Furthermore, only for lighting - a pure time series model – does Staff normalize sales to a 1990 billing cycle as part of the estimation process.

Q. How are the projected values of the independent (regressor) variables derived?

A. All climate-related variables are projected at their expected values for each quarter commencing with the forecast period; actual values are used through the second quarter of 2007. Average real electric prices are held

constant. Employment, income and population projections are those purchased for use by Orange and Rockland from the forecasting firm Economy.com.

Q. Besides the macroeconomic numbers, is any other information gathered during the discovery phase of this proceeding used in producing staff's sales and sendout projections?

A. Yes. Staff accepts the Large Primary and Lighting customer projections used by Orange and Rockland; Staff also uses a loss factor and Company own-use projection identical to those used by Orange and Rockland.

Q. What are the electricity sales projections produced by these equations?

A. Aggregate and category-specific results for 2007 Q3 through 2011 Q2 appear in Exhibit___(GPS-2); total billed customer sales for the 12 months ending June, 2009 are projected at 4,161.6 GWH, as shown in Exhibit__(GPS-3).

Q. How do the two sets of sales projections compare for the Rate Year ending June 30, 2009?
A. The projections are extremely close in aggregate, the difference estimated at less than one-tenth of one percent. The largest single category-specific difference is found in residential sales.

Q. What is your recommendation to the Commission with regard to the Rate Year ending June 30, 2009?
A. I recommend that the Commission accept the updated Rate Year sales projection presented by the Company in this proceeding.

Q. Does this conclude your testimony at this time?
A. Yes, it does.