

**DIRECT TESTIMONY
OF
FRANK A. MONFORTE, Ph.D.
ON BEHALF OF
VIRGINIA ELECTRIC AND POWER COMPANY
BEFORE THE
STATE CORPORATION COMMISSION OF VIRGINIA
CASE NO. PUE-2007-_____**

1 **Q. Please state your name, position, place of employment and business address.**

2 A. My name is Frank A. Monforte, Ph.D. I am employed as Director of Forecasting
3 Solutions for Itron, Inc., a meter manufacturing and energy software and consulting
4 firm ("Itron"). My business address is 11236 El Camino Real, San Diego, California
5 92130.

6 **Q. What is your educational and professional background?**

7 A. I received my Ph.D. in Economics with a specialty in Applied Econometrics from the
8 University of California, San Diego in 1985 and my B.A. in Economics from the
9 University of California, Berkeley in 1980. From 1985 through 1990, I worked as an
10 internal business consultant at Southern California Gas Company. Since 1990, I held
11 several positions with Regional Economic Research, Inc. ("RER"), a consulting firm
12 specializing in energy modeling, and Itron, which acquired RER in 2002. While at
13 RER and continuing at Itron, I directed the development and implementation of
14 several energy forecasting tools including MetrixND, a statistical forecasting tool, and
15 MetrixIDR, an automated energy forecasting system. This software allows utilities
16 and others to analyze data and develop statistical models of annual, quarterly, monthly,
17 weekly, daily and hourly data. MetrixND supports a variety of modeling approaches,
18 including time series (ARIMA), exponential smoothing, multivariate regression and
19 neural networks. This product is widely used by independent system operators (each

1 an “ISO”), distribution utilities, energy suppliers and others to forecast energy
2 consumption and hourly loads. At Itron, the forecasting business is organized around
3 this product.

4 **Q. What additional professional experience have you had with load forecasting**
5 **while working for Itron?**

6 A. Over the last ten years, I have developed load forecasting models that are used to
7 support real-time system operations at the New York ISO, ISO New England, the
8 Midwest ISO, the California ISO, Gaz De France, Ontario IMO and the Australian
9 market operators Western Power and NEMMCO. I also have developed short-term
10 forecasting models to support retail operations for energy retailers operating in North
11 America, Europe and Australia. Recently, I developed a long-term peak forecasting
12 model for PJM.

13 Over the last 20 years, I have written numerous papers that have been published in
14 professional journals and by industry research groups. I have made dozens of
15 presentations on forecasting and data analysis topics at industry conferences and
16 seminars. I also have conducted numerous training sessions and workshops related to
17 statistical modeling and econometrics.

18 **Q. What were you asked to do in connection with this case?**

19 A. Virginia Electric and Power Company (“Dominion Virginia Power”) commissioned
20 Itron to describe the PJM forecasting framework and determine whether it is
21 reasonable. In addition, Itron studied alternative methods for allocating the PJM
22 produced peak forecast to the 15 transmission zones spanning Dominion Virginia

1 Power's control area, thereby evaluating the reasonableness of the methodology used
2 by Dominion Virginia Power to allocate forecast loads across its service territory,
3 including the northern Virginia area.

4 **Q. What is the purpose of your testimony?**

5 A. The purpose of my testimony is to introduce and sponsor the *Dominion Transmission*
6 *Zone Peak Forecast Study*, a true and correct copy of which is included as Attachment
7 FAM-1 to my testimony.

8 **Q. Does this complete your prepared direct testimony?**

9 A. Yes, it does.