June 5, 2002

Angel M. Cartagena, Jr. Chairman Public Service Commission of the District of Columbia 1333 H Street, N.W. 2<sup>nd</sup> Floor, West Tower Washington, D.C. 20005

## Dear Chairman Cartagena:

As requested, PJM has performed further analysis of the potential need for the operation of the Potomac River, Benning Road and Buzzard's Point generating stations to control transmission constraints in the Washington, D.C. area. When a unit is needed for this purpose it is referred to as a unit being must run for reliability. The original analysis was provided as a Report to the Washington D.C. Public Service Commission, dated July 1999. It is our conclusion that the results of the 1999 report remain accurate.

The original report and the updated analysis focus on conditions in 2006. In particular, our conclusions based on updating the 1999 study are:

- 1. Benning Road will be likely to be determined to be must run for reliability in 2006 and subsequent years during peak demand periods.
- 2. Potomac River will be likely to be determined to be must run for reliability in 2006 and subsequent years during peak demand periods.
- 3. Buzzards Point will be likely to be determined to be must run for reliability in 2006 and subsequent years during peak demand periods if one or both of the other two plants are out of service.

Since the prior study, PEPCO has requested that PJM assume congestion management control of lower voltage transmission facilities in the vicinity of Benning Road and Buzzards Point. PJM will begin this congestion management control within the next few weeks. As a result, both the Benning Road and Buzzards Point facilities are expected to immediately be must run under certain conditions. The Benning Road and Buzzards Point facilities are expected to be must run for reliability during off peak periods for certain maintenance conditions or as the result of a forced outage. In addition, the Benning facility is expected to be must run for reliability during certain high load conditions. Given that these units will be must run under certain conditions, the length of the notification period for the Benning Road station is of concern. We have contacted the owner of the unit, PEPCO Energy Services, and they have agreed to a somewhat shorter notification period. The notification period is the amount of time between notification by PJM to the owner that the unit is required and the beginning of the start sequence for the unit. The start up time covers the period from the beginning of the start sequence to synchronization of the unit with the grid and the production of power. We will continue to monitor the interaction between

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the need to run these units to control transmission constraints and the length of the combined notification period and start up time for the units.

In response to your request, PJM performed additional reliability analysis related to the Potomac River station. Our conclusions based on this analysis are:

- 1. Potomac River will be likely to be determined to be must run for reliability in 2003 and subsequent years during peak demand periods.
- 2. Potomac River will be likely to be determined to be must run for reliability in 2002 and subsequent years during off-peak demand periods when one of the two transmission lines into the area is out of service for maintenance or as the result of a forced outage.
- 3. Under certain conditions, there is a risk of a loss of load (about 10 MW or about 2% of load in the area) in the Potomac River area. The risk would exist in 2004 and increase in subsequent years during on-peak periods when one of the two transmission lines into the area is out of service as the result of a forced outage, assuming 3% load growth. The risk would first occur in 2005 if load growth is 2%. (To be more precise, the condition is the loss of one of the 230 kV Burches Hill Palmers Corner lines which serve the 230 kV Palmers Corner Blue Plains Potomac River lines directly serving the Potomac River area.) PJM would not permit the line to be out for maintenance under peak load conditions. A loss of load would occur if the second transmission line is lost while the first line is out and load in the area is greater than the generating capability of the Potomac River station.

I would be happy to discuss any of these or related issues with you in more detail. If you would like to discuss further, please contact me at 610-666-4536 or Craig Glazer at 202-393-7756.

Sincerely,

Joseph E. Bowring Manager