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April 13, 2006

The Honorable Samuel W. Bodman Secretary of Energy United States Department of Energy 1000 Independence Avenue, S.W. Washington, D.C. 20585

Re: District of Columbia Public Service Commission, Docket No. EO-05-01 Pepco Response to the City of Alexandria's Supplemental Comments

Dear Secretary Bodman:

In accordance with Order No. 202-06-1, issued by the Department of Energy ("DOE") on February 17, 2006, Potomac Electric Power Company ("Pepco") hereby submits this Response to City of Alexandria Supplemental Comments filed March 23, 2006, in the above captioned proceeding.

BACKGROUND

On December 20, 2006, the DOE issued Order No. 202-05-3 ("December 20 Order"), which directed Mirant Potomac River, LLC ("Mirant") to operate its Potomac River Generating Station ("Potomac River Plant") in certain situations. Subsequently, on January 19, 2006, VDEQ and Alexandria submitted requests for rehearing of the December 20 Order, and the District of Columbia Public Service Commission ("DC PSC") submitted a request for clarification or, in the alternative, rehearing of the December 20 Order. On February 17, 2006, the DOE issued Order No. 202-06-1, inviting parties to submit, by March 23, 2006, any additional comments, information, or analysis on the operation of and/or effects of the December 20 Order as such operation and/or effects may be relevant to a decision on the requests for rehearing. DOE specifically requested comments concerning the operation of the Potomac River Plant during the days in January 2006 when it was required to operate pursuant to Ordering

City of Alexandria's Supplemental Comments Re: Emergency Order (March 23, 2006) ("City of Alexandria's Supplemental Comments").

Paragraph A of Order No. 202-05-3, and also specifically requested comments and information concerning the Potomac River Plant's current operational status.

On or about March 23, 2006, several parties, including the City of Alexandria, filed comments in response to Order No. 202-06-1. The City of Alexandria's Supplemental Comments offer several purported alternatives to maintain electricity reliability in the Washington, D.C. area, to which these supplemental comments respond. For the many reasons detailed below, the purported alternatives proffered by the City of Alexandria are not feasible alternatives.

PEPCO's RESPONSE TO THE CITY OF ALEXANDRIA'S SUPPLEMENTAL COMMENTS

A. The Existing 115kV Transmission Lines on AMTRAK and CSX Rights of Way are Already Used by Pepco to Support Transmission

In its comments the City of Alexandria suggests that certain transmission alternatives including using AMTRAK railroad rights of way and transmission lines could be used as a source of power for the District of Columbia.² According to the City of Alexandria, AMTRAK owns transmission lines between Washington DC and cities to the north and CSX Railroad may own inactive transmission lines that could deliver power to the District of Columbia.³

Response

The City of Alexandria is misinformed. The existing 115kV transmission lines on AMTRAK and CSX rights of way are already used by Pepco to support transmission. Additional transmission capacity, viable to serve Pepco's load, is not readily available on the AMTRAK or CSX rights of way. Obtaining additional rights of way to construct new transmission lines would not be feasible in the timeframe required to solve the immediate reliability problems caused by the shutdown of the Potomac River Plant. Accordingly, the emergency action taken by the DOE was necessary to address the immediate reliability problems caused by the unscheduled and unilateral shutdown of the Potomac River Plant.

² See City of Alexandria's Supplemental Comments at pages 2 and 3.

³ <u>Id</u>.

> B. The Current 69kV Circuit Between Pepco and Virginia Power is Dedicated to Emergency Service and is not Useable for Normal Operations

The City of Alexandria suggests a permanent connection could be made between Pepco and Virginia Power using circuits presently operated open and dedicated to emergency service.⁴

Response

The 69kV circuit most likely referenced by the City of Alexandria has small capacity and cannot be used in normal operation. It can only be energized in limited emergency situations to provide auxiliary power to the Potomac River Plant in the event that of total loss of load supplied from the Potomac River Substation and is isolated (an island) from the rest of Pepco's system should the 230kV transmission fail. An interconnection with Virginia Power at 69kV operating under normal conditions would have to be able to withstand a contingency of any other transmission line per the reliability requirements of PJM Interconnection, L.L.C. ("PJM"). For example, if one or both 230kV transmission lines into the Potomac River Plant were to trip with this 69kV line in service, the 69kV line would immediately overload and also trip. Therefore, it would provide no benefit under normal operations as suggested by Alexandria. As far as upgrading possibilities, the 69kV line is underground in northern Virginia and would require extensive new right of way and duct construction which would not be feasible or realistic in the near term to address the reliability problem caused by the shutdown of the Potomac River Plant.

- Pepco Already Uses The "Other Generating Resources" Cited by the City of Alexandria
 - Planned Government and Commercial Generation Would Not Provide Any Significant Support or Restore Reliability

The City of Alexandria suggests there are other generating resources in the District of Columbia (e.g., Federal Government generators, Buzzard Point and Benning Road) that could enhance reliability in the District of Columbia by switching inactive circuits.⁵

⁴ Id.at 3.

⁵ <u>Id</u>.

Response

In 2004, Pepco refurbished three 69kV circuits between Buzzard Point and Potomac River substations to provide emergency backup service. These circuits cannot be energized under normal operating conditions because they are small capacity and would overload after a single contingency of one of the 230kV transmission circuits into the Potomac River substation. However, they can provide backup emergency service. In the event of a total loss of load served from the Potomac River substation, they could be used to restore partial load until the generators could be started or the 230kV transmission circuits could be restored. Existing available generation in the District of Columbia will be used to the fullest extent possible for reliability, but there are no other immediate opportunities to switch or make "simple interconnections" that would enhance reliability to customers served from the Potomac River substation as suggested by the City of Alexandria.

 Small Generators Cannot Provide Significant System Support for Other Customers in an Emergency

The City of Alexandria in its comments suggest that GSA, Smithsonian, universities and the D.C. Convention Center may have cogeneration systems that may be able to increase capacity in the District of Columbia on a short-term emergency basis.⁶

Response

As the City of Alexandria notes in its comments, these generators, if available, can only supply on the order of a few MW of power. The load served from the Potomac River substation is up to 550 MW at peak periods. While small generators can provide local customer backup protection, they cannot provide any significant system support for other customers in an emergency. Furthermore, they would most likely not be turned on before an emergency were to occur and therefore, could not necessarily prevent loss of system load.

⁶ <u>Id</u>. at 3 − 4.

> The Buzzard Point Generators Cannot be Operated Other Than for Emergency Restoration Purposes

The City of Alexandria suggests the Buzzard Point generators could be connected to the Potomac River substation via two 69kV circuits through Virginia Power's War substation and be made a permanent connection.⁷

Response

As discussed in Response C.1. above, Pepco already refurbished and made ready three 69kV circuits for emergency operations between the Buzzard Point and Potomac River substations in 2004. As noted however, they cannot be operated permanently connected as they are not strong enough to withstand a single contingency of a 230kV circuit into the Potomac River substation. They are only available for emergency restoration purposes after a loss of load has occurred. A portion of the circuits are submarine cables under the Potomac River and cannot be upgraded in any short period of time as suggested by the City of Alexandria.

 There are no Unused 69kV Circuits Between Benning Road and Buzzard Point

The City of Alexandria in its comments suggested that Pepco upgrade and make permanent existing but normally disconnected circuits between Benning Road and Buzzard Point substations to complete a path to the Potomac River substation and supply emergency power.⁸

Response

There are no unused 69kV circuits between Benning Road and Buzzard Point. See Response C.3. above.

 The Existing Feeders Coming out of the Buzzard Point Substation are Already Included in Pepco's Short Term Reliability Plan

The City of Alexandria suggests that District of Columbia load normally served by the Potomac River 69kV bus could be transferred to other generators, and that the 9th Street and "I" Street load could be connected directly to the Buzzard Point generators.

⁷ <u>Id</u>.

^{8 &}lt;u>Id</u>. at 4.

In addition, the City of Alexandria avers that 138kV and 230kV transmission into the Buzzard Point bus could serve the 9th Street and "I" Street loads.

Response

As noted above, the existing three 69kV supply feeders coming out of the Buzzard Point substation are already included in Pepco's short term reliability plan for the loss of Potomac River Plant generation and loss of load served from the Potomac River substation. These supplies could temporarily restore up to 120 MVA of emergency capacity to the Potomac River substation following a total loss of load connected to the Potomac River substation. The City of Alexandria's 138kV and 230kV suggestions are not clear. Without significant new construction (including new transformers), the existing 138kV and 230kV transmission into Buzzard Point substation cannot provide an additional source of power to the 9th Street or I Street substations.

 The City of Alexandria's Suggestion That Forced Load Shedding be Imposed on the Federal and District of Columbia Governments is Irresponsible.

The City of Alexandria suggests that DOE should have imposed emergency load shedding or load cycling for Federal and District of Columbia buildings.⁹

Response

Pepco is astounded by the City of Alexandria's suggestion that forced load shedding (the unannounced and unscheduled emergency disruption of electric service) be imposed on the Federal and District of Columbia governments. The City of Alexandria's suggestion is the height of irresponsibility. Pepco doubts the City of Alexandria would ever suggest the forced shedding of federal and state facilitates in Virginia as a solution to any problem. To recommend such a "solution" in this proceeding is callous and disregards the impact such a short sighted recommendation would have on the workforce and citizens of the entire region – Virginia and the City of Alexandria included. 10

⁹ <u>Id</u>.

Contrary to apparent belief by the City of Alexandria, manual controlled load shedding does not permit Pepco to pick and choose which individual buildings will lose power in an emergency. Rather, manual load shedding by its nature would require that Pepco open distribution feeders that will interrupt load at groups of buildings in selected sectors of the city, including the street lights and communications systems that reside in those sectors.

A more reasoned approach is that recommended by the District of Columbia Public Service Commission as encouraged by the DOE. Specifically, on March 23, 2006, the District of Columbia Public Service Commission issued Order 13907 establishing a Demand Response Working Group to consider the feasibility and reasonableness of instituting demand response programs for load served by the Potomac River substation. The first working group meeting took place on April 12, 2006. The City of Alexandria did not intervene to participate.

CONCLUSION

CC:

The suggestions set forth in City of Alexandria's Supplemental Comments offer hypothetical and unrealistic ideas that provide nothing new for consideration that would relieve the reliability problems caused by the loss of Potomac River Plant generation. Pepco has addressed many of the City's suggestions directly and none of them provide a better or more expedient solution to the problem than the current plan to operate the generators within environmental restrictions and construct new 69kV and 230kV transmission facilities in 2006 and 2007. The City of Alexandria's proposals for new construction ignore the reality of obtaining permits, acquiring rights of way and construction requirements, and, construction timelines. There is nothing in the City of Alexandria's Supplemental Comments that would relieve the need for generation during this interim period before construction of the new 69kV and 230kV transmission lines can be completed.

For the reasons set forth herein, the DOE should reject the City of Alexandria's Supplemental Comments.

Sincerely,

/s/ Kirk J. Emge

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Mr. Lawrence Mansueti, DOE Rm. 8H-033