February 19, 2010

Steven R. Herling
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Dear Mr. Herling:

The presentations made by you and your colleague, Mr. Paul McGlynn, at PJM’s January 13, 2010 and February 10, 2010 Transmission Expansion Advisory Committee meetings, regarding PJM’s seeking input from stakeholders to incorporate into PJM’s 2010 RTEP studies has prompted this letter. The State of Maryland’s Energy Administration, and the other signatory agencies of our 4 December, 2009 letter of recommendation to the MD Public Service Commission for Case 9179 (see attached), as well as the Public Service Commission Engineering staff commends PJM’s solicitation for input to the analyses process. (See http://webapp.psc.state.md.us/Intranet/home.cfm for more information.) With your offer, we are pleased to provide input to the stakeholder process and recommend that PJM consider certain factors, described herein, to ensure that a more robust and, comprehensive RTEP study be performed with results that can be useful in energy planning.

In response to the recent PJM announced delays in two regional backbone transmission projects, the Mid-Atlantic Power Pathway (MAPP) and the Potomac-Appalachian Transmission Highline (PATH), and continued review of the need for these two projects as part of its 2010 regional transmission expansion planning (RTEP) process, we would like to take this opportunity to participate in this critical regional transmission planning effort.

As PJM acknowledged in its response to the Virginia State Corporation Commission’s hearing examiner, the regional transmission expansion update must be comprehensive and should include, among other factors, the following parameters:

- updated load flow analyses,
- inclusion of all existing and new generation,
- inclusion of all demand responses and energy efficiency resources that have cleared the most recent market,
- consideration of all upgrades to the transmission system, and
• acknowledgment of and consideration for various States' goals for demand response and energy efficiency programs.

It is our recommendation that any analyses regarding the need for additional transmission projects should begin with new assumptions and data sets. It is clear from PJM documents that the initial selection of the two backbone projects coming into or crossing through Maryland was based on screening analyses performed in the 2006 timeframe, supplemented by subsequent studies. Much has transpired between 2006 and today, in terms of economic activity, demand-side management, proposed renewable energy facilities, and state-supported energy efficiency programs. Additionally, PJM's own studies have been revised to the point where currently proposed projects are being supported primarily on the basis of voltage studies and not in reaction to thermally overloaded facilities within the region. In light of these changes, Maryland agencies believe it prudent from a planning perspective to examine alternatives to all proposed projects during the 2010 RTEP process. This would ensure that the justification for any backbone transmission projects that may be recommended later this year rests upon a well-developed analysis of alternatives.

We request that during the 2010 RTEP process PJM develop a base case that excludes the MAPP and PATH projects and use this base case to identify reliability issues within the PJM region. PJM would then study alternative solutions to address these reliability issues. Such solutions could include transmission lines, combinations of lines and the expanded utilization of new and known technology, including static var compensation technology in those regions of the transmission system where voltage drop and voltage collapse reliability issues are identified.

We expect that any recommended transmission solution resulting from this process will include documentation justifying the need for each individual line segment being proposed, and an explanation of how each line segment or equipment mitigates or resolves reliability violations or otherwise provides regional and local reliability benefits. These solutions should also address protocols for operating any direct current lines that may be studied during the 2010 RTEP process. Ultimately, this alternatives analysis may again lead PJM to recommend some portion or all of the proposed MAPP and PATH projects.

When PJM develops the models for performing load deliverability and generation deliverability studies for determining the reliability of the PJM transmission system, we would suggest as a minimum that PJM include the following scenarios in the study of new backbone alternatives:

• without MAPP and PATH,
• with MAPP and PATH,
• with MAPP but without PATH,
• without MAPP but with PATH, and
• with MAPP and PATH but without the western shore segments of MAPP.

In previous PJM studies, reliability benefits of a Conestone to Peach Bottom to Keeney 500 kV line were identified. This reliability solution should again be evaluated as a possible alternative to the MAPP project including alternatives that reinforce the Delmarva grid from the north.
Finally, in a November 24, 2009, letter, the applicants for MAPP provided several alternatives described as “apples to apples” comparisons to MAPP that cross the eastern interface and provide transmission service to central Delmarva to meet local needs including:

- **Alternative 1:** Establish a 138-mile long 500kV AC line from Kemptown substation to Salem Substation, interconnecting with a newly constructed 500kV substation near Middletown, Delaware. This substation would be located adjacent to two existing 230kV lines which would be cut into and out of the new 500/230kV substation. These 230kV lines would establish a connection to Keeney substation and the existing transmission facilities supplying the peninsula. To provide an alternative energy supply into central Delmarva Peninsula, construct 108 miles of two DC transmission circuits from the new 500 kV substation located at Middletown, down the Delmarva Peninsula to terminate one circuit near Vienna, Maryland and continue the second DC circuit to Indian River Substation in Sussex County, Delaware. Two individual AC/DC converter stations would be located at the new substation near Middletown and one DC converter unit would be located at Vienna, Maryland and one DC converter unit would be located at Indian River, Delaware.

- **Alternative 2:** Establish a 138-mile 500 kV line from Kemptown substation to Salem substation, including a new 500 /230 kV substation near Middletown, Delaware. From the new substation, construct a 68-mile 500 kV AC line to the Vienna substation with a new 500/230 kV substation at Vienna and a 35 mile 500 kV AC line from Vienna to a new Indian River 500/230 kV substation.

- **Alternative 3:** Establish a 138-mile 500 kV AC line from Kemptown substation to Salem substation, including a new 500/230 kV substation near Middletown, Delaware. From the new substation, construct a 68-mile 500 kV AC line to the Vienna substation with a new 500/230 kV substation at Vienna and a 35 mile 500 kV AC line from Vienna to a new Indian River 500/230 kV substation. In addition there would be a new 86-mile 500 kV AC line from Indian River to Salem.

We would request that these alternatives, if still appropriate, also be included in the RTEP analyses.

An additional area for further study would be the relationship between backbone transmission lines and integration of renewable or conventional energy generation into the region. We recommend that PJM work with stakeholder’s to develop sensitivity studies associated with state-mandated energy efficiency programs, including studies based on

- all demand responses and energy efficiency resources that have cleared the most recent market;
- future anticipated demand response and energy efficiency resources based on orders of the Maryland Public Service Commissions and other state commissions; and
- future anticipated demand response and energy efficiency resources based on orders of Maryland’s and other states’ statutory goals.
The Maryland PSC continues to examine various supply options and this important area of study could possibly be used to differentiate between alternative transmission solutions or generation options and better demonstrate transmission need.

We appreciate the opportunity to offer this input into the 2010 RTEP process and look forward to an open and transparent planning effort throughout 2010 and beyond.

Sincerely,

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