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August 7, 2006

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Re: Request for Early Designation of a National Interest Electric Transmission Corridor Consistent With the Mid-Atlantic Power Pathway Project in PJM

Gentlemen and Ladies:

In response to the Department of Energy's February 2, 2006 Notice of Inquiry ("NOI") concerning the criteria for designation of National Interest Electric Transmission Corridors, Pepco Holdings, Inc. filed timely comments on behalf of itself and its transmission-owning affiliates, Atlantic City Electric Company, Delmarva Power & Light Company and Potomac Electric Power Company (collectively, the "PHI Companies"). Since that time, the PHI Companies have submitted a proposal to PJM Interconnection, L.L.C. ("PJM") for the development of a major new transmission infrastructure project that would add roughly 230 miles of 500 kV and 80 miles of 230 kV transmission capacity within the PJM footprint at an estimated cost of $1.2 billion. This PHI-sponsored project, which has been coined the "Mid-Atlantic Power Pathway" or "MAPP" Project, would complement other large-scale transmission projects that PJM plans to study contemporaneously under its regional transmission expansion planning ("RTEP") process. In order that these complementary proposals may be evaluated and pursued on a consistent and rational basis, the PHI Companies request that the Department ensure that its early designation of transmission corridors within PJM be defined broadly enough to include the general path of the MAPP Project.

The NOI offered interested parties an opportunity to identify any area "that they believe merits designation as an NIETC, and explain why early designation is necessary and appropriate." In response, the Department received at least three requests for early NIETC designation relating to transmission infrastructure development in PJM. The American Electric Power System ("AEP") asked for early designation in connection with its proposed "AEP I-765 Corridor," the Allegheny Power System ("Allegheny") requested early designation for its "Trans-Allegheny Interstate Line (TrAIL) Project," and PJM requested designation of two broad corridors described as the "Allegheny Mountain Path" and the "Delaware River Path." Now that the PHI Companies have suggested the MAPP Project as an important and viable adjunct to the proposals under consideration by PJM, PJM has made clear that it plans to evaluate these projects together under its 15-year forward-looking RTEP process. In a June 30 letter to the Federal Energy Regulatory Commission ("FERC") (Appendix 1 hereto), PJM stated as follows:

> The June 22 RTEP authorizes and directs the construction of $1.3 billion in transmission-system baseline reliability upgrades and direct [sic] further study and evaluation of approximately $10 billion in proposed transmission projects, including consideration of the high-voltage transmission line projects proposed recently by American Electric Power, Pepco Holdings Inc., and Allegheny Power. ... On June 22, the [PJM] Board formally endorsed further study and evaluation of the 10 backbone transmission projects. That study is already underway. PJM will analyze these projects including major transmission projects recently proposed by American Electric Power, Allegheny Power and Pepco Holdings Inc., to identify the most effective combination of component segments of all proposed backbone proposals that, collectively, will meet the long-term reliability and economic needs of the PJM region. ... *PJM hopes to complete this review by late 2006 or early 2007, at which time the approved projects will be incorporated into the RTEP.* (Emphasis added).

Thus, PJM's comprehensive study of these projects will consider not only whether each of these large infrastructure options is appropriate in and of itself, but also whether some combination of multiple project components will best meet PJM's growing needs for transmission facilities in a reliable and cost-effective manner. PJM's long-term system analysis presented at the July 11, 2006 Transmission Expansion Advisory Committee meeting shows the need for additional transmission facilities to address reliability concerns in eastern PJM. It is therefore imperative that the Department's NIETC designations within PJM be broad enough to include all component parts of the AEP I-765 Corridor, the TrAIL Project *and the MAPP Project,* including the geographic areas in which they resolve significant reliability, security and economic congestion issues. Furthermore, given PJM's announced intention to include the selected project components in the RTEP as soon as the end of this year or the beginning of next year, it is crucial for the Department to consider the NIETC designations in the PJM region on an expedited basis.

Under the operative PJM documents, once the Board-approved RTEP directs transmission owners to construct, own and/or finance new transmission investments, the designated owners are obligated to take the steps necessary to initiate those activities in a timely manner. The PHI Companies' analyses show that the MAPP Project is necessary for the long-term reliability, security and economic operation of PJM. If PJM's studies confirm that the MAPP Project should be built, the PHI Companies will pursue the project in an expeditious manner so that the first phases can be in-service as soon as 2010. In these circumstances, early NIETC designation is clearly warranted.

I. General Description of the PHI Companies

Pepco Holdings, Inc. is the parent (either directly or indirectly through another subsidiary) of Atlantic City Electric Company ("Atlantic City"), Delmarva Power & Light Company ("Delmarva") and Potomac Electric Power Company ("Pepco"). Atlantic City is a regulated transmission and distribution company organized under the laws of the State of New Jersey. It provides retail electric services to customers in southern New Jersey. Delmarva is a regulated transmission and distribution company organized under the laws of the State of Delaware and the Commonwealth of Virginia. Delmarva serves customers in Delaware and the eastern shore of Maryland and Virginia. Pepco is a regulated transmission and distribution company organized under the laws of the District of Columbia. It provides retail electric services in the District of Columbia and Maryland.

Atlantic City, Pepco and Delmarva have been participants in PJM since its inception as a regional power pool. When PJM was converted to a FERC-sanctioned Independent Transmission System Operator ("ISO"), these PHI Companies turned over operational control of their transmission facilities to PJM. As an ISO, and later as a FERC-authorized Regional Transmission Organization ("RTO"), PJM also has taken over the ultimate responsibility for regional transmission system planning across its entire footprint. Transmission owners, including the PHI Companies, participate regularly and actively in planning activities, but PJM has final planning authority under the RTEP process.

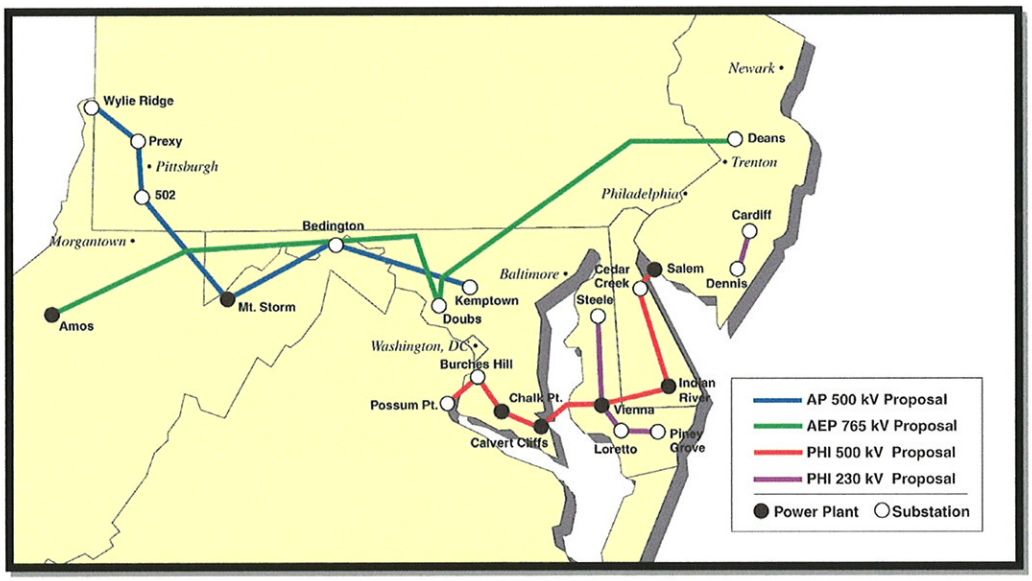
Together, the PHI Companies have invested more than $1 billion in transmission facilities in the mid-Atlantic region. While this is a very significant amount, the $1.2 billion MAPP Project will more than double the collective transmission investments of Pepco, Delmarva and Atlantic City . The PHI Companies welcome the opportunity to continue contributing their expertise and capital to a robust transmission grid and firmly believe that expeditious inclusion of the MAPP Project within a designated NIETC will facilitate this much needed infrastructure development.

II. Why the MAPP Project is Needed

No major new interstate transmission lines capable of importing low cost energy into the mid-Atlantic region have been constructed in more than 25 years. FERC has warned of "imminent serious reliability violations" (*see* April 20, 2006 Press Release, FERC Docket Nos. EL05-148, ER03-1410) and PJM has told this Department about "costly congestion on the existing 500 kV facilities" (*e.g.,* Attachment A at p. 10). Although PJM and its transmission owner members have diligently addressed these issues under the RTEP process, there is no question that more can and should be done. For example, transmission congestion continues to drive up costs in areas like the Baltimore-Washington metropolitan area, the Delmarva Peninsula and New Jersey. PJM data indicate that, in the area east of the Allegheny Mountains (which includes Washington, D.C. and Baltimore), congestion costs rose from $124 million in 2003 to $862 million in 2005 (*see* PJM's March 6, 2006 Request for Early Designation of NIETCs, at p. 15). In eastern PJM (which includes the Delmarva Peninsula and New Jersey), congestion increased from $144 million in 2003 to $459 million in 2005 (*see id.* at p. 20).

As noted above, several interstate projects of unprecedented proportion have been proposed to PJM to address the known and anticipated reliability and congestion needs of the PJM-controlled grid. The proposed AEP I-765 Corridor Project would consist of about 550 miles of 765 kV transmission lines extending from the Amos substation in West Virginia, through the Doubs substation in Maryland, and on to the Deans substation in New Jersey. The proposed TrAIL Project would span 330 miles at 500 kV, from the Wylie Ridge substation in West Virginia to a new substation near Kemptown, Maryland; the TrAIL Project would be constructed solely within Allegheny's current service area. These projects have expected completion dates in the 2014 timeframe.

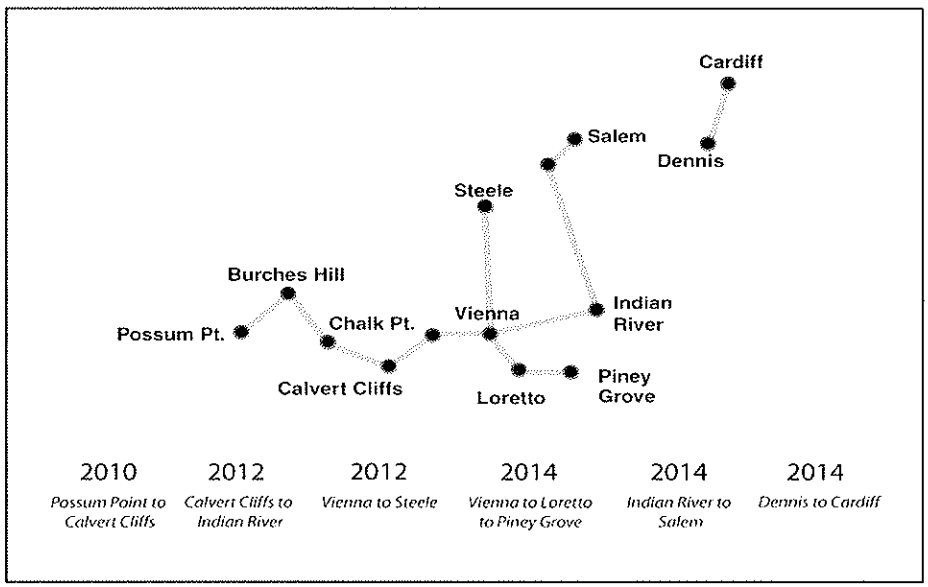
The MAPP Project proposed by the PHI Companies is a separate, but complementary, power pathway. It will consist of both 230 kV and 500 kV line segments originating in Northern Virginia, crossing Maryland, traveling up the Delmarva Peninsula and extending into southern New Jersey. The following diagram shows the general route of the MAPP Project in relation to the AEP and Allegheny projects.



As this diagram illustrates, the MAPP Project is the only major south-to-north proposal that is currently being considered by PJM to address identified reliability and congestion issues in eastern PJM. PJM is also considering major transmission lines in Virginia that would complement the MAPP Project. In light of the intended project routing, and the particular reliability, security and economic issues it is designed to address, the MAPP Project could be construed as falling within a broader or different transmission corridor than the AEP and Allegheny proposals. That is the primary reason why the PHI Companies are asking at this time for expedited NIETC designation, contemporaneous with the Department's designation of one or more corridors encompassing the AEP and Allegheny projects.

III. General Description of the MAPP Project

The MAPP Project is best understood as comprising nine component parts with planned in-service dates spanning from 2010 through 2014. These components are described below as "Projects A through I" and are summarized on the following chart. It is anticipated that most of the new transmission line segments will be built either on, or parallel to, existing rights of way, and about 52 miles will make use of existing transmission towers.



Project "A" – Possum Point to Burches Hill: This portion consists of a 33-mile 500 kV line starting at the Possum Point substation in Northern Virginia and crossing the Potomac River into Maryland at the Burches Hill substation. It will parallel an existing 500 kV line and will require additional 500 kV terminals at each end. Although most of the existing towers were built to accommodate a future second circuit, the Potomac River crossing has only single circuit capability. Various options are under consideration for crossing the Potomac River and for using existing rights of way to the maximum extent feasible. This portion of the MAPP Project has a projected in-service date of December 31, 2010, with expenditures starting as early as 2007.

Project "B" – Burches Hill to Chalk Point: This 19-mile 500 kV line segment also will parallel an existing 500 kV line and require new terminals at each end. The entire length of this line segment will make use of existing towers that have currently-unused double circuit capability. This portion also has a projected in-service date of December 31, 2010, with expenditures beginning in 2007.

Project "C" – Chalk Point to Calvert Cliffs: This portion consists of 20 miles of 500 kV line that will parallel an existing 500 kV line between the Chalk Point and Calvert Cliffs substations, with new terminals at both ends. The existing towers were installed using single circuit construction, so either a new line or a double circuit line will be needed. The projected in-service date is December 31, 2010.

Project "D" – Calvert Cliffs to Vienna: A new 43-mile 500 kV circuit will be built from Calvert Cliffs to Vienna. A new terminal will be required at Calvert Cliffs and a new 500-230 kV substation will be required at Vienna. This line segment also will require about an 8-mile underground crossing of the Chesapeake Bay. Project D has a projected in-service date of December 31, 2012.

Project "E" – Vienna Substation and Associated Upgrades: The new segment from Vienna to Steele requires a new 230 kV line, upgrading to 230 kV of the existing 138 kV lines from Vienna to Loretto and from Loretto to Piney Grove, a new 230-138 kV transformer at the Loretto substation, and various terminal upgrades. The projected in-service dates range from December 31, 2012 to December 31, 2014.

Project "F" – Vienna to Indian River: This new 500 kV line will follow existing 138 kV lines from Vienna to Nelson and from Nelson to Indian River for a total of 35 miles. This portion of the MAPP Project has a scheduled in-service date of December 31, 2012.

Project "G" – Indian River to Salem: This new 80-mile 500 kV line will follow the route of two existing 230 kV lines. A new terminal will be required at Salem. This segment will cross the Delaware River and pass in the vicinity of an Air Force base. This part of the MAPP Project is slated for completion on December 31, 2014.

Project "H" – Transformer Bank at Alloway: A second 500-230 kV transformer bank will be added at the Alloway substation. That substation is expected to be in-service in 2008 with space provided for the second transformer. The second transformer is expected to be in-service on December 31, 2014.

Project "I" – Dennis to Cardiff: A new 30-mile 230 kV line will be constructed from the Dennis substation to the Cardiff substation, with new terminals at each end. The line is expected to follow the existing path of a 69 kV line to the extent feasible. A portion of the line crosses the New Jersey Pinelands, which may impact the permitting process. This segment has an expected December 31, 2014 in-service date.

IV. Brief Summary of MAPP Project Benefits

United States Census Bureau data show the following expected growth for States located in southeastern PJM from 2000 to 2030: Maryland – 32.6%; Delaware – 29.2%; Virginia – 38.8%; New Jersey – 16.5%. PJM has projected annual growth for the region at between 1.1% and 2.5% (*see* PJM's March 6, 2006 Request for Early Designation of NIETCs, at p. 12). Some of the highest expected growth rates are in eastern PJM, which includes the service areas of Atlantic City (2.1% expected annual growth), Delmarva (2.5% expected annual growth) and Pepco (2% expected annual growth) (*see id.)* These data suggest the need for approximately 3,000 megawatts of new power supply for the region over the next decade. According to PJM, its "RTEP studies show that in order to meet this load growth during the most recent planning horizon (through 2010), Baltimore-Washington and eastern PJM both must rely on the interstate, high voltage transmission network to obtain needed energy from western sources." (*Id.*) The rapid growth expected in the service areas of the PHI Companies and other parts of eastern PJM requires aggressive infrastructure development *now*, particularly given the long lead-times associated with large-scale transmission enhancements.

As the only major south-to-north transmission project in the PJM study process, the MAPP Project establishes a natural tie between Dominion Virginia Power, one of the newest PJM member utilities, and the so-called "classic" PJM region. Expanding this interface capability and internal PJM network can help to facilitate imports of affordable electricity generation from the south and west to serve the more constrained areas in Maryland, the District of Columbia, the Delmarva Peninsula and New Jersey. The MAPP Project will create a new path to regions with existing fossil fuel plants and to nuclear assets such as Calvert Cliffs, North Anna and Salem/Hope Creek. It also should encourage development of new generation and enhanced competition.

The PHI Companies estimate that the MAPP Project can eliminate billions of dollars in congestion costs, justifying the initial investment over a relatively short timeframe. Reduced congestion costs, in turn, are an important contributor to customer rate stability. Moreover, significant congestion cost savings are expected as each segment of the MAPP Project is completed.

Additional important reliability and security benefits are derived by creating multiple paths, in conjunction with other transmission projects, for importing power into the rapidly growing PJM region. Together with other needed infrastructure development, the MAPP Project will create appropriate levels of redundancy. In this way, the project will bolster the robustness of the Pepco, Delmarva and Atlantic City service territories – among others – by establishing an electricity corridor that can contribute to improved restoration during transmission outage events.

V. NIETC Designation is Warranted and Time is of the Essence

As the foregoing discussion should suggest, the MAPP Project is a very major undertaking that will contribute materially to the PJM transmission grid and the customers served by that grid. This project will require a huge and ongoing expenditure of capital and other resources of the PHI Companies as well as a long-term commitment from PJM and a host of Federal, State and local authorities having jurisdiction over various aspects of the project. Among other considerations, the MAPP Project will involve two significant river crossings (Potomac and Delaware), a crossing of the Chesapeake Bay, various wetlands and other environmental issues, right of way and land acquisitions, and siting/permitting requirements in four States and numerous localities. Three of the four States involved have statutory eminent domain provisions, but Delaware does not.

As the preceding discussion also should illustrate, time is of the essence. Under the most optimistic assumptions, substantial new transmission construction takes a long time to complete. AEP's Wyoming-to-Jackson Ferry line, which took some 16 years from start to finish, is often cited as an example of the difficult realities of infrastructure development. But nearly every transmission-owning utility, including the PHI Companies, undoubtedly could point to examples of very long transmission lead-times in their own jurisdictions. Although these contingencies can never be predicted with certainty, the PHI Companies are proposing to complete the MAPP Project in

approximately eight years, with significant portions in-service as quickly as four years. Also, assuming favorable PJM action in the RTEP process, the PHI Companies expect to begin making considerable capital and resource expenditures as early as next year.

These factors argue strongly for early designation of one or more NIETCs within PJM that encompass the entirety of the MAPP Project. This will allow PJM to study all of the pending proposals for infrastructure development within its footprint on a level playing field. Assuming that all or significant portions of the MAPP Project receive a green light under PJM's RTEP process, early NIETC designation should help to facilitate project development, especially in jurisdictions or areas where FERC backstop authority could assist in keeping the work on schedule.

The PHI Companies have stated publicly in a variety of contexts that they stand ready and willing to construct all transmission facilities that PJM finds necessary and appropriate in the PHI rate zones. By advancing the MAPP Project as a viable solution to both reliability and economic concerns identified within PJM, the PHI Companies are proactively following through on these public commitments.

VI. The MAPP Project Satisfies the Department's Proposed Criteria for NIETC Designation as Set Forth in the NOI

PJM's March 6, 2006 Request for Early Designation of NIETCs makes a compelling case for early NIETC designations that will facilitate transfers of power into PJM and into the eastern portions of PJM. Indeed, at p. 8 of that submittal, PJM characterizes the need for such new transmission investment as "acute" –

> PJM's regional transmission planning program indicates an acute need for additional transmission investment to facilitate west-to-east wholesale power transfers within the PJM region to ensure reliable service and to provide lower-cost power to eastern markets.

PJM repeatedly highlights the need for improved transmission capability to serve the Baltimore-Washington metropolitan areas, the Delmarva Peninsula and parts of New Jersey. The extremely high loads experienced during the early part of August 2006 and the associated high prices in PJM further demonstrate the need for additional transmission infrastructure to serve these parts of PJM. The areas highlighted by PJM are precisely the areas that the MAPP Project is designed to benefit. Thus, PJM's rationale for expedited designation of NIETCs into and across eastern PJM applies with equal force to the corridor that will comprise the MAPP Project.

PJM also makes a compelling case that its independent RTEP process provides a solid foundation for the Department's designation of NIETCs to address the identified needs of the Baltimore-Washington area and eastern PJM *(see, e.g.,* PJM's March 6, 2006 Request for Early Designation of NIETCs at pp. 25-27). As noted above, the MAPP Project is now being evaluated in the RTEP process on an equal footing with the proposed AEP and Allegheny projects and any designation of NIETCs should be broad

enough in scope to allow any of these projects (or their component parts) to move forward expeditiously if the PJM Board determines that they are the best available options to maintain the reliability and economic vitality of the PJM system.

The PJM RTEP process, with its recent enhancements, is the best developed and most comprehensive regional planning process in the nation. The PHI Companies are confident – and believe the Department can be confident – that PJM will conduct a fair and unbiased analysis of all transmission owner sponsored projects, as well as any alternatives and additional projects that PJM's planning staff may identify to meet the region's reliability and economic needs. PJM's choices would be limited, however, and its analysis potentially skewed, if certain of the major expansion options fell within a designated NIETC while others did not. Thus, at the end of the day, the Department can be most helpful in promoting transmission development in the PJM region by designating NIETCs that provide PJM sufficient latitude to consider *all* of the major projects before it.

Given PJM's thorough discussion of reasons why transmission corridors into the Baltimore-Washington area, the Delmarva Peninsula and eastern PJM satisfy the Department's draft NIETC criteria, the PHI Companies will not retrace that ground here. Suffice it to say that, for each of the reasons articulated in this letter and in PJM's request for complementary corridor designations into and across PJM, the Department's designation of a corridor broad enough to encompass the MAPP Project is necessary and appropriate (1) to maintain high reliability in the region; (2) to achieve economic benefits for consumers; (3) to ease electricity supply limitations in end-use markets in the important problem areas addressed in PJM's studies; (4) to enhance energy independence by decreasing dependence on gas and oil fueled resources; (5) to further national energy policy including facilitation of major new infrastructure development; (6) to enhance supply reliability to critical loads, including those in the Nation's capital, and reduce vulnerability to natural disasters or malicious acts; (7) to effectuate an independent regional planning process that fully vets analytic assumptions and conclusions; and (8) to enable alternative solutions to be considered either through the regional planning process or through the "market window" that accompanies that process and enables sponsors of generation and demand-side projects to come forward.

VII. Conclusion

We do not yet know for certain how the Department will decide to define individual NIETCs. As numerous commenters have suggested and as the NOI appears to contemplate, it seems appropriate to identify NIETCs rather broadly – and certainly more broadly than by reference to specific routes or rights of way. Based on the foregoing discussion as well as the support for early NIETC designations submitted to the Department by PJM, AEP and Allegheny, the PHI Companies respectfully urge the Department to expeditiously designate one or more NIETCs within PJM that are broad enough in scope to encompass all segments of the MAPP Project (from the Possum Point area in northern Virginia through the Delmarva Peninsula and into New Jersey in

the vicinity of Cardiff) including the geographic areas where this important infrastructure project will resolve reliability, security and economic issues vetted through the PJM RTEP process.

The PHI Companies appreciate the Department's attention to this request and would be pleased to answer any questions or furnish additional information about the MAPP Project upon request. Please direct any questions or correspondence to the following representatives of the PHI Companies.

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Very truly yours,

David E. Goroff
Counsel for the PHI Companies

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APPENDIX 1

June 30, 2006 Letter
From PJM Interconnection, L.L.C.
To The Federal Energy Regulatory Commission

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June 30, 2006

Chairman Joseph T. Kelliher
Commissioner Nora Mead Brownell
Commissioner Suedeen G. Kelly
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: Update on PJM Planning Initiatives

Dear Chairman Kelliher and Commissioners:

PJM Interconnection, L.L.C. ("PJM") is providing this progress report in order to keep the Federal Energy Regulatory Commission ("FERC" or "Commission") apprised of general developments related to PJM's planning process as well as recent action by the PJM Board of Managers ("Board") directing additional transmission infrastructure to be constructed within the PJM footprint. PJM will be making future filings on these matters but wishes to provide the Commission with this overall outline of our various planning initiatives and how they fit together.

This letter and the accompanying attachments will detail PJM's progress on three distinct activities and address their interrelationship:

- The Board's recent approval of the first Regional Transmission Expansion Plan ("RTEP") that utilizes a fifteen year planning horizon;
- PJM's consideration of various transmission line proposals including those submitted by American Electric Power, Allegheny Power, Pepco Holdings Inc., and others; and
- PJM's actions to enhance the economic planning process to include market efficiency considerations.

This letter serves to update the Commission as to the status of these initiatives and provide an outline of pending and future activity. A copy of this letter will be

provided to all of PJM's members as well as state commissions within its footprint.

PJM Extends its Planning Horizon to 15 Years

In 2005, PJM expanded its planning horizon for purposes of developing its RTEP from five to fifteen years. The first set of plans which were the result of PJM's fifteen year RTEP process were reviewed and approved by the PJM Board on June 22 ("June 22 RTEP").[1] The June 22 RTEP authorizes and directs the construction of $1.3 billion in transmission-system baseline reliability upgrades and direct further study and evaluation of approximately $10 billion in proposed transmission projects, including consideration of the high-voltage transmission line projects proposed recently by American Electric Power, Pepco Holdings Inc., and Allegheny Power. With this latest approval, the PJM Board has ordered over $4 billion in transmission investment since 2000. Approximately $547 million of the ordered upgrades have already been completed and the rest are in various stages of construction.

As the Board addressed both base line reliability upgrades needed over the next five years as well as projects expected to be needed over the next six to fifteen years, the Board's actions will be addressed separately below.

1. Baseline Reliability Proposals Move Forward

   a. *Five year Reliability Upgrades*

The June 22 Board-approved system upgrades resolve 5-year reliability concerns through 2011. Due to the longer planning horizon, these projects also address reliability issues observed through 2014. These baseline upgrades are described in more detail in **Attachment A** and include two new 500 kV transmission lines; the Carson – Suffolk 500 kV line (the "Carson-Suffolk line") and associated system upgrades in southeastern Virginia and the 502 Junction – Mt. Storm – Meadowbrook – Loudoun 500 kV line (the "Loudon line"), running from southwestern Pennsylvania to northern Virginia. The Carson – Suffolk 500 line and associated system upgrades in southeastern Virginia are required to mitigate the potential for loss of customer load in the Norfolk/Virginia Beach area for certain second contingency events. The Loudon line will mitigate two 500 kV overloads related to eastern PJM load deliverability and provide transmission congestion relief across the Allegheny Mountain corridor, including the Baltimore and Washington D.C. area. The Loudon line is an element of addressing congestion across the "Allegheny Mountain corridor" for which PJM sought corridor designation from the U.S. Department of Energy. The baseline RTEP upgrades ordered in the June, 22 RTEP, as well as, generation and merchant

[1] PJM had implemented its new 15-year planning horizon, after having achieved approval of the PJM Reliability Committee on October 26, 2005 for incorporation into the RTEP process as of January 1, 2006.

transmission interconnection upgrades included in the June 22 RTEP total $1.3 Billion. The Board has approved recommended cost allocations for these projects, which PJM will file with the Commission in July, 2006 in accordance with Schedule 12 of the PJM Tariff and Schedule 6 of the PJM Operating Agreement.

b. Planning in years 6 to 15

The Board on June 22 also directed the continued evaluation of 10 potential new transmission facilities to resolve reliability problems in the 6 to 15 year horizon, as discussed in detail in **Attachment B**, hereto.

Specifically, in response to the Department of Energy's Notice of Inquiry ("NOI") regarding National Interest Electric Transmission Corridors, PJM identified the Allegheny Mountain Corridor and the Delaware River Corridor as being critical to the long-term reliability and market efficiency of the PJM grid. The designation of these corridors was based on a wide range of criteria, proposed in the NOI, including reliability criteria violations and transmission congestion. As part of its 6 to 15 year RTEP evaluation, PJM identified reliability criteria violations along both proposed corridors through 2021.

On June 22, the Board formally endorsed further study and evaluation of the 10 backbone transmission proposals. That study is already underway. PJM will analyze these projects including major transmission projects recently proposed by American Electric Power, Allegheny Power and Pepco Holdings Inc., to identify the most effective combination of component segments of all proposed backbone proposals that, collectively, will meet the long-term reliability and economic needs of the PJM region. The approval process necessarily includes a number of key considerations, including the viability of siting, the likely environmental issues, and the most effective combinations of transmission segments. PJM hopes to complete this review by late 2006 or early 2007, at which time the approved projects will be incorporated into the RTEP.

2. Market Efficiency Planning Process Nears Completion

PJM has completed working group discussions to refine the 15-year RTEP process to address long-term market efficiency considerations and how such processes integrate with existing long-term considerations of reliability criteria violations. Market Efficiency analysis will be performed within the larger context of the 15-year RTEP Process cycle. This 15-year process integrates reliability, market efficiency and sensitivity analysis with information transparency, stakeholder input and review (via the PJM Transmission Expansion Advisory Committee under an expanded charter) and PJM Board of Manager approvals. Facilities developed for market efficiency will be incorporated into the RTEP in addition to transmission facilities that resolve reliability criteria violations. The market efficiency aspect of the PJM RTEP process is presently undergoing

review and approval with all appropriate PJM stakeholder committees, and PJM anticipates Board review and approval during August 2006, after which PJM will file amended Operating Agreement and OATT provisions with the FERC. Prior to the review and approval of the Board, a vote is scheduled before the Markets and Reliability Committee on June 30, 2006. PJM will also be seeking endorsement of its Members Committee on August 3, 2006. Assuming endorsement by the Members Committee, PJM will file the appropriate tariff changes with FERC for review and approval.

The details of the economic efficiency process will be outlined in Schedule 6 of the PJM Operating Agreement. Broadly speaking, the Market Efficiency analysis will: 1) determine which reliability upgrades have an economic benefit if they are accelerated; and 2) identify new transmission upgrades that may result in economic benefit, using the proposed methodology. Details concerning these proposals can be found at: http://www.pjm.com/committees/working-groups/rppwg/rppwg.html

Conclusion

PJM looks forward to continuing to work with the Commission, state commissions and stakeholders to improve the RTEP process. Many hours have been focused on this effort, and although complex, PJM remains committed to refining the RTEP process as well as moving forward concurrently with ordering new transmission infrastructure to meet the needs of the PJM region. Please contact Craig Glazer at 202-423-4743 or Janine Durand at 610-666-4485 if you have any additional questions at this time.

Very truly yours,

Janine Durand

Janine Durand, Senior Counsel
PJM Interconnection, LLC

Encs. Attachment A
Attachment B

cc. Daniel Larcamp, Chief of Staff
Anna Cochrane, Director
Shelton Cannon, Director
John Moot, General Counsel
Craig Glazer, PJM Interconnection, L.L.C.

ATTACHMENT A

ATTACHMENT A

PJM's 2006 Regional Transmission Expansion Plan

Transmission Plans Proposed for Approval to Proceed with Construction Related to 15 Interconnection Projects and the 2006 Baseline Regional Transmission Expansion Plan

EXECUTIVE SUMMARY

On April 4, 2006 the PJM Board approved elements of the Regional Transmission Expansion Plan primarily to resolve criteria violations through 2010. Since the Board's approval in April, PJM has completed 15 System Impact Studies, 9 interconnection projects have withdrawn and the baseline system upgrades have been updated to resolve reliability problems through 2011.

Among these baseline upgrades are included two new 500 kV transmission lines. The Carson – Suffolk 500 kV circuit and associated system upgrades in southeastern Virginia are required to mitigate the potential for loss of customer load in the Norfolk/Virginia Beach area for certain second contingency events. The 502 Junction – Mt. Storm – Meadowbrook – Loudoun 500 kV circuit, running from southwestern Pennsylvania to northern Virginia, is required to mitigate two 500 kV overloads related to load deliverability to eastern PJM and is expected to resolve a significant portion of the transmission congestion across the Allegheny Mountain corridor which totaled over $1.2 Billion in 2005. Additionally, one new 345 kV circuit is being recommended to resolve an overload identified in northern Illinois in 2014.

The total increase to the RTEP to include these baseline and interconnection project changes is $1.3 Billion. With these additions, the RTEP will include over $4.0 Billion of transmission additions and upgrades since the first plan approved by the Board in 2000.

PJM has also directed the continued evaluation of right-of-way for more than 10 potential new transmission facilities to resolve reliability problems in the 6 to 15 year horizon. These projects are discussed in a separate document detailing transmission plans proposed for further development.

The elements of the 2006 Regional Transmission Expansion Plan for the 15 System Impact Studies and additional baseline upgrades and were presented for the Board Reliability Committee's consideration and for recommendation to the Board for approval, and were approved on June 22, 2006.

SUMMARY OF RESULTS

2006 Baseline Transmission Upgrades

The first step in each cycle of the Regional Transmission Expansion Planning Process is an evaluation of the "baseline" system, i.e. the transmission system without any of the generation interconnection requests included in the current planning cycle. This baseline analysis determines the compliance of the existing system with reliability criteria and standards. The cost of transmission upgrades to mitigate such criteria violations are the responsibility of the PJM transmission owners.

For the 2006 Plan, the baseline assessment resulted in the need for transmission upgrades in several transmission zones. Major projects in the 2006 Plan include:

Mid-Atlantic Region System Upgrades

- Southwestern Mid-Atlantic Region
  - Install 200 MVAR of 230 kV capacitors at Bells Mill - $7 M
  - Add a second Burches Hill 500/230kV transformer - $32 M
  - Install fourth Ritchie 230/69 kV transformer - $12 M
  - Reconductor two Dickerson - Quince Orchard 230 kV - $8 M
  - Install 0.5% reactor at Dickerson on the Pleasant View - Dickerson 230 kV - $5 M

- Eastern Mid-Atlantic Region
  - Make the Metuchen bus solid - $2 M
  - Reconductor Tunnel - Parrish 230 kV - $3 M
  - Install second Plymouth Meeting 230/138 kV transformer - $3 M
  - Reconductor Master - North Philadelphia 230 kV - $4 M
  - Reconductor Buckingham - Pleasant Valley 230 kV - $8 M
  - Reconductor North Philadelphia - Waneeta 230kV - $4 M
  - Reconductor Gilbert - Glen Gardner 230 kV - $7 M
  - Create a new 230 kV station that splits Milford to Indian River 230kV line. Add a 230/69 kV transformer and a new 69 kV line to Harbeson - $13 M

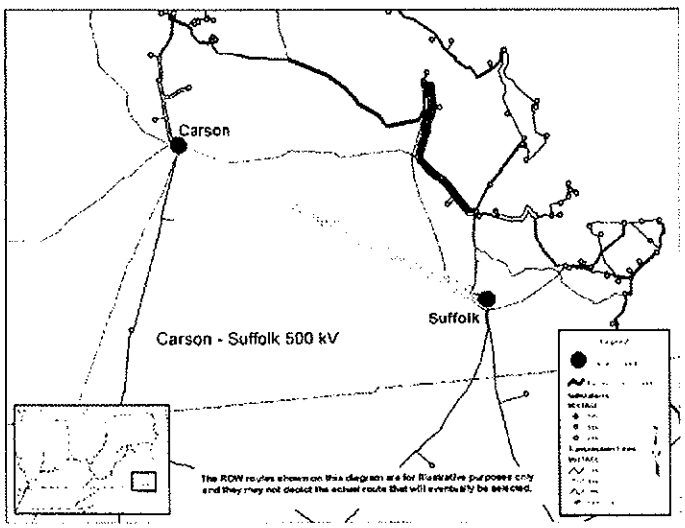
- Penelec Zone
  - Install 600 MVAR Dynamic Reactive Device at Airydale 500kV substation - $30 M
  - Install 300 MVAR capacitor at Conemaugh 500kV substation - $2 M

Southern Region System Upgrades

- Dominion Zone
  - Build new Meadowbrook - Loudoun 500 kV - $230 M *
  - Build Carson - Suffolk 500 kV and second Suffolk 500/230 kV transformer - $160 M
  - Upgrade six 230kV breakers at Loudoun 500 kV sub - $2 M
  - Install second Everetts 230/115 kV transformer - $3 M
  - Uprate/resag Remington - Brandywine - Culpepper 115 kV - $2 M
  - Build second Harrisonburg - Valley 230 kV - $5 M
  - Build Chase City - Clarksville 115 kV - $6 M
  - Build Lexington 230 kV ring bus - $5 M
  - Replace Gordonsville 230/115 kV transformer - $3 M
  - Replace Trowbridge 230/115 kV transformer - $3 M

  * The first 20 miles of the Meadowbrook – Loudoun 500 kV circuit is in the AP zone and the remaining 30 miles is in the Dominion zone.

The Carson – Suffolk 500 kV circuit, second Suffolk 500/230 kV transformer and new Suffolk – Fentress 230 kV circuit is needed to mitigate the potential loss of load in the Norfolk / Virginia Beach area of Dominion for the outage of the two 500 kV circuits that serve the area. In 2009 and 2010 various system upgrades were included in the RTEP to support this area. However, by 2011 the total loss of load in the area exceeds 400 MWs and, therefore, PJM is recommending the addition of the Carson – Suffolk 500 kV circuit and associated upgrades to resolve the potential loss of load issue. The diagram to the right shows the main transmission in the area and the recommended Carson – Suffolk 500 kV circuit.



Western Region System Upgrades

- AEP Zone
  - Install Amos 765/138 kV transformer - $13 M

- ComEd Zone
  - Install a second Byron - Wempletown 345 kV - $15 M
  - Reconductor 10301 & 10302 Lisle - Lombard 138 kV - $2 M
  - Reconductor 17713 from Burnham - Wildwood and 7611 from Wildwood - Beverly tap - $7 M

- AP Zone
  - Build new Mt. Storm - 502 Junction 500 kV - $338 M
  - Build new Mt. Storm - Meadowbrook 500 kV - $282 M
  - Build new Meadowbrook - Loudoun 500 kV - $230 M *
  - Build a new Prexy 500 kV substation and Prexy - 502 Junction 500 kV - $120 M
  - Convert Lime Kiln substation to 230kV operation - $4 M
  - Replace the North Shenandoah 138/115 kV transformer - $2 M
  - Replace Doubs 500/230 kV transformer #2, #3 and #4 - $16 M
  - Convert Doubs - Monocacy 138kV facilities to 230 kV - $9 M

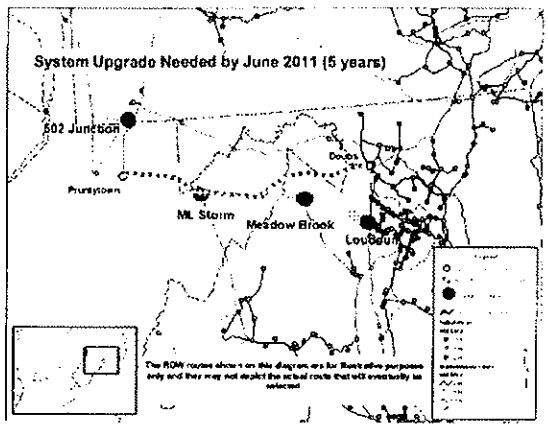
  * The first 20 miles of the Meadowbrook – Loudoun 500 kV circuit is in the AP zone and the remaining 30 miles is in the Dominion zone.

The 502 Junction – Mt. Storm – Meadowbrook – Loudoun 500 kV circuit is the recommended system upgrade to relieve an overload on Mt. Storm – Doubs 500 kV in 2011 and an overload on Pruntytown – Mt. Storm 500 kV in 2014. A number of other new transmission circuits were evaluated including the PHI, APS and AEP transmission proposals. PJM studies indicated that a portion of the APS transmission proposal coupled with a proposal provided to PJM by Dominion was the best alternative to resolve the identified problems. As an added advantage, this new circuit provides a parallel path not only to the Pruntytown – Mt. Storm – Doubs 500 kV reliability problems but also to the Black Oak – Bedington 500 kV path that has resulted in considerable congestion in the last several years. During 2005, gross transmission congestion across the Allegheny Mountain corridor amounted to over $1.2 Billion. It is expected that the proposed 500 kV circuit will resolve a significant portion of this congestion, annually. However, until additional backbone transmission facilities are constructed, it is likely that a portion of any congestion relieved by the proposed facility will reappear on other transmission elements west and east of the Allegheny Mountain corridor.

Attachment A

Allegheny Mountain Corridor Congestion in 2005

Facility	Calendar Year ($Millions)
Bedington-Black Oak Transfer Interface	$534
50045005 Transfer Interface	$200
Kammer 765/500 kV Transformer	$137
Mt. Storm-Doubs 500 kV	$119
Doubs 500 kV #1 Transformer	$71
Doubs 500 kV #3 Transformer	$50
AP South Transfer Interface	$48
Pruntytown-Mt. Storm 500 kV	$46
Allegheny Mountain Corridor 2005 Total Congestion	$1,205



ATTACHMENT B

ATTACHMENT B

Transmission Proposals Directed for Further Development

The concept to develop new backbone transmission facilities on the PJM grid was initiated in a response to a FERC 2005 technical conference on fuel diversity and expanded use of coal-fired resources, held in Charleston, West Virginia. Specifically, the Commission asked a number of questions related to the issues surrounding the development of new clean coal generating resources and the transmission planning activities that would be required to deliver such resources in the West Virginia, Ohio, and Kentucky region to load centers in eastern PJM.

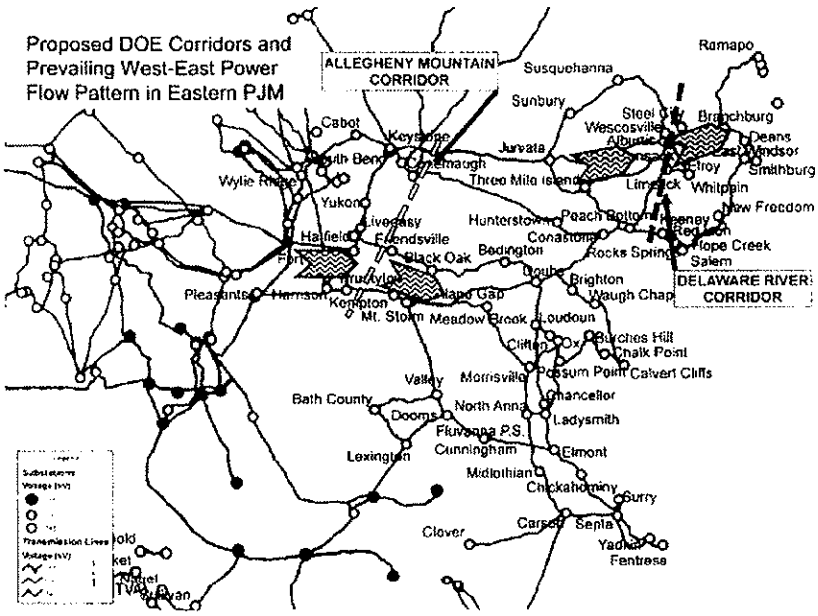
PJM first proposed the Project Mountaineer concept in that technical conference by identifying four general transmission paths over which transmission could likely be built in order to provide the transfer capability required to facilitate such deliveries. These paths did not represent specific transmission project proposals. Rather, they were identified based on varying levels of past discussion regarding the opportunity for the development of additional transmission capability across the PJM system. In the process of identifying the Mountaineer paths, it was expected that two 500 kV or 765 kV transmission circuits would need to be developed to facilitate the delivery of 5,000 MW of new coal-fired generation to eastern load centers.

ATTACHMENT B

In response to the DOE NOI regarding National Interest Electric Transmission Corridors, PJM identified the Allegheny Mountain Corridor and the Delaware River Corridor as being critical to the long-term reliability and market efficiency of the PJM grid. The designation of these corridors was based on a wide range of criteria, proposed in the NOI, including reliability criteria violations and transmission congestion.

Reliability criteria violations have been identified along both proposed corridors in recent Regional Transmission Expansion Plans and additional criteria violations were expected to be identified in the current cycle of the RTEP, evaluating compliance with reliability criteria through 2021. The current cycle of the RTEP, which was presented for the Board's consideration and approved, addresses the reliability issues identified through the 2021 time period. However, further analysis will be required to evaluate the effectiveness of the proposed solutions to resolve identified reliability issues and with respect to managing historic and forecasted west-to-east transmission congestion.

In 2005, eight of the ten costliest transmission constraints were directly related to the proposed Allegheny Mountain Corridor, amounting to $1.2 Billion of congestion. These costs include congestion charges associated with energy that flows ultimately across the proposed Delaware River Corridor, but is attributed to limits at the Allegheny Mountain Corridor. An additional $87 Million of congestion charges resulted, in 2005, at the Delaware River Corridor for transfers that were not limited at the Allegheny Mountain Corridor.



ATTACHMENT B

With the completion of the baseline reliability criteria analysis for the planning horizon extending through 2021, PJM has identified a significant number of reliability criteria violations.

Violations Through the APS System

Test Resulting in Highest Overload	Year That Facility Loading Exceeds Conductor Rating	Overloaded Facility
Load Deliverability	2011	Mt. Storm - Doubs 500 kV
Generator Deliverability	2014	Pruntytown - Mt. Storm 500 kV

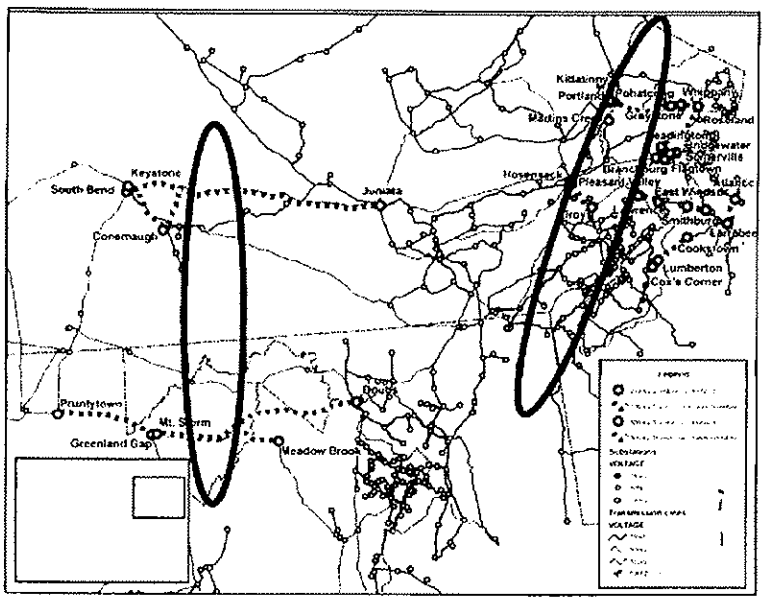
Violations in Eastern PJM

Test Resulting in Highest Overload	Year That Facility Loading Exceeds Conductor Rating	Overloaded Facility
Load Deliverability	2015	East Windsor - Smithburg 230 kV
Generator Deliverability	2015	Greystone - Whippany 230 kV
Load Deliverability	2016	Cox's Corner - Lumberton 230 kV
Load Deliverability	2016	Branchburg - Readington 230 kV
Load Deliverability	2016	Whippany - Roseland 230 kV
Load Deliverability	2016	Kittatinny - Pohatcong 230 kV
Load Deliverability	2016	Hosensack - Elroy 500 kV
Generator Deliverability	2016	Atlantic - Larrabee 230 kV
Load Deliverability	2016	Lumberton - Cookstown 230 kV
Load Deliverability	2017	Branchburg - Flagtown 230 kV
Load Deliverability	2017	Flagtown - Somerville 230 kV
Generator Deliverability	2017	Somerville - Bridgewater 230 kV
Load Deliverability	2017	Martins Creek - Portland 230 kV
Generator Deliverability	2019	Portland - Kittatinny 230 kV
Generator Deliverability	2019	Portland - Greystone 230 kV
Load Deliverability	2020	Pleasant Valley – Lawrence 230 kV
Load Deliverability	2021	Readington - Roseland 230 kV

Violations Through West-Central Pennsylvania

Test Resulting in Highest Overload	Year That Facility Loading Exceeds Conductor Rating	Overloaded Facility
Load Deliverability	2019	Airydale - Juniata 500 kV Circuit 1
Load Deliverability	2019	Airydale - Juniata 500 kV Circuit 2
Load Deliverability	2020	Keystone - Conemaugh 500 kV

Represented on a transmission map, these violations clearly align with the corridors proposed for designation to the DOE. The number and extent of these violations suggest the need for new backbone transmission facilities through both corridors identified to the DOE rather than a series of lower voltage transmission upgrades.

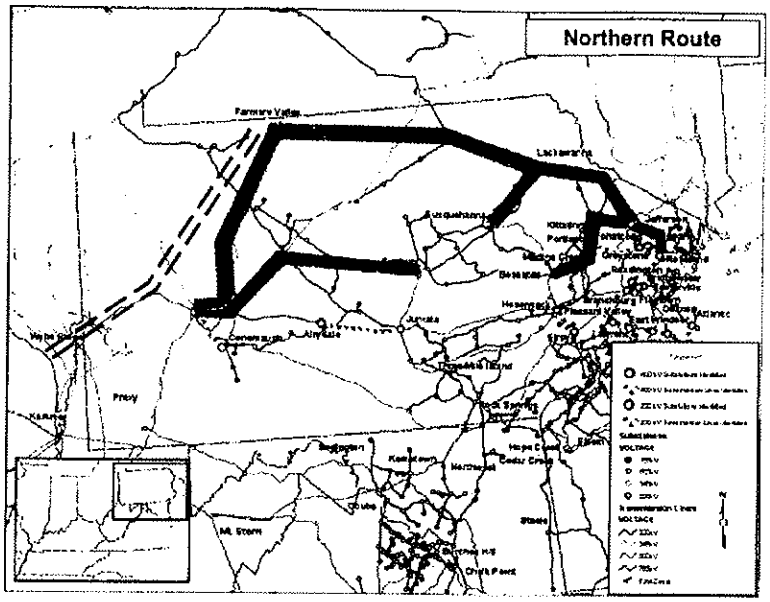


Ten backbone transmission projects have been proposed for consideration with respect to resolving the reliability criteria violations identified in years 2012 – 2021. These projects, in addition to the Mt. Storm – Loudoun circuit proposed by Dominion related to a 2011 reliability criteria violation, will be evaluated to identify the most effective combination of transmission elements to meet the longer-term needs of the system. It is to be expected that portions of the proposed projects will be reconfigured with other projects, that terminal points will be relocated, and that some projects will be abandoned in developing the optimal package of transmission upgrades. It is also possible that additional, yet unidentified, transmission projects will be proposed to complete the optimal package.

Northern Tier Project Proposals

Four transmission projects have been proposed across the northern portion of eastern PJM. These projects generally connect strong generation sources in western Pennsylvania to load centers in northern New Jersey. Alternatively, the projects could be extended to the AEP 765 kV system in eastern Ohio.

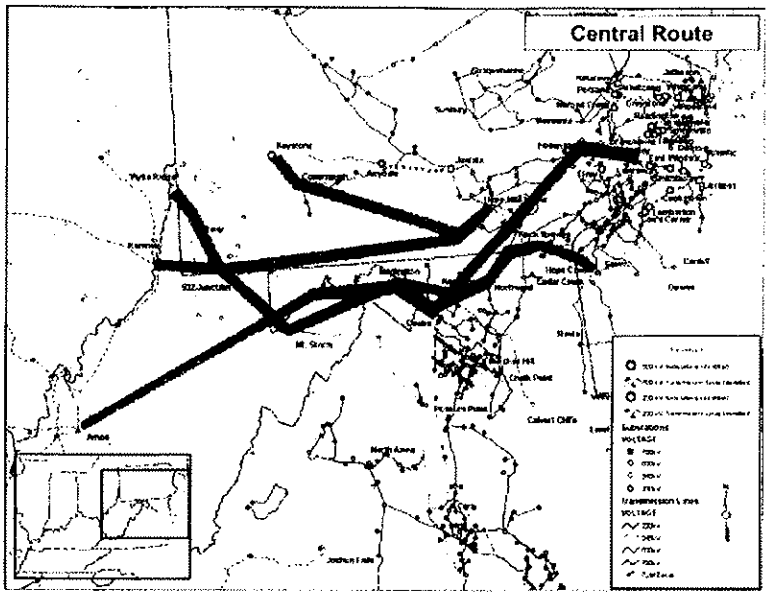
ATTACHMENT B



Central Tier Project Proposals

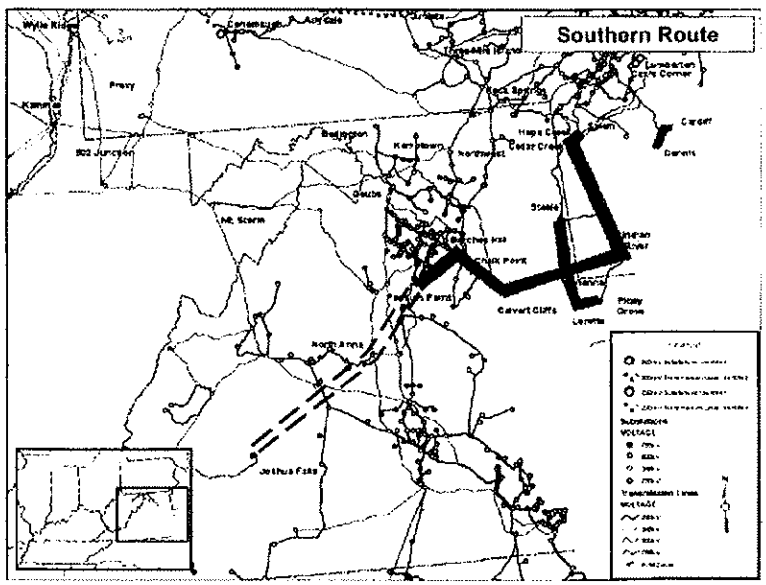
Five transmission projects have been proposed across the central portion of eastern PJM, in addition to the Mt. Storm – Loudoun circuit, proposed for 2011. These lines connect strong generation sources in West Virginia, Kentucky, and Ohio to load centers in New Jersey and the Washington, D.C. and Baltimore area.

ATTACHMENT B



Southern Tier Project Proposals

One transmission project has been proposed across the southern portion of eastern PJM. This project, coordinated with portions of the central tier projects or a connection to the AEP 765 kV system in central Virginia, provides a strong source to the Delmarva Peninsula and southern New Jersey.



Next Steps

There are two significant activities that must move forward before a final selection of transmission projects is made to comprise the package of upgrades that will be presented to the Board for review. Siting Feasibility Studies will be performed for each of the proposed transmission projects that the Board approves for further development. The purpose of these studies will be to identify, from a siting perspective, which projects appear to be most viable or what changes, with respect to points of interconnection with the existing system, would make individual projects more viable.

These Siting Feasibility Studies would be completed in parallel with technical analyses of the combinations of transmission elements that most effectively meet the long-term reliability and economic needs of the grid. The technical analysis will be comprised of traditional power flow, short circuit, and, as necessary, stability analyses to evaluate the relative impact of selected upgrades on reliability constraints and the extent to which upgrades to local area transmission facilities will be required to integrate proposed projects. In addition, market efficiency analyses will be performed to evaluate the impact of proposed transmission projects on a range of economic indicators of system economic performance.

Upon completion of the technical analysis of the proposed transmission projects, a package of recommended transmission upgrades will be identified based on the results of that technical analysis and of the Siting Feasibility Studies. The recommended package of transmission upgrades will be presented to the Transmission Expansion Advisory Committee (TEAC) for review and comment.

Once the comments of the TEAC have been reviewed and integrated, as appropriate, the final recommended package of transmission upgrades will be presented to the Board for review and consideration of approval to proceed with construction.