

1 As the primemovers in the claimed need for TrAIL, this responsibility should rest with the  
2 Company and the PJMRTO.

3 **7.0 CAUSES AND IMPLICATIONS OF PLANNING DEFICIENCIES**

4 **Q. ARE YOU ABLE TO EXPLAIN, DR. ILEO, THE CAUSE OF THE FAILURE TO**  
5 **CONSIDER OPTIONS OTHER THAN TRANSMISSION IN THE PLANNING OF**  
6 **TRAIL?**

7 A. Yes, although only again as an economist who has practiced in the field of electric  
8 utility regulation for many years. There also may be specific legal reasons, on which I am  
9 not qualified to express an opinion, that explain why the PJM does not consider new  
10 generation, DSM programs, and other options in its planning.

11 Available documents in this proceeding as to the purpose, structure, and operation  
12 of the PJM, suggest that it has little ability to require PJMRTO members to add generation  
13 (as contrasted with transmission) facilities in meeting load growth or system reliability  
14 requirements. Much the same appears to be true for DSM programs, although some  
15 comparatively minor efforts in this regard are identified as discussed later in my testimony.  
16 The resulting DSM impacts on Summer Peak electricity consumption, accordingly, are  
17 relatively small in the load forecasts of the PJMRTO.

18 The lack of least-cost IRP by the PJM and related federal agencies appears to stem  
19 from two forces. First, in the interest of promoting competition in electric generation  
20 markets, federal policy has sought to separate generation and transmission decision-making.  
21 This is an extraordinarily difficult task, as suggested by the experience of the various states  
22 that undertook specific electric industry restructuring, stranded generation cost recovery  
23 mechanisms, and related retail competition initiatives in the mid to late 1990s. In large part,  
24 these experiments have yet to realize the anticipated benefits of competition, including that  
25 downward pressures on generation prices have failed to materialize. That the vast bulk of  
26 generation assets in the U.S. remains under the ownership and/or control of electric utilities  
27 additionally complicates efforts to separate the generation and transmission sectors of the

1 electric business. The logic of attempts to sever generation and transmission decision-  
2 making also remains debatable, at least viewed from a regional planning perspective.

3 Second, the institution of DSM programs that could meaningfully impact load growth  
4 are subject to state jurisdictional authority. More specifically, in that retail end-use on the  
5 East Coast of the U.S. is the primary cause of the Summer Peak electrical demands faced by  
6 the PJMRTD, only a collective approval of DSM programs by state regulators (e.g., in New  
7 Jersey, Pennsylvania, Maryland, Washington, DC, and Virginia) could produce a material  
8 slowing of peak load growth. However, if the PJM possessed a DSM authority similar to  
9 what prevails for transmission, the likelihood of state regulatory approval in each jurisdiction  
10 of a standardized DSM program sponsored by the PJMRTD would be materially enhanced  
11 in my judgment.

12  
13 **Q. PLEASE EXPLAIN YOUR UNDERSTANDING OF THE EXPERIENCES IN**  
14 **STATES THAT UNDERTOOK EFFORTS TO PROMOTE ELECTRIC**  
15 **COMPETITION.**

16 **A.** Having been a student of the electric business for many years, as well as participated  
17 in numerous industry restructuring cases before state regulators, I am generally familiar with  
18 the outcomes to date of electric competition experiments throughout the U.S. These  
19 initiatives have met with highly limited success, if not disappointment, as suggested below  
20 from the June 5, 2006 Draft Report To Congress On Competition In The Wholesale And  
21 Retail Markets For Electricity ("Draft Report"):

22 In most profiled states, retail competition began in the late 1990s.  
23 States implemented retail rate caps and distribution utility obligations  
24 to serve, which are now just ending, that make it difficult to judge the  
25 success or failure of retail competition. Few alternative suppliers  
26 currently serve residential customers, although industrial customers  
27 have additional choices. To the extent that multiple suppliers serve  
28 retail customers, prices have not decreased as expected, and the range  
29 of new options and services is limited. Since retail competition  
30 began, most distribution utilities in the profiled states have either sold  
31 most of their generation assets or transferred them to unregulated  
32 affiliates (pgs. 4-5).

1           The “profiled states” cited in the Draft Report consist of Illinois, Maryland,  
2           Massachusetts, New Jersey, New York, Pennsylvania, and Texas, where the most extensive  
3           experiments with competition have been undertaken. The reference to the selling or  
4           transferring of generation assets in the Draft Report is indicative of the notion that the  
5           separation of generation from other functions of electric utilities will serve to foster  
6           competition within the electric industry.

7 **Q.    IN CITING AN ABSENCE OF LEAST-COST IRP AT THE FEDERAL LEVEL, TO**  
8 **WHAT DO YOU REFER?**

9 A.           Current federal policy with respect to resource planning in the electric industry is  
10           best reflected in the recent National Electric Transmission Congestion Report (“NETC  
11           Report”) published by the U.S. Department of Energy (“DOE” or “Department”) in the  
12           Federal Register (“FR”) on October 5, 2007. The requirement for the DOE to produce a  
13           NETC Report stems from a 2005 added Section 216 to the Federal Power Act (“FPA”).  
14           More specifically, upon the designation of National Corridors by the DOE that are subject  
15           to electric transmission congestion, the NETC Report sets in motion a procedural process  
16           by which developers of new transmission facilities in these National Corridors may gain  
17           approval for these projects from state and/or federal regulators. The latter is the Federal  
18           Energy Regulatory Commission (“FERC”).

19           Nearly at the outset of the NETC Report (i.e., in I. Background, A. Statutory  
20           Framework, at FR Page 56993), the DOE makes clear its interpretation of new FPA Section  
21           216:

22           FPA section 216(a) does not shift to the Department the roles of  
23           electric system planners or siting authorities in evaluating solutions  
24           to congestion and constraint problems. Transmission expansion is  
25           but one possible solution to a congestion or constraint problem.  
26           Other potential solutions include increased demand response;  
27           improved energy efficiency; deployment of advanced technology;  
28           and siting of additional generation, including distributed generation,  
29           close to load centers. Nothing in FPA section 216 requires or  
30           suggests that the Department should engage in a comparison of the  
31           relative merits of these different solutions to easing congestion in a  
32           specific geographic area.

1 DOE immediately goes on to explain the basis of its interpretation. Among other  
2 things, the DOE cites the provision in new FPA Section 216 that the congestion study (i.e.,  
3 the NETC Report) required therein is described as “a study of electric transmission  
4 congestion, rather than a study of either the solutions to congestion or the need for  
5 transmission.” DOE then proceeds to re-emphasize its interpretation by the following at FR  
6 Page 56994:

7 Whether a particular transmission project, some other transmission  
8 project, or a non-transmission project is an appropriate solution to a  
9 congestion or constraint problem identified by a National Corridor  
10 designation is a matter that market participants, applicable regional  
11 planning entities, State authorities, and potentially FERC will  
12 consider and decide before any project is built.

13 Much of the remaining parts of the NETC Report, which essentially reiterates prior  
14 FERC policies in many respects, is devoted to refuting the claims of commentors on the  
15 initial (draft) National Corridor study published by the DOE in May 2007. For instance,  
16 regarding matters captioned as Consideration of Alternatives Under FPA Section 216(a)(2)  
17 at FR Page 57010, the DOE responds as follows:

18 The Department concludes that consideration of non-transmission  
19 solutions to the congestion problems facing the Mid-Atlantic Critical  
20 Congestion Area is neither required nor necessary . . .

21  
22 Numerous commentors would have us interpret the phrase to mean  
23 alternative solutions to congestion or constraint problems, which  
24 would then necessitate a comparison of non-transmission solutions  
25 against transmission solutions. Nothing in the language of FPA  
26 section 216 requires or suggests such an interpretation.

27  
28 Not only does the statute not require the Department to analyze non-  
29 transmission alternatives, such analysis is also not warranted as a  
30 matter of discretion.

1 Use of the word "discretion" above suggests that the DOE could have interpreted  
2 new FPA Section 216 to require analyses of alternative means (in addition to transmission  
3 facilities) by which the East Coast power problem might be addressed. And, had the DOE  
4 and other federal agencies pursued this latter course of action, the void in relevant IRP  
5 information and data likely would not exist in this proceeding.

6 **Q. PLEASE EXPLAIN YOUR COMMENT THAT THE NETC REPORT REITERATES**  
7 **PRIOR FERC POLICY.**

8 A. In various decisions regarding RTOs (such as the PJM) or RTO members, the FERC  
9 has taken the position that in its evaluation of proposed transmission projects, consideration  
10 as to whether such projects are prudent (in terms of being the most cost-effective solution  
11 to a reliability concern) need not be made. A recent FERC decision involving transmission  
12 ratemaking matters applicable to TrAIL underscores the historical position of FERC on such  
13 IRP issues.

14 A May 31, 2007 Order of the FERC in Docket Nos. ER 07-562-000 and 001  
15 dismissed claims that no showing had been made as to the prudence (i.e., cost-effectiveness)  
16 of TrAIL, including within the context of both the indicated Dockets and the planning of the  
17 PJM that gave rise to TrAIL. In its dismissal of these IRP issues at Paragraphs 64-72, the  
18 FERC cites its prior generic Order Nos. 679 and 679-A, which interpreted provisions of the  
19 Energy Policy Act of 2005 with respect to incentive-based rate treatments for new  
20 transmission projects. As noted by the FERC, these two Orders established procedures for  
21 public utilities to request incentive rate treatments of proposed new transmission project  
22 costs upon demonstrations that these proposed facilities "either ensure reliability or reduce  
23 the costs of delivered power by reducing transmission congestion" (§ 65). Since the FERC  
24 had already found that TrAIL met this requirement through the planning process of the PJM,  
25 claims that TrAIL had yet to be shown as "prudent or the most cost-effective alternative"  
26 were denied by the FERC -- further noting that such claims constituted an "impermissible  
27 collateral attack" on prior FERC Orders (§ 67).  
28

1 Q. AS AN ECONOMIST, HOW DO YOU VIEW THE IMPLICATIONS OF THE  
2 FEDERAL POLICIES EXPRESSED IN THE NETC REPORT AND FERC  
3 OPINIONS?

4 A. In the first instance, current federal policies cause the unusual circumstances  
5 confronted in this case -- at least in part. Put otherwise, since federal policy neither requires  
6 the DOE or PJM to consider alternatives other than transmission, nor permits parties to raise  
7 IRP issues in FERC proceedings, the information and data necessary to evaluate whether  
8 TrAIL is truly an economical (cost-effective) solution to the East Coast power problem are  
9 missing. This situation likely would not prevail had the DOE exercised its "discretion"  
10 differently in interpreting new FPA Section 216.

11 These federal policies also effectively serve to shift the responsibility for ensuring  
12 that rational economic decisions are made in deploying electric utility resources to state  
13 regulators, such as the Commission. However, few (if any) state regulatory agencies possess  
14 the capabilities to gather necessary data and conduct requisite cost-effectiveness studies for  
15 the numerous markets and suppliers in a geographical area as large as that served by the  
16 PJMRTO. Only the PJM itself (or possibly the DOE) has that capability.

17 Moreover, in that the PJM is able to penalize its members for not pursuing designated  
18 transmission solutions to the East Coast power problem, it should bear responsibility for  
19 demonstrating that these projects are economical. Neither by Allegheny nor the PJM has this  
20 demonstration been made in this proceeding with respect to TrAIL.

21 Q. DO YOU FORESEE AN UNDERMINING OF COMPETITION GOALS FOR THE  
22 ELECTRIC INDUSTRY WERE AN IRP PROCESS UTILIZED BY THE PJM?

23 A. No. Indeed, my judgment is that not only would a properly structured regional  
24 planning process promote competition, but it would further greatly facilitate the ability of  
25 state regulators to reach appropriate decisions regarding electric utility resource deployment.  
26 I say this for two major sets of reasons.

27 First, under present conditions, an economic bias in favor of transmission facilities  
28 is incorporated in federal policies and PJM planning. Incentive ratemaking treatments of

1 transmission project costs by the FERC, for example, encourages electric utilities to pursue  
2 transmission solutions over other feasible options in resolving the East Coast power problem.  
3 Much the same is true of the penalties that the PJMRTTO is able to impose on its members  
4 if steps to build designated new transmission facilities are not taken.

5 Second, if the planning of the PJMRTTO embodied IRP concepts, this would serve to  
6 meaningfully identify feasible options other than only transmission, which would relieve a  
7 major obstacle in assessing potential economic opportunities by market participants. As  
8 things stand, federal planning relieves only the burden of identifying needed transmission  
9 facilities for resolving the East Coast power problem in the absence of considering other  
10 feasible solutions. And, of course, if the planning of the PJM extended to new generation,  
11 transmission upgrades, DSM programs, etc., a relevant data problem might not exist in this  
12 proceeding.

13 In my view, a material pro-competitive benefit would be conferred on producers and  
14 consumers in the electric industry (including state regulatory agencies) if federal policies and  
15 planning embraced IRP concepts. This is not to say that the PJMRTTO should, upon  
16 identifying reliability problems, immediately designate a member responsible for developing  
17 a cost-effective generation, transmission, or DSM solution. To the extent no action is taken  
18 in this regard after some reasonable period of time, such a designation and enforcement  
19 similar to what is presently done with respect to only transmission facilities would not be  
20 inconsistent with competitive goals.

21 **Q. PLEASE EXPLAIN YOUR COMMENTS ABOUT POSSIBLE PROJECT**  
22 **DESIGNATIONS AND ENFORCEMENTS BY THE PJM.**

23 **A.** Consider one of the findings reached in the accompanying testimony of Mr. Lewis.  
24 Analyses of the load flow model utilized by Allegheny and the PJMRTTO lead him to  
25 conclude that new generation in the range of \*\*\*\*\* located in the vicinity of the Doubs  
26 Substation in Northern Virginia would alleviate the transfer capability shortfall reported by  
27 the Company for 2011. The identification of such a project by the PJM several years in  
28 advance of when it might be needed, along with other potential generation and transmission

1 solutions including TrAIL, would impart valuable knowledge to all participants in the  
2 electric industry.

3 Acting in light of this information, some participants are likely to further pursue the  
4 feasibility of new generation close and connected to the Doubs Substation. And, if  
5 investigations in this regard establish the viability of this generation project, attendant actual  
6 planning is also likely to ensue. Such an outcome would also suggest that the marketplace  
7 has found \*\*\*\*\* of new generation capacity at the Doubs Substation to be a cost-effective  
8 solution to the transfer capability deficiency.

9 On the other hand, if no evidence of actual planning becomes apparent after several  
10 years, this outcome would suggest that market forces have determined that the potential new  
11 generation project in question is not feasible. Armed with this information, as well as similar  
12 knowledge pertaining to other potential solutions previously identified, resulting decisions  
13 of the PJM will be more consistent with both competitive outcomes and IRP principles. For  
14 instance, if certain identified projects have been pursued in the marketplace, while others  
15 have not, the latter should only be mandated by the PJM when an overriding public interest  
16 concern is posed; i.e., a public need that cannot be fulfilled by the "invisible hand of  
17 competition." If such conditions pertained to the Doubs generation project or to TrAIL, an  
18 enforcement of either project would not be inconsistent with competitive goals, as a reliance  
19 on market forces over several years has yet to produce desired results.

20 **8.0 SENSITIVITIES OF THE TRANSER CAPABILITY PROBLEM**

21 **Q. HAS ALLEGHENY REPORTED A SPECIFIC TRANSFER CAPABILITY**  
22 **PROBLEM IN CONNECTION WITH ITS CLAIMED NEED FOR TRAIL?**

23 **A.** Yes. In response to discovery, the Company has presented data showing that west  
24 to east transmission flows in the PJM System will be deficient by about \*\*\*\*\* in 2011;  
25 e.g., see Tab: Summary Sheet in Attachment Staff-2-6-A of Allegheny response to Staff-2-6-  
26 (c). TrAIL is slated to fill this void, along with being shown as creating an additional  
27 electric power transfer capability of roughly \*\*\*\*\*, such that the total capacity of TrAIL