

Carl J. Bridenbaugh
Vice President

330-384-3850

February 3, 2012

Via Electronic and U.S. Mail

Howard Schneider, Chair
Board of Managers
PJM Interconnection, L.L.C.
955 Jefferson Avenue
Valley Forge Corporate Center
Norristown, Pennsylvania 19403-2497

Re: Rio SVC Project

Dear Mr. Schneider:

At the January 30, 2012 meeting of the Transmission Expansion Advisory Committee ("TEAC"), PJM further explained certain of its proposed reactive upgrade projects to address N-1-1 voltage collapse contingencies. The purpose of this letter is to express FirstEnergy's concern that PJM has not properly evaluated one of the proposed projects – the 600 MVAR SVC at Rio ("Rio SVC Project") – and has not justified its inclusion in PJM's Regional Transmission Expansion Plan ("RTEP").

FirstEnergy previously apprised the Board of concerns about the Rio SVC Project in a December 2, 2012 letter. At that time, FirstEnergy understood, based on PJM representations at the November 3, 2011 TEAC meeting, that the proposed SVC now identified for installation at Rio was intended to be installed at the Meadow Brook Substation which is owned and operated by The Potomac Edison Company ("Potomac Edison"), a FirstEnergy subsidiary. At the January 30 TEAC meeting, PJM clarified that the proposed location is intended to be Rio in West Virginia, rather than the Meadow Brook Substation, which is in Virginia. The Rio SVC Project is proposed to be located within First Energy's Allegheny Power transmission zone and interconnected to two 500 kV transmission lines owned by FirstEnergy operating companies -- the 500 kV TrAIL wholly-owned by Trans-Allegheny Interstate Line Company ("TrAILCo"), a FirstEnergy subsidiary, and the 500 kV Mt. Storm-Greenland Gap-Meadow Brook line in which Potomac Edison holds a minority interest.

PJM has not adequately explained either its decision to locate the SVC at Rio or the assignment of construction responsibility for the SVC to Primary Power. In proposing the Rio SVC Project, PJM has rejected or ignored two equally effective and far less expensive alternatives. The first alternative, as described in our December 2 letter, is the installation of a 300 MVAR capacitor at Meadow Brook and increasing an existing 200 MVAR capacitor at this substation, which will adequately address the 17 planning criteria violations that PJM now proposes to resolve. FirstEnergy recommended this alternative as a more cost-effective solution, estimating the installation of capacitors at Meadow Brook to cost only one-fifth as much as an SVC at the same substation. However, if PJM confirms an SVC is necessary to resolve these violations, there is a second alternative that PJM appears to have ignored: the construction of the SVC at Meadow Brook, rather than Rio,

which is more cost-effective and faces fewer construction and permitting risks. FirstEnergy believes PJM's decision to require the installation of the Rio SVC Project rather than an SVC at Meadow Brook will cost approximately \$40 million more. In short, the Rio SVC Project will result in PJM transmission customers bearing substantially excessive and unnecessary costs.

The TEAC process envisions and requires an iterative and collaborative process in which PJM identifies the reliability needs of the region's transmission system and, in collaboration with stakeholders, identifies, evaluates and analyzes expansions and enhancements required to maintain system reliability. This decision appears to be the product of a failure to adhere to this transmission planning process and the relevant provisions set forth in Schedule 6 of the PJM Operating Agreement. The RTEP produced through this process must "avoid unnecessary duplication of facilities" and "avoid the imposition of unreasonable costs on any Transmission Owner or any user of Transmission Facilities." Notably, PJM is not limited to the consideration of projects proposed by transmission owners or other entities. Rather, PJM is charged with the responsibility to identify and select the most appropriate solutions, whether or not they precisely match those proposed to PJM by project developers. In this instance, PJM failed to discharge and, indeed, abdicated its independent planning responsibility in a manner that appears to be arbitrary and capricious and may be unduly discriminatory.

In the January 30 presentation, PJM concluded that the installations of SVCs at the newly identified Rio location (to be built by Primary Power) and several other locations were preferable solutions to the voltage criteria violations. PJM did not, however, present any investigation or analysis to determine if Primary Power's construction of its proposed SVC at a new Rio substation was the most cost-effective approach to implementing this solution and would "avoid the imposition of unreasonable costs" on PJM transmission customers. In particular, PJM does not appear to have considered whether a 600 MVAR SVC constructed at the Meadow Brook substation could provide an effective solution at lower cost. Instead, it appears to have simply adopted the Primary Power proposal and designated Primary Power to construct the SVC at Rio.

As explained above, this decision constitutes an abdication of PJM's planning responsibility. Once PJM determined that an SVC-based solution to the voltage criteria reliability concern was preferable, PJM had a duty to evaluate and analyze the potential options for installing the required SVCs at locations that would provide an effective solution without producing excessive costs. The apparent failure to do so caused PJM to select an option that is unnecessarily costly, duplicates existing facilities, and may be more risky than alternatives (e.g., siting). A 600 MVR SVC at the existing Meadow Brook Substation would be an effective alternative to the Primary Power proposal that would provide similar voltage support benefits and would cost substantially less. PJM identifies the cost of the Rio project at \$100 million. Because it could make use of existing substation facilities and land, FirstEnergy estimates construction of the SVC at Meadow Brook would cost less than \$60 million. To support this lesser cost alternative, FirstEnergy has the proven processes already in place to efficiently finance, plan, engineer, and construct the SVC in a timely manner. In addition, because of existing Potomac Edison and TrAILCo facilities at Meadow Brook, FirstEnergy does not believe state authorization to construct the SVC will be required. From an operational and monitoring perspective, FirstEnergy has extensive experience in the operation and maintenance of transmission facilities as well as an existing communications network and state-of-the art operations center.

If the PJM Board were to reject the less expensive, capacitor-based alternative at Meadow Brook and confirm the need for an SVC solution, the Board should direct the installation of an SVC at Meadow Brook, and

designate Potomac Edison as the responsible transmission owner. The appropriate FirstEnergy affiliate will undertake its construction.

PJM may have acted under the mistaken belief that FERC's decision in the *Primary Power* proceeding required it to designate Primary Power to construct and own an SVC at Rio. If that is the case, PJM was incorrect. Although FERC stated that PJM "would need to adequately justify its action if it denied the sponsor of the project the right to construct that project and receive the economic benefit of its project," it did not eliminate PJM's responsibility to evaluate alternative solutions to reliability concerns. Rather, FERC stated that PJM must designate projects under the relevant tariff provisions in a not unduly discriminatory manner, whether sponsored by transmission owners or others. In particular, FERC did not require PJM to designate a project sponsor to construct an upgrade at a new location, when a transmission owner could install the same or a similar upgrade at an existing substation, at much lower cost.

PJM's failure to evaluate construction of an SVC at Meadow Brook, and its failure to explain why Primary Power's SVC project is preferable, render inclusion of the Primary Power project in the RTEP indefensible. FirstEnergy urges the Board of Managers to require PJM to correct this deficiency.

Finally, we note that FirstEnergy's December 2, 2012 letter to the Board also addressed the proposed Hunterstown SVC Project. While we remain concerned about PJM's decision to reject our lesser cost alternative at Hunterstown and to recommend to the Board approval of the more costly Hunterstown SVC Project, we will not repeat those concerns here. Rather, we will simply renew our request that the Board approve the capacitor-based solution at Hunterstown in place of the Hunterstown SVC Project. However, if PJM confirms the need for an SVC and the Board directs the construction of the SVC, the appropriate FirstEnergy affiliate will undertake its construction.

Sincerely,



Carl J. Bridenbaugh
Vice President, Transmission

cc: Board of Managers
Terry Boston
Mike Kormos
Steve Herling
Paul McGlynn