The Northeast Power Coordinating Council, Inc (NPCC Inc.) respectfully submits the following additional comments for U.S. Department of Energy’s (DOE’s) consideration regarding its proposed Draft Mid-Atlantic Area National Corridor [Docket No. 2007–OE–01].

DOE “acknowledges that determining the exact perimeters for a national corridor under a source-and-sink approach is more of an art than a science …” and that “The drawing of the boundary is ultimately a judgment that the Secretary must make.” 1

Recent studies 2 presented to the Inter-Area Planning Stakeholder Advisory Committee (IPSAC) 3 illustrate some of the existing wide-Area, trans-Regional international reliability considerations identified in the proposed draft Mid-Atlantic Area National Corridor footprint associated with west to east power transfers across the PJM-RTO and north to south power transfers across the New York ISO. The “Procedure to Protect for the Loss of Phase II Imports.” 4 outlines the current agreement to determine the maximum level at which facilities need to be reliably operated to ensure that the reliability of the Eastern Interconnection is not put at risk from an occurrence of a contingency in New England that is larger than the NYISO or PJM-RTO systems can reliability withstand.

DOE has also recognized that “Drawing National Corridor boundaries broadly may also encompass transmission upgrades needed to address ‘loop flow’ … Thus a transmission

1 DOE FR Notice at page 25849
2 See: http://www.interiso.com/documents.cfm
3 The Inter-Area Planning Stakeholder Advisory Committee supports of the comprehensive process of coordinating system planning activities established under the Northeastern ISO/RTO Planning Coordination Protocol by ISO-NE, NYISO and PJM.
4 FERC Order Accepting for Filing the Procedure to Protect for the Loss of Phase II Imports, subject to Compliance Filing, Docket No. ER07-231-000. See: http://www.iso-ne.com/regulatory/ferc/orders/2007/jan/er07-23-000_1-12-07_phase_ii_protocol.pdf
improvement designed to correct a congestion problem in one part of the transmission system may in some cases cause loop flows elsewhere that must also be addressed.”  

Loop flow is unscheduled power flow on a transmission system that arises due to the physical nature of electricity as it follows the path of least resistance. With respect to the proposed Draft Mid–Atlantic Area National Corridor, the flow of electricity on the transmission system around Lake Erie is an example of loop flow.

These high loop flows have often contributed to heavy loading on the Ontario QFW interface⁶, and in doing have limited the amount of Ontario power transfers.

As can be seen from the referenced IPSAC analysis and recent Ontario Lake Erie Loop Flow experience, power flows within the proposed draft Mid-Atlantic Area National Corridor designation have the potential for international reliability impacts. As was submitted in earlier NPCC comments, corridor designations should result in transmission projects that eliminate or reduce the magnitude of constraints between the U.S. and Canada.⁷

Transmission project(s) proposed within the proposed draft Mid-Atlantic National Corridor would likely increase the power flows from west to east across the PJM RTO and/or increase power flows from north to south across the New York ISO (from source to sink). The proposed transmission project(s) may require additional transmission and/or supporting facilities (e.g., reactive support, lower voltage system improvements) to be built outside of the proposed draft Mid-Atlantic National Corridor designation to allow for their complete, reliable integration, according to NERC/ERO reliability standards and/or more stringent regional and local reliability criteria.

In order to provide for the complete, reliable integration of any proposed associated corridor transmission project(s), NPCC Inc. recommends that DOE acknowledge that wide-Area, trans-Regional, international reliability impacts outside of their ultimate corridor designation associated with proposed corridor transmission project(s) are of critical importance, and that those reliability impacts need to be identified, coordinated, and addressed by the affected entities through the related Regional planning process before national interest electric transmission corridor status is granted to the proposed transmission project(s).

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⁵ DOE FR Notice at page 25849, Footnote 29