

PJM RTEP – 2016/17 Long Term Window
Olive-Liquid Carbonics 138 kV

A proposal to PJM Interconnection, Submitted February 28, 2017

Submitted by

**American Electric Power “AEP” Transmission
and**

Northern Indiana Public Service Company (“NIPSCO”)

A. Executive Summary

American Electric Power (“AEP”) and Northern Indiana Public Service Company (“NIPSCO”) submit this proposal (the “Proposal”) to PJM Interconnection, LLC (“PJM”) in response to the *PJM RTEP 2016/17 Long Term Proposal Window*. AEP and NIPSCO seek to be considered the Designated Entity for the project described within this Proposal. As one of the Designated Entities, AEP is proposing to construct, own, operate and maintain the proposed 138 kV line and associated station assets. NIPSCO is proposing to rebuild an existing NIPSCO 138 kV line from Michigan City to Trail Creek to Bosserman. The projects should be considered as a whole.

AEP submits the “Olive-Liquid Carbonics 138 kV” Proposal to address interregional market efficiency congestion in both PJM and MISO for the jointly identified flowgate, Olive – Bosserman 138kV FLO New Carlisle - Olive 138kV. AEP proposes to rebuild approximately 5 mile section of the 34.5 kV line between New Carlisle and Silver Lake as double circuit 138 kV, operating one circuit at 34.5 kV while the other at 138 kV. In addition, extend the 138 kV circuit to Liquid Carbonics by constructing a single circuit 138 kV to Liquid Carbonics approximately 9 mile long. Also, install a 138 kV CB at New Carlisle station, and a phase over phase switch at Liquid Carbonics. In addition to the AEP proposed work, NIPSCO proposes to include the rebuild of Michigan City – Trail Creek 138kV and Bosserman – Trail Creek 138kV with the Proposal. Total project cost is estimated to be \$41.8 million with a proposed in-service date of June 1, 2021.

The project proposes to address following market efficiency congestion identified by PJM and MISO.

Facilities Recommended for Proposals: Criteria (PJM Region - Lower voltage > \$1 million for 2021 and 2024, Regional > \$10 million for 2021 and 2024, and Frequency > 25 hours Interregional - PJM Congestion > \$0 for 2021 and 2024, and PJM Frequency > 0 hours) (updated On 11/09/2016)				2021 Input Assumptions with 2021 Topology		2024 Input Assumptions with 2021 Topology		
FG#	Facility Name	AREA	TYPE	Frequency (Hours)	Market Congestion (\$ Millions)	Frequency (Hours)	Market Congestion (\$ Millions)	Notes/Potential Upgrade
ME-4	Bosserman to Olive 138 kV	AEP	LINE	17	\$0.4	71	\$2.0	Interregional Constraint

Table A.1: PJM Identified Congestion of Olive – Bosserman 138kV FLO New Carlisle - Olive 138kV

ID	Monitored Element	From Bus TO	To Bus TO	Contingency Element(s)	AAT 2031 SP	EF 2031 SP	PR 2031 SP	Wghtd 2031 SP	Wghtd CC (Total for MLs)	Wghtd BHrs
A	Olive - Bosserman 138 kV	AEP	AEP	New Car - Olive 138 kV	642	34	364	334	(\$52,103,613)	338

Table A.2: MISO Identified Congestion of Olive – Bosserman 138kV FLO New Carlisle - Olive 138kV

The project will require very limited outages as it involves mostly in the clear construction.

B. Company Evaluation Information

B.1 AEP Company Overview

AEP is located at 1 Riverside Plaza in Columbus, Ohio. Specific contact information is provided below:

Primary Contact	Kamran Ali Director, Transmission Planning	AEP 1 Riverside Plaza Columbus, Ohio 43215-2372 Telephone: 614-933-2122 Email Address: kali@aep.com
Secondary Contact	Takis Laios Manager, Transmission Asset Strategy	AEP 1 Riverside Plaza Columbus, Ohio 43215-2372 Telephone: 614-716-3462 Email Address: tlaios@aep.com

AEP has been pre-qualified to be a Designated Entity for transmission projects in PJM under section 1.5.8 (a) of the PJM Operating Agreement. The pre-qualification information is contained in the document submitted to PJM on April 29, 2013, entitled Pre-Qualification Application of American Electric Power and Certain Affiliates. This document is on record with PJM and posted on the PJM website, with PJM pre-qualification ID of 13-05. PJM confirmed the pre-qualified status of AEP in a letter dated July 7, 2013. As required annually, AEP has reviewed this information and an Addendum to this posted document was submitted to PJM on September 30, 2016. PJM reaffirmed the pre-qualified status of AEP in a letter dated October 27, 2016.

AEP will bring to bear their talents, resources, and capabilities to execute the Project. These capabilities are detailed in AEP's prequalification submittal to PJM.

B.2 NIPSCO Company Overview

Legal name of submitting entity:	Northern Indiana Public Service Company
Primary Contact Person	Name: Miles Taylor
	Title: Manager Economic Transmission Planning
	E-Mail Address: mtaylor@nisource.com
	Telephone #: 219-647-5601
	Mailing Address: 801 E. 86 th Avenue Merrillville, IN 46410

Please reference Northern Indiana Public Service Company Pre-Qualification Filing for Company Evaluation, Project Constructability and Maintenance plan.

Furthermore NIPSCO is seeking interregional analysis and cost allocation for this project.

Pre-qualification ID: PJM ID Q13-14

C. Proposed Project Constructability Information

Redacted.

D. Analytical Assessment

Redacted.

E. Cost

Redacted.

F. Schedule

Redacted.

G. Operations/Maintenance

Redacted.