

**PJM RTEP-2016 RTEP Proposal Window #3**  
**Lockwood Road-Stryker 138 kV Line Project**  
**A Proposal to PJM Interconnection November 15, 2016**

Submitted by

**Transource® Energy, LLC**

**1 Riverside Plaza, Columbus, Ohio 43215-2372**







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## A. Executive Summary

Transource® Energy, LLC (Transource) is pleased to provide the following proposal to PJM in response to the *PJM RTEP-2016 RTEP Proposal Window #3 Problem Statement & Requirements Document*. Transource was specifically formed as a joint venture between subsidiaries of American Electric Power Company (AEP) and Great Plains Energy Incorporated (GPE) to participate in competitive processes for transmission development and to provide benefits to transmission customers through the planning, construction, and ownership of high quality, low cost transmission infrastructure. Transource is located at 1 Riverside Plaza in Columbus, Ohio.

### A.1. General Description of Proposed Project

Transource proposes to build the Lockwood Road-Stryker 138 kV Project (or, the Project) in northwestern Ohio. The Project will establish a new 16.7 mile 138 kV single-circuit transmission line from the existing Lockwood Road Station to the existing Stryker Station. There are no greenfield station facilities to be constructed as part of this proposal.

Transource has completed the necessary preliminary project development work to determine project constructability, preliminary cost estimates, and a conceptual project schedule. Experienced AEP engineering, siting, permitting, project management, and construction personnel were the primary resources for this work.

### A.2. Reliability Problem(s) Proposed to Resolve

The Project addresses the planning criteria violation(s) listed below:

2021 PJM Winter Analysis Generation Deliverability Result													
FG #	Fr Bus	Name	To Bus	Name	CKT	KVs	Area	Rating	FN DC	FN AC	Cont Label	Cont Ty	Conductor Rating (MVA)
1	239070	02RICHLD	238521	02NAOMI	1	138/138	202/202	230	101.14	100.41	'ATSI-P2-4-TE-138-002T'	Breaker	Rate A/B =182/230
2	239070	02RICHLD	238521	02NAOMI	1	138/138	202/202	230	101.14	100.41	'ATSI-P2-2-TE-138-003T'	Bus	Rate A/B =182/230
3	239070	02RICHLD	238521	02NAOMI	1	138/138	202/202	230	100.97	100.24	'ATSI-P2-3-TE-138-005T'	Breaker	Rate A/B =182/230

**Table 1. Addressed Contingencies Identified by PJM**

The generation deliverability thermal overload on the Richland-Naomi 138 kV circuit occurs for breaker and bus contingencies involving the loss of the Richland 138 kV Bus J. The Project creates an additional 138 kV path to the Stryker area, compensating for the loss of the source from Richland during the identified contingencies.

Furthermore, Transource performed analysis of existing and new contingencies that the Project may create and found no planning criteria violations.

### **A.3. Overall Schedule Duration**

The overall schedule duration is expected to 42 months after award by PJM. Assuming a project award date of April 1, 2017, Transource could place the project in-service October 2020. Please refer to Section F of this proposal for more details on the proposed schedule.

### **A.4. Overview of Estimate**

The estimated capital cost of the Project in 2016 dollars is \$17,190,671. This estimated cost includes all Project components, including work that PJM may consider as upgrades. Please refer to Section E of this proposal for details on the project cost.

### **A.5. Designated Entity Statement of Intent**

Transource seeks to be considered the Designated Entity for the project described within this Proposal to design, construct, own, operate, and maintain the facilities and assets, subject to determination regarding components deemed upgrades by PJM.

### **A.6. Designated Entity Status/Pre-Qualification**

Transource 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 Transource in a letter dated July 7, 2013. As required annually, Transource 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.

## B. Company Evaluation Information

Transource Energy, LLC is located at 1 Riverside Plaza in Columbus, Ohio. Specific contact information is provided below.

### B.1. Transource Contacts

Primary Contact	Robert Cundiff Manager, Transource Business Development	Transource Energy, LLC 1 Riverside Plaza Columbus, Ohio 43215-2372 Telephone: 614-716-2076 Email Address: rjcundiff@aep.com
Secondary Contact	Takis Laios Manager, Transmission Asset Strategy	Transource Energy, LLC 1 Riverside Plaza Columbus, Ohio 43215-2372 Telephone: 614-716-3462 Email Address: tlaios@aep.com

### B.2. Transource Qualifications

Transource 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 Transource in a letter dated July 7, 2013. As required annually, Transource 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.

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

### B.3. Overview of Transource Energy

Transource was formed to pursue the development of competitive transmission projects in marketplaces initiated by the implementation of FERC Order No. 1000. AEP owns 86.5 percent of Transource, and GPE owns 13.5 percent. The combined strengths of AEP and GPE in engineering, project management, procurement, project development, construction, operation and maintenance will result in effective and efficient delivery of transmission solutions that benefit transmission customers.

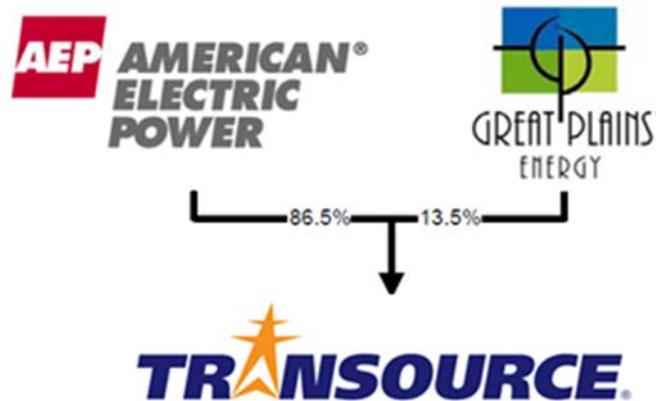


Figure 1. Summary of Transource Ownership Structure

Transource is currently developing two Southwest Power Pool (SPP) approved transmission projects in the state of Missouri through its subsidiary Transource Missouri LLC (Transource Missouri). The Iatan-Nashua 345 kV transmission project was recently placed into service, and the Sibley-Nebraska City 345 kV transmission project is currently under construction. Transource received approval from the Federal Energy Regulatory Commission (FERC) of a formula rate and certain incentives for Transource Missouri in FERC Docket No. ER12-2554. Also, Transource Missouri received approval from the Missouri Public Service Commission of a settlement filed in File No. EA-2013-0098 for a line Certificate of Convenience and Necessity to finance, construct, own, operate and maintain these projects.

In addition to these projects in Missouri, Transource was recently awarded PJM's largest-ever market efficiency project on the Pennsylvania-Maryland border in the eastern

portion of PJM. Transource is also developing the Thorofare Creek Area Project in central West Virginia as part of PJM’s 2014 Regional Transmission Expansion Plan.

The figure below provides a snapshot of the states in which Transource’s owners, AEP and GPE, currently own or are developing transmission assets.

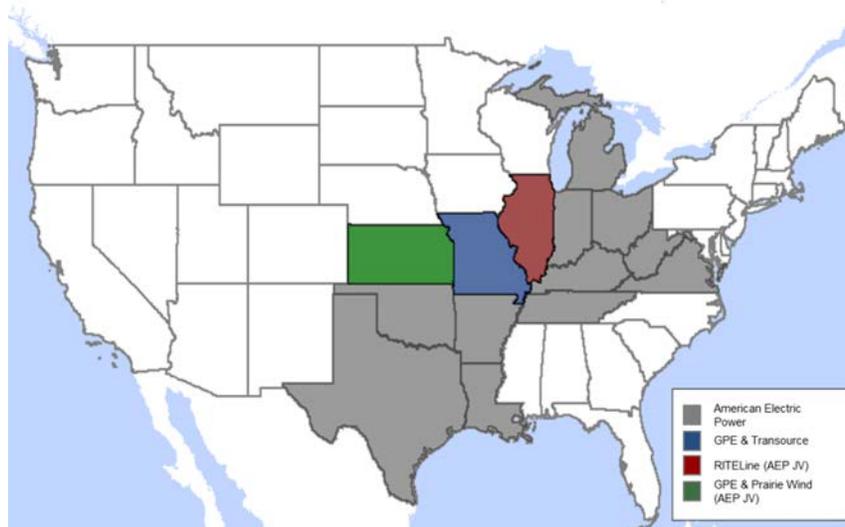


Figure 2. Combined Transmission Presence

## C. Proposed Project Constructability Information

[REDACTED]

## D. Analytical Assessment

[REDACTED]

## E. Cost

[REDACTED]

## F. Schedule

[REDACTED]

## G. Operations/Maintenance

### G.1. Operational Plan

Transource is flexible regarding Project operations that can be provided using one of the following approaches:

- Transource can operate the new facilities directly using the capabilities of the AEP Transmission Operations (TOps) organization.
- Transource can work with the incumbent transmission owner to facilitate their operations of the new facilities.

The TOps organization operates from a state-of-the-art System Control Center (SCC) located in New Albany, Ohio. AEP TOps also operates five Transmission Operations Centers that coordinate transmission switch orders and interface with field personnel. The SCC and Transmission Operations Centers are staffed with NERC and PJM-Certified operators.

Operator tools include a State Estimator covering AEP's 11-state transmission system, real-time contingency analysis, and visualization and situational awareness tools. TOps has a back-up control center that can be staffed and fully functional within one hour from declaration of an emergency. TOps completes approximately 18,000 switching jobs totaling over 200,000 switching steps with an accuracy rate exceeding 99.99 percent annually.

### G.2. Maintenance Plan

[REDACTED]

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