

July 26, 2014

Nancy Muhl
PJM Interconnection
2750 Monroe Boulevard
Audubon, PA 19043

Subject: 2014 RTEP Project Proposal

Dear Ms. Muhl:

Please accept the following letter submission as outlined in the "Greenfield Project Proposal Template" included with the 2014 Project Proposal Window 1 Problem Statement & Requirements Document.

A. Executive Summary

Duke Energy proposes a new 138kV transmission line be built between our Miami Fort substation and our Willey substation. The new line and structures will require new right of way and expanding sections of existing right of way along its 16 mile route.

The reliability problem that the project resolves is an overload caused by a contingency found in the 2014 RTEP study of the 2019 planning year. Two violations were noted in the 2014 RTEP Proposal Window 1 Results V1.xlsx workbook: on the Baseline Thermal tab, FG# 124, 08M.FORT to 08WILEY2, and, on the Generation Deliverabilit&CMO tab, FG# 1037, 08M.FORT to 08WILEY2. Both were caused by contingency [REDACTED] in the 2019_RTEP_Summer_Line_FB_0430214.con file. The existing Miami Fort to Willey line is loaded at 108.8% for the contingency. With the addition of the new line, the loading is reduced to 75.1%.

The proposed project cost is estimated at \$20,000,000. This estimate is all inclusive, and comprehends property acquisition, right-of-way obtainment, permitting, engineering, procurement and construction.

The overall schedule duration is 4 ½ years.

Duke Energy seeks to construct, own, operate and maintain the project as a Designated Entity. Please refer to our PJM pre-qualification ID 13-13.

B. Company Evaluation Information

Please see Pre-Qualification Submittal for Designated Transmission Entity Status, Submitted to PJM September 5, 2013, included as a separate document with this submission.

C. Proposed Project Constructability Information

Duke Energy is requesting Designated Entity status for all elements in the project.

1. Component Scope

The project scope consists of all the necessary equipment, lines and structures to build a 138kV transmission line.

a. Greenfield Transmission Line Element Detail

The new line will terminate at Duke Energy's Miami Fort and Willey substations. The route is through western Hamilton County, Ohio, and traverses terrain that has sections of hilly and wooded, flat and wooded, and flat farm land. The new line will share 2 miles of existing right of way that will be expanded. The remaining 14 miles will require the acquisition of new right of way. All segments of the line will be 138kv overhead, single circuit, using 477 kcmil 26/7 ACSR with a rating of 198MVA.

b. Greenfield Substation/Switchyard Facility Element Detail

The terminating locations are both Duke Energy owned substations. Sections of one-line diagrams showing the addition of breakers and associated equipment are included in this submission.

c. Transmission Facilities to be Constructed by Others

Duke Energy will construct the entire project.

d. Environmental, Permitting and Land Acquisition

Assessments of environmental impacts related to the new transmission facilities including environmental impact studies, permitting, sediment and erosion control will be addressed if this project is selected.

2. Project Component Cost Estimates

The cost estimate above is high level and includes engineering and design, material and equipment, construction and commissioning, right of way and land procurement, permitting, construction management, and contingency. A detailed cost estimate with line items for these and others will be developed if this project is selected.

3. Schedule

The overall schedule duration of 4 ½ years is based on our experience with similar projects and includes obtaining state and local jurisdictional siting approvals, right of way acquisition, engineering and design, equipment lead time, and construction/testing/commissioning activities. A detailed milestone schedule including outages will be developed if this project is selected.

4. On-going Transmission Facility Items

a. Operational Plan

The new transmission line will be operated in accordance with Duke Energy procedures. The line will be monitored and controlled consistent with other Duke Energy transmission facilities by the Duke Energy Ohio and Kentucky operations center.

b. Maintenance Plan

The new transmission line and associated equipment will be maintained consistent with other Duke Energy transmission facilities in accordance with Duke Energy maintenance procedures.

5. Assumptions

Due to the high level estimates of the cost and schedule during this phase of planning it is necessary to add a tolerance. The variance to the estimated cost above is +/- 20%. The schedule may vary +/- 3 months. The variances in cost and schedule will be refined if this project is selected.

For questions regarding this proposal please contact me using the information you have on file.

Sincerely,

Steve Steinkuhl, PE
Senior Engineer