COMMONWEALTH OF KENTUCKY

BEFORE THE KENTUCKY STATE BOARD ON ELECTRIC GENERATION AND TRANSMISSION SITING

In the Matter of:

APPLICATION OF SOUTHERN INDIANA GAS &)	
ELECTRIC CO. D/B/A VECTREN ENERGY)	
DELIVERY OF INDIANA, INC., FOR A	j	CASE NO.
CERTIFICATE TO CONSTRUCT AN ELECTRIC	j	2010-00223
TRANSMISSION LINE FROM ITS AB BROWN	j	
PLANT TO THE BIG RIVERS REID EHV STATION	í	

VECTREN RESPONSE TO SITING BOARD STAFF'S SECOND DATA REQUEST

Southern Indiana Gas and Electric Company d/b/a Vectren Energy Delivery of Indiana, Inc. (Vectren) hereby responds to the Staff Data Request of December 10, 2010. Vectren notes that this second Data Request is outside the timeframe established by the procedural schedule, and responds hereto without waiving any objection to the timeliness of the Request. Vectren does so in the interest of full cooperation and to further the expeditious resolution of this Case.

Respectfully submitted,

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- Explain in detail whether Vectren considered using steel monopole support structures ("steel monopoles") for the construction of its proposed transmission line along the portion of the route that would parallel the existing 161 kV transmission line owned and operated by Henderson Municipal Power & Light (HMP&L) as opposed to the H-frame support structures proposed by Vectren in its amended application.
 - a. If "yes," provide an explanation of why Vectren determined not to use steel monopoles along the portion of the proposed route that would parallel HMP&L's existing 161 kV transmission line.
 - b. If "no," explain why Vectren did not consider using steel monopoles along the portion of the proposed route that would parallel HMP&L's 161 kV transmission line.

Witness: Larry Rogers

RESPONSE: Vectren studied use of steel monopoles for this project; and in specific locations where other structure options are not technically feasible, Vectren has designed for construction using steel monopoles. Significant additional costs and construction considerations associated with steel monopoles resulted in Vectren's selection of H-frame construction for most of its line, both on the northern portion (Phase One, from the Gibson Station in Gibson County, IN, to Vectren's Brown Power Plant in Posey County, IN) and on the southern portion (Phase Two, from Vectren's Brown Power Plant in Posey County, IN to Big Rivers Electric Corporation's Reid Station in Webster County, KY). The northern portion of the line is constructed across mostly agricultural land and consists almost exclusively of H-frame construction (except for some monopoles in wetlands areas and some three-pole structures when the line angles). Construction was completed, and that portion of the line was energized in November 2010.

Vectren estimates that the cost difference between the cost of H-frame construction and the cost of steel monopoles is approximately \$50,000 per monopole structure, depending on conditions at specific locations along the route. With placement of poles approximately every 900 feet along the route, the total cost differential for steel monopole construction throughout the southern portion of the route would be approximately \$4M, an increased cost over the current design that would be borne by Vectren ratepayers and the ratepayers of other Midwest ISO members with no improvement to regional reliability and with delays for additional design and other technical considerations.

Vectren would note that specific impacts to properties along Vectren's proposed route, including for example impacts based on the location or design of support structures, are factors routinely considered in calculation of easement values, and compensation to property owners. Vectren also negotiates with property owners regarding structure placement to the extent that specific property owner requests can be accommodated within the project design parameters. Vectren would further note that the Chair of the Siting Board specifically acknowledged that such considerations fall outside the jurisdiction of the Siting Board, in his opening remarks at the Public Hearing held in Henderson, KY, on September 2, 2010.

 Explain in detail whether Vectren considered co-locating its proposed transmission line in HMP&L's existing right-of-way and on HMP&L's existing support structures.

a. If "yes," explain in detail why Vectren determined not to co-locate its proposed transmission line in HMP&L's existing right-of-way and on HMP&L's existing support structures.

b. If "no," explain in detail why Vectren did not consider co-locating its proposed transmission line in HMP&L's existing right-of-way and on HMP&L's existing support structures.

Witness: Larry Rogers

RESPONSE:

Please refer to Vectren's Responses to Henderson Municipal Power & Light (HMP&L) First Data Request dated September 3, 2010, as well as to Vectren's Responses to Siting Board Staff's First Data Request dated September 1, 2010, wherein Vectren's consultations with HMP&L have been outlined, including a closed session presentation to HMP&L in September 2009 and a series of consultations thereafter.

Co-location of lines in this instance is inconsistent with good utility practice and highly impractical under these circumstances. Co-location (moving existing lines onto the new poles) would take a potential NERC N-1 planning contingency (planning for a one facility failure) and create a potential N-2 planning contingency (planning for a two facilities failure on one set of poles). This would creating a potential incremental threat to system reliability and regional reliability that is counter to the reasons for undertaking a baseline reliability project such as this one in the first place. Put simply, if Vectren were to use a co-location design, the region would end up with two transmission lines dependent on the structural integrity of

a single set of poles, instead of two transmission lines on two separate sets of poles. Given the debilitating ice storm, the windstorms, and tornadoes which our region endured during the last 4 years, such an approach would not serve the reliability goals of this line from a transmission planning and operations perspective. Vectren could agree, in the abstract, that joint construction could serve certain land use and aesthetic considerations, but from an electric reliability perspective, it adds no value (and indeed diminishes value) in this specific project.

Additionally, it is neither feasible not practical for the HMP&L 161 kV line to be taken out of service for the length of time necessary for construction of Vectren's proposed line. See Response to Data Request Question 6, below.

Despite these compelling arguments against co-location, in the interest of attempting to secure a Kentucky utility partner, such as HMP&L or Big Rivers, Vectren did consider, and did discuss with HMP&L, the possibility of co-location of the Vectren transmission line within HMP&L's existing right of way. Vectren did not, for technical reasons, consider locating on existing HMP&L structures (HMP&L's structures cannot accommodate Vectren's proposed line), but Vectren did discuss with HMP&L the possibility of relocating HMP&L lines on Vectren structures within HMP&L's existing right of way (see response to Question 3, below). Vectren and HMP&L could not reach agreement on terms for any potential co-location. HMP&L representatives indicated to Vectren and Siting Board staff as recently as during the settlement negotiations in October 2010 (as well as to Vectren in discussions prior to that time) that HMP&L would not allow Vectren to encroach on existing HMP&L easements for any reason not even for guy wires supporting structures in Vectren's adjacent easements. Consequently, Vectren's route has been designed so that its right of way abuts but does not overlap HMP&L's existing easements.

3. Explain in detail whether Vectren considered co-locating its proposed

transmission line in HMP&L's existing right-of-way and on new support

structures.

a. If "yes," explain in detail why Vectren determined not to co-locate its

proposed transmission line in HMP&L's existing right-of-way and on

new support structures.

b. If "no," explain in detail why Vectren did not consider co-locating its

proposed transmission line in HMP&L's existing right-of-way and on

new support structures.

Witness:

Michael W. Chambliss

RESPONSE:

See Response to Data Request Question 2, above, and Question 4, below.

Vectren discussed with HMP&L the possibility of relocating HMP&L lines

on new structures within existing HMP&L easements. Vectren and HMP&L

did not reach agreement on such an arrangement; nor, as discussed in

responses above and below, is such an arrangement technically feasible

for this project.

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4. Explain in detail whether there are any reliability contingencies that influenced Vectren's decision not to co-locate the proposed transmission line with HMP&L's 161 kV transmission line in the same right-of-way and on the same support structures.

Witness: Michael W. Chambliss

RESPONSE:

Yes, reliability concerns did indeed drive Vectren's decision to not pursue co-location. Specifically, Vectren's 345 kV transmission line was designated by the Midwest Independent Transmission System Operator (Midwest ISO) as a baseline reliability project. Vectren's 345 kV transmission line reduces or eliminates north-south line congestion in a region recognized by the US Department of Energy as one of the fifty most congested areas in the Eastern Interconnect.

If Vectren's line, which has been designed to enhance electric reliability in the Southwest Indiana / Northwest Kentucky region, were to be co-located with any existing transmission line, that reliability enhancement would be significantly diminished. See specific reliability considerations discussed in response to Data Request Question 2, above.

TAB 5

5. Explain in detail the difference in cost between constructing the transmission line as proposed by Vectren and constructing the transmission line in the same right-of-way and on a single set of steel monopoles with HMP&L's 161 kV transmission line.

Witness: Larry RogersRESPONSE:

Reliability considerations outlined above, as well as practical considerations also outlined above render the premise of this question highly speculative. Nonetheless, Vectren will attempt to outline the construction cost differential between Vectren's project as proposed in Vectren's Amended Application to the Siting Board and the shared easement and monopole hypothetical in this question. Vectren specifically notes that it cannot support the premise of this hypothetical from either a reliability or timing standpoint, as the premise significantly diminishes the reliability benefits of the project as proposed by Vectren.

Nonetheless, the difference in cost Vectren would anticipate based on the hypothetical question would include the following elements in addition to the materials cost differential of \$4M noted in answer to Data Request Question 1, above: steel H-frame poles may be installed directly in the ground in contrast with steel monopoles, which must be installed in concrete foundations sufficiently robust to support not only the Vectren 345 kV transmission line but also another utility's 161 kV transmission line. The construction cost difference would increase the initial materials cost for steel monopoles by three fold (to approximately \$150,000 per pole for the length of the co-location), thus increasing the costs estimated in response to Question 1 by between double to triple, or \$8M to \$12M. Moreover, if Vectren were required to pay for the removal of the existing HMP&L lines (and not just their transfer to the new poles, that cost would be closer to \$10M- \$15M). In addition to the significant cost differential between steel monopoles and H-frames structures, in this hypothetical co-

location scenario, Vectren would also incur significant additional design costs. In total, such significant cost overruns could jeopardize the feasibility of this project and thus deprive customers and utilities in the region of the interstate reliability benefits of this project.

Additionally, this question assumes that Vectren could somehow enlist the cooperation of a non-jurisdictional municipal electric utility, which is also highly speculative. See, for example, Vectren's Responses to Henderson Municipal Power & Light First Data Request dated September 3, 2010, as well as to Vectren's Responses to Siting Board Staff's First Data Request dated September 1, 2010. Given the demonstrated importance of this project to regional reliability, and the benefits that the Commonwealth of Kentucky will receive upon the project's completion, the project should not be delayed in an attempt to foster a different approach to the project than the one that has been presented herein.

6. Assuming, hypothetically, Vectren had designed its proposed transmission line to be in the right-of-way and on the same set of support structures as HMP&L's existing 161 kV transmission line, explain in detail the construction process, including a general description of the timeline such construction process would follow.

Witness: Larry Rogers

RESPONSE:

Vectren would anticipate significantly increased costs and delays to accomplish any such construction. If the HMP&L 161 kV transmission line were de-energized during that 9-12 month construction period (assuming that Vectren and utilities presently not parties to this proceeding could reach some consensus that would allow such an arrangement) the region would experience significant inconvenience, to and including increased risk of periodic power outages because the area would be reduced to a single feed. This would create risks to regional reliability that Vectren's project as proposed in Vectren's Application and Amended Application to the Siting Board would not create. In fact, as proposed by Vectren, this project enhances regional reliability with no time period of increased risk to regional reliability.

In the alternative, as hypothesized in the Question and without regard to the feasibility of such a scenario, if Vectren were to attempt to construct with the HMP&L 161 kV transmission line energized, additional significant construction and safety risks as well as significant costs (approximately double the estimated labor costs or an additional incremental cost of \$5M) would need to be managed.

Vectren could not meet its current estimated in service date of mid-2012 if either of these hypothetical scenarios in Questions 6 or 7 were to be undertaken. Vectren has planned for a 2012 in service date to address

specific regional reliability and planning considerations, which, in the event of regulatory, design and construction delays such as those suggested by these questions, Vectren would be forced to address in other ways.

7. Would HMP&L's existing 161 kV transmission line have to be deenergized in order for Vectren to move the HMP&L transmission line into one right-of-way and onto the same set of support structures with Vectren's proposed transmission line?

a. If "yes," explain in detail whether de-energizing HMP&L's existing 161 kV transmission line would affect electric service or reliability in the region while the construction process was underway.

b. If "yes," how long would HMP&L's existing 161 kV transmission line have to be de-energized during such construction?

Witness: Larry Rogers

RESPONSE:

Yes. See response to Data Request Question 6, above.

8. Assuming, hypothetically, Vectren had designed its proposed transmission line to be located in the same right-of-way and on the same set of support structures as HMP&L's existing 161 kV transmission line, explain in detail the operational and maintenance issues which might arise from having two sets of transmission lines owned and operated by two separate utilities (Vectren and HMP&L) located on the same set of support structures.

Witness: Michael W. Chambliss

RESPONSE:

Significant, on-going and extensive cooperation between two utilities would be required to maintain and operate transmission lines in such a scenario.

Specific concerns include on-going surveillance, maintenance and vegetation management for the lines as required under the NERC Reliability Standards. Vectren would be responsible for compliance with those Standards on its own line, and, as a practical matter, would need to take responsibility for coordinating compliance with those Standards for any line attached to Vectren's structures. That means that two separate NERC Regional Entities (RFC for Vectren and SERC for HMP&L) would be monitoring this NERC reliability compliance activity.

While HMP&L has indicated recently that it is indifferent to Vectren's proposed line insofar as the line has no impact (or any impact has been mitigated) on the HMP&L system, the potential that such cooperation could be problematic in the long-term is significant. See Vectren's Responses to Henderson Municipal Power & Light First Data Request dated September 3, 2010, as well as to Vectren's Responses to Siting Board Staff's First Data Request dated September 1, 2010.

CERTIFICATE

I certify that the responses set out above are true and accurate to the best of my knowledge, information and belief, formed after reasonable inquiry.

William S. Doty, President

Southern Indiana Gas & Electric Co. d/b/a Vectren Energy Delivery of

Indiana, Inc.

CERTIFICATE OF SERVICE

I certify that the original and one copy of the foregoing was served via HAND DELIVERY on the following:

Mr. Jeff Derouen
Executive Director
Kentucky Public Service Commission
Kentucky State Board on Electric Generation & Transmission Siting
211 Sower Boulevard
P.O. Box 615
Frankfort, KY 40602-0615

And I hereby certify a true and accurate copy of the foregoing was filed electronically with the Kentucky State Board on Electric Transmission and Siting, c/o the Kentucky Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40601.

Done this 13th day of December, 2010

Jason R. Bentley

McBrayer, McGinnis, Leslie & Kirkland, PLLC

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