BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Grain Belt Express Clean Line LLC for a Certificate of Convenience and Necessity Authorizing it to Construct, Own, Operate, Control, Manage, and Maintain a High Voltage, Direct Current Transmission Line and an Associated Converter Station Providing an Interconnection on the Maywood-Montgomery 345 kV Transmission Line	)	Case No. EA-2016-0358

GRAIN BELT EXPRESS CLEAN LINE LLC'S
FIRST SET OF DATA REQUESTS DIRECTED TO
SHOW-ME CONCERNED LANDOWNERS WITNESS PAUL GLENDEN JUSTIS, JR.

RESPONSES

PGJ.1: With reference to page 6 lines 20-22 of your testimony, please provide all documentation and the relevant sections in the documentation that support or that you have relied upon to base your conclusion that all "existing and future wind energy delivery needs of utilities in western Missouri are being satisfied by the existing grid and by projects already under development in coordination with SPP."

Response: In my testimony, I did not use the word "all". Please refer to 1) my rebuttal testimony beginning on page 7, line 10 (discussion of FERC requirements concerning obligations of RTOs to provide transmission service) and 2) https://www.spp.org/engineering/transmission-planning/integrated-transmission-planning.

PGJ.2: With reference to page 6 lines 22-23 of your testimony, please provide all documentation and the relevant sections in the documentation that support or you have relied upon to base your conclusion that all "existing and future wind energy delivery needs of utilities in eastern Missouri are being satisfied by the existing grid and by projects already under development in coordination with MISO."

Response: In my testimony, I did not use the word "all". Please refer to 1) my rebuttal testimony beginning on page 7, line 10 (discussion of FERC requirements concerning obligations of RTOs to provide transmission service) and 2) https://www.misoenergy.org/Planning/TransmissionExpansionPlanning/Pages/MTEP16.

PGJ.3: With reference to page 7 lines 2-4 of your testimony, please list all wind projects from which Union Electric Company d/b/a Ameren Missouri, Great Plains Energy, Inc., and Associated Electric Cooperative, Inc. purchase wind energy.

Response: The ones of which I am aware are:
Ameren Missouri: Pioneer Prairie

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Great Plains: Spearville, Cimmarron, Slate Creek, Gray County Wind, Ensign Wind
Associated Electric: Bluegrass Ridge, Conception, Cow Branch, Flat Ridge 2, Lost Creek, Osage

PGJ.4: With reference to the answer to the preceding item, please state to your knowledge what these three power suppliers pay for each MWh of energy purchased from these wind projects.

Response: I have no information on the prices paid.

PGJ.5: With reference to page 7 line 10 to page 8 line 5 of your testimony, have you performed any engineering or economic analysis that shows that acquiring transmission service through existing RTOs and delivering wind power is more cost-effective than acquiring service through Grain Belt Express? If so, please provide these analyses.

Response: I have not performed such an analysis.

PGJ.6: With reference to page 8 lines 17-19 of your testimony, please:
a) Provide any engineering or economic analysis that supports or you have relied upon to base your conclusion that conventional AC-based transmission is the most economical method of delivering wind energy to Missouri.
b) State the transmission path or paths that you believe could move wind power from Kansas to Missouri over the existing AC system.
c) Provide any and all evidence you have relied upon that transmission service is available on the transmission path(s) described in (b), above.
d) Are you aware of any transmission lines under development that are substantially similar to the AC lines described in your testimony? If so, please provide information of the development status of these projects, including the schedule, estimated costs and status of regulatory approvals.

Response:
a) Please refer to the document referenced in my testimony.
b) If the question pertains to source/sink pairs, there are many combinations and I do not currently have information on the specific names. If the question pertains to physical flow along a path, the transmission system does not work in this manner.
c) Please refer to my answer to questions PGJ.1 and PGJ.2.
d) For information on transmission facilities in development in SPP and MISO, please refer to:
https://www.spp.org/engineering/transmission-planning/integrated-transmission-planning
https://www.misoenergy.org/Planning/TransmissionExpansionPlanning/Pages/MTEP16

PGJ.7: With reference to page 12 lines 12-14 of your testimony, please provide any and all documentation that supports your view that when utilities in SPP and MISO analyze new wind generation resources to incorporate into their portfolio, they add the cost of supplemental capacity in the manner you have outlined.

Response: I view this as common industry practice, and as being consistent with fundamental electric utility economics as influenced by regional planning reserve requirements. It is also consistent with the rebuttal testimony of Dr. Michael Proctor in the prior case (Case No. EA-2014-0207), page 16. I do not have further documentation on this, nor am I aware of whether or not other references might exist.

PGJ.8 Please provide a complete explanation for the assumptions used for:

a) The Terrain Factor, in the workpaper "GJustis GBX Testimony Support Calcs HC," the tab "Line Cost Estimates" cells E5 and E16, including any analysis you performed on the Grain Belt Express route;
b) The AC line rated capacity, in the workpaper "GJustis GBX Testimony Support Calcs HC," the tab "Line Cost Estimates" cell G14;
c) The Capital cost when GJ Adjustments are applied, in the workpaper "GJ Adjustments to Berry Model HC," the tab "Missouri Wind" cell D8;
d) The Year 1 O&M when GJ Adjustments are applied, in the workpaper "GJ Adjustments to Berry Model HC," the tab "Missouri Wind" cell D13;

Response:
a) The terrain factor is an approximate factor based on Table 2.5 of the reference in Schedule PGJ-01 of my rebuttal testimony, "CAPITAL COSTS FOR TRANSMISSION AND SUBSTATIONS - Updated Recommendations for WECC Transmission Expansion Planning, B&V PROJECT NO. 181374, PREPARED FOR Western Electricity Coordinating Council, FEBRUARY 2014".
b) I do not currently have information on the specific rating of the line that this analysis reflects.
c) I did not modify this value in the "Apply GJ Adjustments" case.
d) I did not modify this value in the "Apply GJ Adjustments" case.

PGJ.9: With reference to page 15 lines 24-26 of your testimony, did you produce your own analysis to calculate the Levelized Avoided Cost of Electricity (LACE) for the specific resources used in your analysis?

Response: I have not performed my own LACE analysis for this case.

PGJ.10: With reference to page 15 line 32 to page 16 line 5 of your testimony, are you aware of whether Ameren Missouri included the production tax credit for wind energy in its analysis?

Response: No.

PGJ.11: Do you agree that it is valuable for utilities to have multiple generation alternatives and options to serve their customers? If the answer is anything than an unqualified yes, please explain the full basis for this answer.

Response: Yes

PGJ.12: Regarding the statement on page 8, line 4 of your testimony that: "There is adequate transmission service through the existing RTO structure":
a) In this statement, what is the meaning of the word "adequate"?
b) Is your position that the transmission service referenced in this statement is available today, without any transmission upgrades?
c) If the answer to part (b) is yes, please provide the engineering or other analyses that are the basis for this view.
d) If the answer to part (b) is no, have you performed any cost estimates of the necessary upgrades? If so please provide these cost estimates, including documentation for relevant assumptions.

Response:
a) The customary meaning. Please refer to Merriam-Webster or other reliable dictionary for further information.
b) No.
c) n/a
d) I have not performed such analysis.

PGJ.13: With reference to your statement on page 20, line 13-14, "If Clean Line desires to develop a competing service to the existing transmission grid, it should not do so under the authority of a CCN. Clean Line should be required to negotiate with whatever private parties are necessary to obtain the land and other resources needed to pursue the project":
a) Is it your opinion that Grain Belt Express could construct, own and operate the Grain Belt Express Project without a CCN from the Missouri Public Service Commission?
b) Who do you believe should "require" Clean Line Energy to negotiate per your recommendation?
c) Is it your position that Clean Line Energy on behalf of Grain Belt Express has not negotiated with private parties? If so, please state the basis of your belief and provide any documents that support this belief.

Response:
a) I have no opinion on this.
b) The general principles of free markets and property right should require this.
c) I have no information on whether or not Clean Lean Energy has negotiated with private parties.

PGJ.14: If a utility already has sufficient dispatchable capacity to meet its reserve margins, would it still be necessary for that utility to add new, dispatchable resources for each MW of wind power added to its portfolio? If the answer is anything other than an unqualified no, please state the full basis for this position.

Response: No.

Paul Glenden Justis, Jr. 2/23/17

Paul Glenden Justis, Jr. **Date**