Exhibit No.: 402
Issues: Negative Impacts to Farming
And Ranching Operations
Witness: John E. Turner
Sponsoring Party: Show-Me Concerned Land Owners
Type of Exhibit: Rebuttal Testimony
Case No.: EA-2016-0358
Date Testimony Prepared: January 24, 2017

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

FILED
April 4, 2017
Data Center
Missouri Public
Service Commission

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	Case No. EA-2016-0358
Current Transmission Line and an Associated Converter)	
Station Providing an Interconnection on the Maywood-	
Montgomery 345 kV Transmission Line)	

REBUTTAL TESTIMONY OF

JOHN E. TURNER

ON BEHALF OF THE

SHOW ME CONCERNED LANDOWNERS

JANUARY 24, 2017

Show-me Exhibit No. 403
Date 3.24.17 Reporter A F
File No. EA. 2016.0358



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2	OF THE STATE OF MISSOURI	
3 4	REBUTTAL TESTIMONY OF	
5	JOHN E. TURNER	
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7	SHOW ME CONCERNED LANDOWNERS	
8	JANUARY 24, 2017	
9		
	Q. Please state your name, position and address.	
10	A. My name is John E. Turner. My address is 24397 Monroe Rd 250, Paris, MO 65275. I	
11	am self-employed as a soil and water conservation consultant, rancher, farm fence construction	
12	contractor and farm fence material retailer.	
13	Q. Please describe your experience and qualifications.	
14	Prior to retirement, I worked as a Soil Conservation Aid, Soil Conservationist and Grassland	
15	Conservationist for the Natural Resources Conservation Service in the U.S. Department of	
16	Agriculture (named Soil Conservation Service prior to 1994) for more than 38 years. I was	
17	assigned during that tenure to work in Grundy, Howell, Oregon, Butler, Holt, Atchison, Monroe	
18	Shelby, Chariton and Randolph Counties as well as multi-county areas in the Northeast and	
19	Central parts of Missouri. I also served as one of two State Grassland Conservationists serving	
20	the entire state of Missouri. I was District Conservationist in Monroe County for 18 years. I	
21	graduated with a B.S. in Agronomy from Northwest Missouri State University where I also	
22	engaged in graduate studies in Soil Science. I have completed coursework in agricultural	
23	irrigation at Three Rivers Community College. I am a former member of the Soil and Water	
24	Conservation Society, the Range Society, and the Missouri Association of Professional Soil	
25	Scientists.	

- 1 Q. On whose behalf are you appearing in this proceeding?
- 2 A. I am appearing on behalf of Show Me Concerned Landowners.
- 3 Q. Please describe the scope and purpose of your testimony.
- 4 A. I have reviewed the direct testimonies of Grain Belt Express' witnesses Lanz and Arndt
- as well as the "Missouri Agricultural Impact Mitigation Protocol," the "Missouri
- 6 Landowner Protocol" and the "Code of Conduct for Employees, Right-of-Way Agents,
- 7 and Subcontractor Employees." I have also reviewed the rebuttal testimony of Show
- 8 Me's witness Charles Kruse. I agree with the testimony of Mr. Kruse. I support his
- 9 testimony and have some additional comments to make in support thereof.
- 10 Q. Do you have any general comments to make regarding the "Missouri Agricultural
- Impact Mitigation Protocol," the "Missouri Landowner Protocol" and the "Code of
- 12 Conduct for Employees, Right-of-Way Agents, and Subcontractor Employees?"
- 13 A. Considerable mention is made in the testimonies of both Lanz and Arndt of the "Missouri
- Agricultural Impact Mitigation Protocol," the "Missouri Landowner Protocol" and the
- "Code of Conduct for Employees, Right-of-Way Agents, and Subcontractor Employees."
- These documents purport to be company policy to govern the way Clean Line will handle
- damages to land, conservation practices and infrastructure and how personnel will behave
- as they interact with landowners, tenants, and their agents and employees. There is not,
- however, any mention of these documents or policies in the "Transmission Line
- 20 Easement Agreement." I see no place where these documents are made binding on Grain
- Belt Express. These documents need to be made binding on Grain Belt Express.
- Therefore, I suggest that the Commission require Grain Belt Express to refer to these

documents in the "Transmission Line Easement Agreement" or impose them as a condition on the certificate if the certificate is granted.

Q. Do you have specific disagreements with Dr. Arndt's direct testimony?

Yes, I do. Dr. Arndt's testimony, on page 15, states that the 2014 Route Selection Study and the 2016 addendum to that study conclude that the route crosses no center pivot irrigation systems in Missouri. This is not true. In Monroe County alone I know personally of three center pivot systems that the proposed route crosses. Mr. Kruse provides additional information on this point.

Second, he states also at page 15, that the aquifers and soils in most of the Missouri counties crossed by the proposed line are not suitable for large-scale center pivot irrigation. This is not true. The western most four miles of the corridor crosses the Missouri River floodplain and large-scale center point irrigation is suitable in that location. The embayment aquifer offers water of sufficient quantity and quality for irrigation. For the remainder of the proposed route, subsurface aquifers are mostly insufficient for large-scale irrigation of any type, but surface water is more than adequate to make large-scale center pivot irrigation suitable.

Large-scale irrigation is feasible and practiced along and adjacent to the proposed route with the water source being surface water. The proposed route only crosses a few streams with dependable sufficient flow for irrigation. Dr. Arndt's mention of the Missouri River in Carroll and Chariton Counties and the Salt River in Monroe County is irrelevant since the proposed route is miles from the Missouri River, and the topography of the land near the Salt River in Monroe County is mostly unsuited to large-scale irrigation. This is also not true. Where the proposed line crosses the Salt River in Ralls

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County there are several tracts in the protected floodplain that are suitable to irrigate, and the river would be a dependable water source. One purpose of Mark Twain Lake (USACE) is domestic water supply; irrigation, however, is not a stated purpose, and withdrawals for irrigation would not be permitted.

Existing and future large-scale irrigation projects along the proposed line would depend, primarily, on surface reservoirs. Additional surface reservoirs could be developed along the route of the proposed project. Many such reservoirs and associated irrigation systems are in use along and near the proposed route. The geology, soils, and topography along the proposed route make construction of such reservoirs feasible virtually anyplace the proposed line crosses a water course with a drainage area less than 200-300 acres, if the adjacent farmland is suitable for irrigation. The inability to construct dams or impound water on the easement area would severely limit irrigation opportunities all along the route.

Based on the 1977 General Soil Map of Missouri by the Soil Conservation

Service about 57 percent of the proposed route crosses soils and topography suitable for irrigation. It is a misconception that land need be relatively flat for irrigation. For surface furrow or contour border irrigation that is true, but driving through Central Nebraska will show that sprinkler irrigation, including center pivots, is quite adaptable to land that is quite rolling.

Existing large-scale irrigation along the proposed route has been adopted based on economics at the time of development. Economics, rather than an available water source or suitable soils and topography, has been the driver. Many irrigation systems were installed during the 1970's because construction of reservoirs and irrigation systems were

relatively inexpensive, and the farm economy was relatively good. That essentially stopped with the 1980's and has been slow ever since. Land prices have increased tenfold; crop inputs have increased greatly. At the same time crop genetics, improved planting and harvesting machinery, and fertilizer and weed control technology have raised potential crop yields to nearly double what they were 40 years ago. In addition, the economic practicality of irrigation is also a function of the ability of the soil to hold water available to plants. Most of the soils along the proposed route have limited available water capacity. Everything east of Huntsville (Randolph County), in the Central Claypan Area, has very limited rooting depth and available water capacity; this makes the risk of crop yield limited by drought even greater. This means that the risk associated with an available water shortage has increased dramatically, making irrigation more critical. These circumstances bring about a resurgence in the interest in irrigation, and there is no doubt that the future will see an increased use of irrigation as a protection from drought.

Q. Do you have observations about Mr. Kruse's testimony?

Yes, I do. First, Mr. Kruse provides a good overview of the impact the proposed project will have on soil and water conservation. However, in some respects, the proposed project will affect soil and water conservation much more than indicated in the testimony of Mr. Kruse. Conservation practices that control erosion; manage water runoff; impound, extract from underground, pump, and distribute water for domestic and agricultural use and provide water to livestock; control livestock access and movement; store, pump, and convey animal waste and apply it to land, and provide water for

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recreation will all be affected. Most of these practices are not listed by Dr. Arndt on page 19 of his testimony.

Second, I want to reinforce Mr. Kruse's testimony about the cost of farming around the transmission line towers. To suggest that such cost is limited to land removed from production by the "footprint" of the towers themselves grossly undervalues the total effect. Many, even most, of the conservation plans on highly erodible land (HEL) require the operator to farm the land on the contour, usually guided by terraces. Consequently, the direction of farming and the alignment of the planting and tillage passes are strictly dictated by the terraces. Even if Grain Belt delivers on their promise to place structures to "minimize their interference with cropland" (Missouri Agricultural Impact Mitigation Protocol Item 4(B), page 6) and towers are located so they do not affect the function of existing terraces, the operator will still be forced to maneuver around the towers with very large equipment, up to 60 feet wide. The area that cannot be farmed with such equipment will be much larger than the "footprint," but another very large cost will be the loss of field efficiency and time.

Q. Do you have any observations regarding the "Transmission Line Easement Agreement?"

Yes, I do. First, it is of note that the "Transmission Line Easement Agreement," in Item 2, does not specifically limit the grantee to one transmission line. The absence of such specific language would make multiple lines within the 200-foot easement possible.

Second, item 3 of the "Transmission Line Easement Agreement" states, "Grain Belt shall, without being liable for damages, have the right from time to time, including after the initial construction of the Facilities, to: clear the Easement of all buildings or

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other structures..." The term "structures" is not defined. Since buildings are specified then structures must be something in addition to buildings. "Structures" may include any or all of the conservation practices as well as corrals and livestock feeding facilities. The unrestricted right in item 3(c) to cut trees outside the easement could effectively extend the boundary of the affected area another 100 feet on both sides—a 400' easement with no liability for damages.

Item 4 of the "Transmission Line Easement Agreement" states that Grain Belt will, at all times, have access through new fences by means of a gate. Item 3 says gates in existing fences will be installed at Grain Belt's expense, but Item 4 does not say that Grain Belt will bear the cost of the gate in a new fence. It is further stated that prior written permission to operate an existing well or to install any of the aforementioned conservation practices (by extension of the prohibited activities listed) "within, under, upon or over the Easement" which "will not be" unreasonably withheld." That leaves a farmer's ability to improve his land subject to the "reasonable" decisions of Grain Belt, a decision that is often dictated by one's perspective. It could be expected that Grain Belt's perspective of "reasonable" would not agree with that of the landowner or tenant in some cases.

Q. What are your conclusions?

A.

Much is made by Grain Belt Express of the "economic development" aspect of the proposed project. Obviously, Grain Belt's evidence is biased and self-interested. The discussion of economic development also attempts to influence decision makers that the state itself will receive a benefit in the form of additional income. This perspective is

coercive in that it attempts to influence decision makers to obtain a benefit for the state itself at the expense of the landowners.

From my perspective of the facts and circumstances in this case, the proposed project will severely limit the potential for the farmers to engage in the economic development of their own farms. Economic development can take many forms. For the farmers and ranchers, improving the infrastructure on their farms and ranches is critical to their economic development and their livelihood. If the Commission grants this application, it will be granting to Grain Belt Express the right to economic development at the cost of taking away the right of the landowners to engage in economic development. The landowners of the state have an existing right to their land. I don't believe it is appropriate for the Commission to grant Grain Belt a right to take their prior rights away from them for this line. The Commission should deny the application.

- Q. Does this conclude your testimony?
- 14 A. Yes, it does.

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Necessity Authorizing it to Construct, Own, Control,) Case No. EA-2016-0358
Manage, Operate 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)
AFFIDAVIT OF JOHN E.	TURNER
STATE OF MISSOURI)	
M) ss	
COUNTY OF Monroe	

John E. Turner, being first duly sworn on his oath, states:

- 1. My name isJohn E. Turner.
- 2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Show Me Concerned Landowners, consisting of 9 pages, having been prepared in written form for introductioninto evidence in the above-captioned docket.
- 3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answerscontained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

John E. Turner

Subscribed and sworn before me this 23rd day of January, 2017.

KIM CRIST

Notary Public - Notary Seal

STATE OF MISSOURI

Monroe County

My Commission Expires: April 3, 2020

Commission # 16001553

Notary Public

Kim CRIST