#### BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of Ameren Transmission ) Company of Illinois for Other Relief or, in the Alternative, ) a Certificate of Public Convenience and Necessity ) Authorizing it to Construct, Install, Own, Operate, ) Maintain and Otherwise Control and Manage a ) 345,000-volt Electric Transmission Line from Palmyra, ) Missouri, to the Iowa Border and Associated Substation ) Near Kirksville, Missouri.<sup>1</sup> )

File No. EA-2015-0146

### ATXI'S INITIAL POST-HEARING BRIEF

James B. Lowery, Mo. Bar #40503 Michael R. Tripp, Mo. Bar #41535 SMITH LEWIS, LLP P.O. Box 918 Columbia, MO 65205-0918 (T) 573-443-3141 (F) 573-442-6686 lowery@smithlewis.com tripp@smithlewis.com

and

Jeffrey K. Rosencrants, Mo. Bar #67605 Edward Fitzhenry, *pro hac vice* Eric Dearmont, Mo. Bar #60892 Ameren Services Company One Ameren Plaza 1901 Chouteau Avenue P.O. Box 66149 (MC 1310) St. Louis, MO 63166-6149 (T) (314) 554-3955 (F) (314) 554-4014 jrosencrants@ameren.com edearmont@ameren.com

<sup>&</sup>lt;sup>1</sup> The project for which the CCN is sought in this case also includes a 161,000-volt line connecting to the associated substation to allow interconnection with the existing transmission system in the area.

# **TABLE OF CONTENTS**

I.	INTRODUCTION 1							
	A.	Nature	e of Req	uest 1				
	B.	The Neighbors' Opposition						
II.	THE TARTAN CRITERIA ARE SATISFIED							
	A.	Tartan	Criteria	a No. 1 - Need for the Facilities				
		i.	The M	VP Portfolio and Mark Twain-Specific Cost-Benefit Analyses9				
		ii.	The pr	ospects for wind development are in fact good 12				
		iii.	Reliab	ility Benefits				
		iv.	Other	Benefits 25				
	B.	Tartan Criteria Nos. 2 and 3 - Qualifications/Financial Ability						
	C.	Tartan Criteria No. 4 Economic Feasibility						
	D.	Tartan	Criteria	a No. 5 - The Public Interest				
		i.		MF from the proposed transmission line does not pose a threat to health				
		ii.	-	oposed transmission line route minimizes the adverse effect on the nmental habitats				
		iii.		sign and route of the proposed transmission line poses only a de is impact on farming practices				
			a.	The amount of agricultural property removed from production totals less than one acre				
			b.	The presence of a transmission line bisecting an agricultural parcel has a minimal impact on its agricultural use				
			c.	Construction activities will not result in permanent destruction of agricultural properties				
			d.	The presence of transmission lines does not interfere with the operation of GPS-guided farm or aerial application equipment 44				

			e.	The Mark Twain transmission line does not impact current pivot irrigation systems and will not preclude the installation of future systems		
			f.	Easements on CRP property will not result in the cancellation of CRP contracts		
		iv.	The proposed transmission line route has only a minimal impact on Ami and Mennonite communities in the area			
		v.	The proposed transmission line does not significantly impact land value along the proposed route			
III.	DISCUSSION OF STAFF CONDITIONS					
	A.	Staff C	Conditions 1, 3 to 7 5			
	B.	Staff C	ff Condition 2			
		i.	Count	y Assents		
			a.	There are no franchise/municipal consent requirements in this sub- section 1 line certificate case		
			b.	Even if there were no distinction between a sub-section 1 and sub- section 2 CCN, and assuming section 229.100 applies, under the facts of this case section 229.100 is not the kind of franchise contemplated by section 393.170		
		ii.		ommission should not otherwise condition ATXI's ability to uct the Project		
			a.	County Assents		
			b.	Other Permits		
CERT	'IFICA'	FE OF S	SERVIC	2E		

**COMES NOW** Ameren Transmission Company of Illinois ("Company" or "ATXI"), and, as provided for in the Commission's November 25, 2015 *Order Granting Motion to Amend Procedural Schedule*, hereby files its initial post-hearing brief, as follows:

#### I. <u>INTRODUCTION</u>

#### A. <u>Nature of Request</u>

Before the Commission for decision is ATXI's request for permission and authority to construct an approximately 95-mile long, 345 kilo-volt ("kV") transmission line (and an associated 345/161-kV substation and a 2.2 mile 161-kV connector line) in northeast Missouri (the "Mark Twain Project" or "Project"). The Project comprises most of two (out of 17) Multi-Value Projects ("MVPs") approved by the Midcontinent Independent System Operator, Inc. ("MISO") Board of Directors in December 2011 through the FERC-approved MISO Transmission Expansion Plan ("MTEP") process.<sup>2</sup>

Participants in the MTEP process that led to MISO's Board of Director's approval of the Project, as well as the remainder of the projects that comprise the MVP portfolio, include the various operators of transmission systems throughout MISO's footprint, state regulators, the Organization of MISO States, public consumer advocates, environmental representatives, independent power producers and others.<sup>3</sup> The MTEP process is required to meet the requirements of FERC Orders 890-B and 1000, including that it be open and transparent, include regional participation and utilize economic planning studies and cost allocation principles.<sup>4</sup> Through its processes, MISO coordinates transmission planning for its entire footprint, in

<sup>&</sup>lt;sup>2</sup> With the exception of a portion of one of the 17 MVPs located in Wisconsin and this Project, all required state approvals for the MVP portfolio have been obtained, and much of the portfolio is under construction. Tr., Vol. 9, p. 623, l. 20-22; see also Exh. 82.

<sup>&</sup>lt;sup>3</sup> Exh. 35, p.4, l. 10-19 (J. T. Smith Surrebuttal).

<sup>&</sup>lt;sup>4</sup> *Id.*, p.2, l. 14 – p. 3, l. 7, including footnotes 1 and 2.

collaboration with entities such as those listed above, and also provides an independent perspective of the needs of the overall transmission system.<sup>5</sup>

The pending request is brought under section 393.170.1, RSMo<sup>6</sup> and is a "line certificate" request of the type addressed in State ex rel. Harline v. Pub. Serv. Comm'n, 343 S.W.2d 177, 182 (Mo. App. W.D. 1960). In such a request, the only question for the Commission is whether or not the construction is "necessary or convenient for the public service."<sup>7</sup> That statutory standard, as consistently applied by this Commission and the courts, boils down to whether the proposed improvement is worth the cost. The standard does not require that the improvement be "absolutely indispensable" in the sense that there would be no electric service without the improvement. State ex rel. Intercon Gas, Inc. v. Pub. Serv. Comm'n, 848 S.W.2d 593, 597 (Mo. App. W.D. 1993), citing State ex rel. Beaufort Transfer Co. v. Clark, 504 S.W.2d 216, 219 (Mo. App. W.D. 1973). Instead, the law is that "[i]f it [the Project] is of sufficient importance to warrant the expense of making [building] it, it is a public necessity" within the meaning of section 393.170. State ex rel. Mo., Kan. & Okla. Coach Lines, 179 S.W.2d 132, 136 (Mo. App. W.D. 1944) (emphasis added). Put another way, the question is whether the benefits of the improvement are worth its costs? The evidence in this case overwhelmingly establishes that the answer to that question is "yes." That being so, the Project is a public necessity within the meaning of section 393.170.

Approval of the Project is supported by every party to this case – save one – including the Staff of the Commission, the Office of the Public Counsel, United for Missouri, Inc., the

<sup>&</sup>lt;sup>5</sup> *Id.*, p. 4, l. 10-20.

<sup>&</sup>lt;sup>6</sup> All statutory references are to the Revised Statutes of Missouri (2000), unless otherwise indicated.

<sup>&</sup>lt;sup>7</sup> Section 393.170.3.

International Brotherhood of Electrical Workers and MISO itself.<sup>8</sup> The one party opposing the Project is principally a group of landowners and others in northeast Missouri that call themselves "Neighbors United Against Ameren's Power Line" (the "Neighbors"). The primary bases for the Neighbors' opposition are (a) that the so-called "Right-to-Farm" constitutional amendment adopted in 2014 completely bans any infrastructure project that takes even a fraction of an acre of farm or ranch land out of production, (b) that the cost of solar generation in the future will be such that there will be no need for the Project, (c) that the Project is not in the landowners' interests.<sup>9</sup> ATXI will address each of these arguments, and explain why they fail to withstand scrutiny.

The Staff has proposed seven conditions, six of which have been fully resolved and agreed upon between the Staff and ATXI and are uncontroversial (Conditions 1, 3 to 7). The second condition, dealing with the possibility that statutory authority *outside* the PSC Law requires certain permission from county authorities in order for the transmission line to be strung above roads in the counties,<sup>10</sup> is a point of dispute – a purely legal dispute – between the Staff and ATXI. ATXI will address this legal issue in detail below. However, the Staff agrees that the *Tartan<sup>11</sup>* criteria, on which the Commission typically evaluates these cases, support approval of the Company's application and have been satisfied in full by the Company's application. The

<sup>&</sup>lt;sup>8</sup> The Missouri Industrial Energy Consumers intervened, but have not participated in the case and requested to be excused.

<sup>&</sup>lt;sup>9</sup> Position Statement of Neighbors United [EFIS Item No. 150].

<sup>&</sup>lt;sup>10</sup> Not a single structure or component of the transmission line will actually be located within any public road rightof-way, but instead only the wires themselves will be suspended far above the roads. There remains a question regarding whether, on those facts, any county permissions are required, but given the vintage of the statute at issue (section 229.100, adopted in 1903, and changed little to this day) and the complete absence of case law applying it, ATXI intends to ask the counties for permission, as is its custom in such matters.

<sup>&</sup>lt;sup>11</sup> In Re Tartan Energy, GA-94-127, 3 Mo.P.S.C.3d 173, 177 (1994).

Staff has also stated that the Commission can and should decide the merits in favor of the application now.<sup>12</sup>

## B. <u>The Neighbors' Opposition<sup>13</sup></u>

The Neighbors first claim that Missouri's "Right-to-Farm" amendment<sup>14</sup> means that unless each and every person with an interest in all of the 377 parcels over which easements are needed to build the Project agrees to grant an easement, the Project cannot be built at all. This is the Neighbors' claim about what the amendment means, as outlined by the Neighbors' counsel in the opening statement:

- Q. So you are taking the position that this is an absolute right?
- A. Yes.
- Q. That's not balanced by anything at all?
- A. Not according to the Missouri Constitution.

\* \* \*

- Q. As a practical matter, would your interpretation of the right to farm result in or would it prevent any further transmission in rural Missouri?
- A. I if they were to cross farmland, yes, I do believe so.<sup>15</sup>

As the Chairman's questions to Neighbors' counsel indicate, the logical extension of this truly extreme reading of the amendment, if applied to a myriad of other rights guaranteed by the federal and state constitutions, would be that every constitutional right is literal and absolute. Under the Neighbors' reading, individuals *could* lawfully yell fire in a crowded theater, fully protected by the Free Speech Clause, and felons *could* lawfully possess firearms,<sup>16</sup> fully

<sup>&</sup>lt;sup>12</sup> Staff's Positions, p. 5 [EFIS Item No. 148].

<sup>&</sup>lt;sup>13</sup> To be clear, the Neighbors are not just opposing the route of the Project, but they are obviously opposing the Project in its entirety. This is shown by their principal arguments, which if adopted would mean that the line is not built at all: a. the Right-to-Farm amendment; b. the claim that only solar generation that they claim would not need transmission will ever be built (and thus, the Project is not needed at all); and (c) the claim that the line is not needed to solve reliability concerns in northeast Missouri.

<sup>&</sup>lt;sup>14</sup> Mo. Const. art. I, § 35, adopted in 2014.

<sup>&</sup>lt;sup>15</sup> Tr., Vol 5, p. 85, l. 9-15; p. 86, l. 13-18 The Neighbors have made similar arguments in an attempt to obtain a complete dismissal of this case without any consideration by the Commission of the merits of the transmission line. *Neighbors United's Motion to Dismiss Application* [EFIS Item No. 45].

<sup>&</sup>lt;sup>16</sup> The Missouri Supreme Court just decided (on February 9, 2016) that even though the voters passed a constitutional amendment the same month as the Right-to-Farm amendment was passed that makes the right to bear

protected by the Right to Bear Arms. And as the Chairman's questions also point out, if the Neighbors' interpretation were correct, transmission could never again be built across a single piece of farm or ranch land, that is, without consent of every single owner whose lands would be impacted. The problem such an interpretation would create would not just exist for ATXI and would not just exist for new transmission lines. To the contrary, every electric service provider in the state, from Ameren Missouri to cooperatives and others, as well as every other utility provider (water, sewer, gas), would effectively be precluded from constructing infrastructure on a farm or a ranch unless that farmer or rancher consented. And the same thing would be true for other infrastructure, such as roads. Statutes and constitutional provisions are to be given a "common sense and practical" interpretation. *Concord Pub. House v. Dir. of Revenue*, 916 S.W.2d 186, 194 (Mo. *banc* 1986). It reflects neither common sense nor practicality to apply the Right-to-Farm amendment in a manner that cedes to one group – farmers and ranchers – total and final control over whether infrastructure that this Commission finds necessary or convenient for the public service can be constructed over farm or ranch land in this state.

Moreover, the plain language of the Right-to-Farm amendment fails to support the Neighbors' incredibly broad interpretation in any event. The amendment only guarantees a right to "engage in" farming and ranching practices. The right to engage in farming or ranching practices on a parcel is not eliminated simply because a single square foot of land is taken out of production by infrastructure, including transmission. Yet that is the Neighbors' claim.<sup>17</sup>

arms "unalienable" and states that it "shall not be questioned," nevertheless both violent and non-violent felons can be prohibited from bearing arms because of compelling state interests in ensuring public safety. *State of Missouri v. Clay*, Slip Op. (Mo. *banc*, Feb. 9, 2016) (Case No. SC 94954). Similarly, the state has a compelling state interest in ensuring that needed infrastructure can be built, subject of course to the payment of just compensation for rights needed to build it.

<sup>&</sup>lt;sup>17</sup> Less than an acre of land is actually taken out of production across the entire 95-mile route. Exh. 8, p. 5, l. 10-11 (Brown Surrebuttal).

As an alternative to their Right-to-Farm argument, the Neighbors lodge a two-pronged attack on the need for (i.e., the benefits of) the Project. The first prong is to essentially argue that the Project would only be needed (and would only provide benefits) if substantial quantities of wind generation will be built, and they claim that there is no need because of their consultant's (William Powers, P.E.) view of the relative cost of solar resources versus wind resources and his claim that the prospects for wind development are poor. The Neighbors' alternative claim of lack of need and benefits, which again is based upon their expert's<sup>18</sup> unproven (and indeed incorrect) claims about alternatives to solving reliability concerns in northeast Missouri, is a mixture of claims that the reliability concerns may not exist or be very serious, or that the Project is not needed to solve them. ATXI addresses each of these claims briefly here, and will elaborate on them further when addressing the *Tartan* criteria of "need" below.

To put it bluntly, Mr. Powers' claim that wind generation suffers from a significant cost disadvantage relative to solar generation and that the prospects for wind development (in the U.S., including in MISO) are "not good"<sup>19</sup> (and that therefore the Project is not needed) totally lacks credibility. His claims are rebutted by credible sources of information on solar and wind costs – sources upon which Mr. Powers himself relies when it suits him to do so. Moreover, his claim lacks credibility because at every turn, he picked facts and figures that support his hypothesis and mixed and matched them to suit his argument, while completely ignoring every piece of evidence that in any way contradicted his hypothesis that wind generation is and will be

<sup>&</sup>lt;sup>18</sup> "Expert" is placed in quotes here because, as the record shows, Neighbors' witness Powers has no education, training or experience in transmission planning or construction. Tr., Vol. 7, p. 357, l. 11 – p. 358, l. 12. In contrast, ATXI Sr. Director of Transmission Planning and witness Dennis Kramer, who testified extensively on these issues, has approximately 30 years of experience in these areas. Exh. 3, p. 1, l. 15 (Kramer Direct).
<sup>19</sup> Exh. 42, p. 34, l. 22-23 (Powers Rebuttal).

costlier than solar generation and, therefore, wind will not be built.<sup>20</sup> ATXI will address the evidence relating to these issues in greater detail below.

The alternative arguments underlying the Neighbors' attack on the need for and benefits of the Project also fail. While the Project is needed and beneficial even absent the reliability concerns that it addresses, it is made even more beneficial because it fully solves reliability concerns in northeast Missouri because of low-voltage conditions that could exist at peak times under several different contingency events. Mr. Powers hypothesized that the concerns could be ignored by "re-classifying" them (effectively treating them as if they are less serious), and also hypothesized that even if they were not ignored, they could be solved by installation of a piece of equipment called a static VAR compensator at Ameren Missouri's Adair Substation.

Mr. Powers merely speculates about re-classification, and re-classification will not reduce the risk that tens of thousands of customers in northeast Missouri could lose service if the lowvoltage conditions arise. Mr. Powers is also simply incorrect regarding the utilization of a static VAR compensator, as the analysis presented by Mr. Kramer shows.<sup>21</sup>

The bottom line is that there exist multiple analyses – an initial analysis conducted by MISO in 2011, an updated analysis conducted by MISO in 2014, and ATXI witness Dr. Todd Schatzki's specific Mark Twain Project analysis conducted in 2015 – that demonstrate significant benefits from the Project far in excess of its costs. The parties with an interest in improving the regional transmission system and gaining benefits for the state as a whole all recognize these benefits, and support the construction of the Project. The one party opposing it simply does not want to be impacted by the transmission line, and is willing to take extreme and

<sup>&</sup>lt;sup>20</sup> As discussed below, supporting low-cost wind development is not the only justification for the MVP portfolio in any event; regardless, the MVPs will support such development, and wind generation will most certainly develop. <sup>21</sup> Tr., Vol. 6, p. 209, l. 25 to p. 210, l. 24; Exh. 4HC, p. 36, l. 4 - p. 37, l. 23 (Kramer Surrebuttal). (Outlining in detail the result of the analysis that demonstrates that a static VAR compensator will not prevent the voltage collapse).

unsupportable positions on the law, and to sponsor consultant testimony from a solar power advocate who selectively relies on data he approves of (but ignores data from those same experts with which he chooses to disagree), in an obvious effort to prevent it from being built.

#### II. <u>THE TARTAN CRITERIA ARE SATISFIED</u>

In its *Tartan* decision, the Commission developed a list of criteria that it had generally applied in the past in evaluating whether a project is "necessary or convenient for the public service" within the meaning of that standard in section 393.170. These criteria have since been known as the "*Tartan* criteria," and are as follows:

- 1. Whether there is a need for the facilities and service;
- 2. Whether the applicant is qualified to own, operate, control and manage the facilities and provide the service;
- 3. Whether the applicant has the financial ability for the undertaking;
- 4. Whether the proposal is economically feasible; and
- 5. Whether the facilities and service promote the public interest.

#### A. <u>Tartan Criteria No. 1 - Need for the Facilities</u>

Every party except the Neighbors agree that the *Tartan* criteria of need is met in this case. Under the well-established standards governing when construction is "necessary or convenient for the public service,"<sup>22</sup> the evidence overwhelmingly confirms that the Project is needed. As noted earlier, "necessity" under the statute "does not mean 'essential' or 'absolutely indispensable"; instead, it basically means is the improvement worth its costs, which in turn largely turns on whether the benefits of the improvement – the Project here – exceed its costs. *Intercon Gas*, 848 S.W.2d 593 at 597. When those standards are met, which is clearly the case

<sup>&</sup>lt;sup>22</sup> Section 393.170.3.

here, then the project at issue *is* a public necessity within the meaning of the statute. *Mo., Kan.* & *Okla. Coach Lines*, 179 S.W.2d at 136.

#### *i.* The MVP Portfolio and Mark Twain-Specific Cost-Benefit Analyses.

The 17 projects that comprise the MVP portfolio were determined by MISO and the MISO Board of Directors to be necessary to facilitate the delivery of renewable energy, resolve numerous reliability issues, reduce transmission line losses and provide economic and efficiency benefits to customers throughout the MISO footprint. The portfolio is a "no regrets" portfolio, meaning it creates significant benefits in excess of costs across a wide variety of scenarios.<sup>23</sup> The MVP portfolio facilitates the delivery of new generation throughout the MISO footprint, including new combined cycle natural gas generation (since one of the routing considerations used by MISO in determining the location of the MVPs was the new transmission lines' proximity to natural gas pipelines).<sup>24</sup> The Project, like the portfolio as a whole, will also provide additional transmission capacity to facilitate the delivery of renewable energy resources both inside and outside of Missouri and will produce market efficiency benefits allowing load-serving entities to serve their customers at lower costs. As referenced earlier, that these benefits exist is proven by multiple cost-benefit analyses, the results of which are of record in this case.

The first such analysis was conducted by MISO as part of the MVP portfolio approval process, in which MISO evaluated the economics of the overall MVP portfolio under several scenarios. Those scenarios included two different "business as usual" cases (one with lower load growth and one using historical load growth), a scenario that combined the enactment of various state and federal energy policies, and that also included significant carbon-related regulation.<sup>25</sup> The MISO analyses were completed first in late 2011 when the MVP portfolio was approved,

<sup>&</sup>lt;sup>23</sup> Tr., Vol. 5, p. 179, l. 11-19; p. 194, l. 24 – p. 195, l. 2; Exh. 35, p. 20, l. 4-6.

<sup>&</sup>lt;sup>24</sup> Exh. 4HC, p. 40, l. 19-22; Exh. 35, p. 12, l. 2-4.

<sup>&</sup>lt;sup>25</sup> Exh. 35, Schedule JTS-1, p. 54.

and were then updated in 2014, as part of the triennial review required by MISO's FERCapproved tariff. The MISO analyses demonstrate that there exist significant MISO-wide benefits from the entire MVP portfolio in every single scenario that was studied, with benefits exceeding the costs throughout the MISO footprint by <u>1.8 to 3.0 times</u>. In fact, benefits for Missouri of the entire portfolio are slightly better than for the MISO footprint as a whole, at between <u>1.8 to 3.2</u> <u>times</u> the cost. As noted, these benefits were first determined in MISO's original MVP benefitcost analysis, and updated and confirmed in its 2014 triennial review, where the overall benefitcost ratios improvd somewhat from the 2011 study.

The second such analysis was performed by ATXI witness Dr. Todd Schatzki, who examined the specific case where the MVP portfolio was built (including the Mark Twain Project) versus the case where the other MVP projects were built but the Mark Twain Project was not built, also under a wide range of scenarios. Dr. Schatzki's analysis shows just how great the benefits to Missouri arising specifically from the Mark Twain Project are. According to the results of Dr. Schatzki's analysis, the benefits of the Project to Missouri are at least <u>24</u> times its costs to Missouri (and could be as much as <u>68</u> times its cost). This is owing to the fact that the Project is a linchpin to producing the overall benefits for the portfolio because it is a critical component of a new 345-kV transmission path from the northern and western parts of Missouri.<sup>26</sup>

The load-serving entities in MISO will pay transmission charges arising from all of the MVP projects; in Missouri's case, about 8% of the total.<sup>27</sup> This means that Ameren Missouri (primarily) and the City of Columbia (to a small extent) will pay about 8% of the charges arising

<sup>&</sup>lt;sup>26</sup> As MISO witness J.T. Smith testified, the Project is a "backbone" of the portfolio, and this is particularly true for Missouri, as Dr. Schatzki's analysis demonstrates. Exh. 35, p. 13, l. 2-9. The Staff agrees with the characterization of the Mark Twain Project as a backbone of the MVP portfolio. Tr., Vol. 5, p. 50, l. 23-25. <sup>27</sup> Exh. 1, p. 6, l. 7-10 (Borkowski Direct).

not just from the Project, but from all of the other MVPs. Under the filed-rate doctrine, Ameren Missouri and City of Columbia will be legally obligated to pay the transmission charges arising from the MVP portfolio even if the Project is not built.<sup>28</sup>

As can be readily seen from Dr. Schatzki's analysis, without Mark Twain, the very significant benefits enabled by the Project for Missouri (which are greater than the overall portfolio's benefits) would not exist because there would no longer be a connection to the larger MVP portfolio in Iowa or in eastern Missouri, which would mean that the planned transmission path from the more northerly and westerly parts of MISO (e.g., North Dakota/Minnesota) to more easterly portions (e.g., Indiana) would not be completed, in contravention of the fundamental design of the MVP portfolio. Failure to complete this path would thwart a significant portion of the MVP portfolio's reduction of production costs, its ability to contribute to the satisfaction of state renewable portfolio standards and other policy objectives and would undermine the MVP portfolio's overall role in helping to ensure the future reliability of the transmission system as a whole, both in Missouri and the MISO footprint in general. As Mr. Smith testified, the MTEP process produces a complex system designed to meet both short- and long-term needs of the bulk electrical system in a coordinated manner.<sup>29</sup> If a key element of the plan (and Mr. Smith indicates that Mark Twain is a "backbone") is not built, economic benefits are lost and alternative but less optimal reliability solutions will have to be developed.<sup>30</sup> As the record shows, if not built, the Mark Twain Project will fail to provide the contemplated connection to the 345-kV transmission in Iowa and beyond in MISO's footprint, including to other MVPs in the north and west part of MISO, and to the new Maywood switching station in Marion County, Missouri, which is included

 <sup>&</sup>lt;sup>28</sup> Montana-Dakota Util. Co. v. Northwestern Pub. Serv. Co., 341 U.S. 246, 251-52 (1951); Northern States Power Co. v. Minn. Pub. Util. Comm'n, 344 N.W.2d 374, 378 (Minn. 1984), cert. denied, 467 U.S. 1256 (1984).
 <sup>29</sup> Exh. 35, p. 13, 1. 1-2.

<sup>&</sup>lt;sup>30</sup> *Id.*, 1. 2-6.

in the Missouri portion of the Illinois Rivers Project already approved by this Commission last summer in Case No. EA-2015-0145.

The Project also facilitates the development of generation that will have zero (or lower, as compared to the existing generation mix) emissions, a benefit that has become even more important in the wake of the USEPA's Clean Power Plan ("CPP"), which as written would undoubtedly require significant displacement of coal-fired generation, prevalent in Missouri and in the MISO footprint in general.<sup>31</sup> The Mark Twain Project, like all of the MVPs, is necessary if all of the MVP portfolio benefits are to be realized because the benefits of the portfolio as a whole depend on construction of the portfolio as a whole. While no analysis has been done by MISO of each individual MVP project's benefits if the Project were or were not included, such an analysis has been done for the Mark Twain Project. As noted, that analysis shows that removal of the Project from the overall portfolio will deprive Missouri of hundreds of millions of dollars of benefits annually.<sup>32</sup>

#### *ii.* The prospects for wind development are in fact good.

Some, but certainly not all, of those benefits arise from the expectation that new renewable resources, including wind generation, will be constructed in the MISO footprint with the MVP portfolio in place. This is where the Neighbors attack the Project's need, relying upon their hypothesis that wind generation is or will be too expensive to lead to further development of wind in MISO. However, the *evidence* demonstrates that their hypothesis is just plain wrong.

<sup>&</sup>lt;sup>31</sup> While the CPP has recently been stayed by the United States Supreme Court, it would be imprudent to simply assume that the electric industry will be able to continue to operate in a world without significant carbon constraints as market forces continue to apply increasing pressure on coal power plants. Regardless, the analyses demonstrating MVP benefits (and Dr. Schatzki's analysis demonstrating even greater Missouri benefits from Mark Twain) show benefits by large margins across many economic scenarios, including those where carbon constraints are not in place. Ex. 35, Sch. JTS-1 and Sch. JTS-2.

<sup>&</sup>lt;sup>32</sup> Exh. 21, Sch. 3, Table 1 (Schatzki Direct).

The Neighbors' consultant, Mr. Powers, argues that wind and solar costs are "essentially the same" at the present time and that wind costs will increase in the future while solar costs will decrease.<sup>33</sup> On these bases, he claims that the prospects for wind development in the United States are "not good."<sup>34</sup> To support his "not good" opinion, he relies almost entirely on two bits of information: one sentence on page 192 of a 233-page report from the United States Department of Energy ("DOE") that vaguely states that "[c]apital costs for wind technologies is assumed to increase...," and a 2014 PowerPoint presentation (prepared as part of DOE's Sunshot initiative; actually a single slide from the 32-page presentation), that reports what analysts were projecting would be the global capital cost of utility-scale solar systems in 2016. Mr. Powers supplements these two pieces of information, which when taken out of context are highly favorable to the argument he wants to make, with a couple of other data points that one must account for in comparing wind versus solar capital costs: the direct current ("DC") to alternating current ("AC") conversion rate, and the capacity factor of the generating resource.

The data points he picked were the most favorable he could have picked, reflecting that he clearly put his thumb on the scale at every turn in an attempt to bolster his arguments about the generation resource he favors, solar generation. His basic opinion is that solar will overtake wind, in terms cost competitiveness, now or very soon and that this will mean that wind just won't be built (meaning, not in MISO) – or at least not that much of it will be built, obviating the need for the Project and the Project benefits. However, there is significant evidence of record – from the very agencies and entities upon which he relies (when it suits him) – that directly contradict Mr. Powers' opinion and thus directly undermine his hypothesis. Some of those sources are summarized in the following table:

<sup>&</sup>lt;sup>33</sup> Exh. 42, p. 37, l. 7-12.

<sup>&</sup>lt;sup>34</sup> *Id.*, p. 34, l. 23.

<u>Row</u> <u>No.</u>	Data Source	<u>Generation</u> <u>Resource</u>	<u>DC-AC</u> <u>Conversion</u> Factor	<u>Capacity</u> <u>Factor</u>	<u>Per kWac</u> Capital Cost	<u>Cost per 1% of</u> <u>Capacity Factor</u>
1	Ex. 62, Slide 27 (DOE Sunshot PowerPoint Midpoint <u>2016</u> Global Projections from Analysts) (Rounded Down)	Solar	.85/.90 <sup>35</sup>	.20/.22 <sup>36</sup>	\$1,600 <sup>37</sup>	\$80.81/\$94.11 <sup>38</sup>
2	Ex. 62, Slide 27 (DOE Sunshot PowerPoint Midpoint <u>2016</u> Global Projections from Analysts) (Actual Midpoint)	Solar	.85/.90	.20/.22	\$1,625 <sup>39</sup>	\$82.07/\$95.58 <sup>40</sup>
3	Ex. 69, Brattle <u>2020</u> Solar Capital Cost Projection, Primarily Using NREL <sup>41</sup> Open PV Project and LBNL <sup>42</sup> Data	Solar	.85/.90	.20/.22	\$1,600	\$80.81/\$94.11 <sup>43</sup>
4	Ex. 67, DOE 2015 Wind Vision Report <u>2020</u> Solar Capital Cost Projection	Solar	.85/.90	.20/.22	\$1,604	\$81.01/\$94.35 <sup>44</sup>
5	Ex. 63, Ameren Missouri <u>2014</u> IRP Wind Resource – 100 Meter Towers	Wind	N/A	.375	\$2,377	\$63.38 <sup>45</sup>
6	Ex. 67, DOE 2015 Wind Vision Report <u>2020</u> Wind Capital Cost Projection (Worst Quality Wind; Highest Cost Wind)	Wind	N/A	.32	\$1,758	\$54.94 <sup>46</sup>

As can be readily observed, Mr. Powers' calculations (appearing at pages 36 to 37 of his

rebuttal testimony) that underlie his statement that solar and wind costs are, currently,

"essentially the same," are, at best, misleading. To develop the figures he relies upon, which he

obviously hoped would prove that the costs of the two technologies today are essentially the

same, Mr. Powers rounded-up (to \$2,400/kWac) the \$2,377/kWac wind capital cost estimate from

Ameren Missouri's 2014 Integrated Resource Plan ("IRP") and then paired it with an outdated

<sup>&</sup>lt;sup>35</sup> Exh. 42, Sch. PE-29, p. 5 (KEMA document, characterizing the 0.90 conversion rate used by Mr. Powers in his calculations as "best case").

<sup>&</sup>lt;sup>36</sup> Exh. 42, Sch. PE-30 (Powers' use of an 18% capacity factor for a ground-mounted, fixed solar system and 22% for a ground-mounted, axis-tracking solar system). Mr. Powers agreed that if a mix of systems was employed 20% is a reasonable capacity factor to assume. Tr., Vol. 7, p. 372, l. 2-13.

<sup>&</sup>lt;sup>37</sup> Exh. 62, Slide 27 of the Sunshot presentation relied upon by Mr. Powers – midpoint global analysts' projection of solar capital costs in 2016 in \$ per kWdc, rounded down to \$1,600.

<sup>&</sup>lt;sup>38</sup> Using same mathematical calculations as Mr. Powers used at pages 36-37 of his rebuttal testimony (Exh. 42), dollars per 1% of capacity factor. For example, the lowest figure, \$80.81, is determined using the best conversion factor and best capacity factor; *i.e.*, (\$1,600/.9)/22 = \$80.81. Mr. Powers confirmed that the figure using the best conversion factor and a .20 capacity factor would produce a figure of \$88.85 [(\$1,600/.9)/20 = \$88.85]. By the same method through simple application of the math, the lower KEMA conversion factor a lower capacity factor of 20% assuming a mix of fixed and axis-tracking installations, produces the \$94.11 figure [(\$1,600/.85)/20].

<sup>&</sup>lt;sup>40</sup> Determined using same mathematical application as used for Row 1.

<sup>&</sup>lt;sup>41</sup> National Renewable Energy Laboratory.

<sup>&</sup>lt;sup>42</sup> Lawrence Berkley National Laboratories.

<sup>&</sup>lt;sup>43</sup> Determined using same mathematical application as used for Row 1.

<sup>&</sup>lt;sup>44</sup> Id.

 $<sup>^{45}</sup>$  \$2,377/37.5 = \$63.38. At hearing, Mr. Powers confirmed the calculation, but with a rounded-down capacity factor of 37%, which produces a figure of \$64.24. Tr., Vol. 7, p. 378, l. 17-22.  $^{46}$  Tr., Vol 7, p. 413, l. 14-20.

capacity factor of 28% from existing wind farms constructed in northwest Missouri nearly a decade ago.<sup>47</sup> As the simple math presented during the hearings showed, his approach, using Mr. Powers' chosen parameters, produced a figure of \$85.71 per 1% of capacity factor for wind generation. As Rows 1 and 2 in the table above show, using Mr. Powers' favored source of solar cost data, that \$85.71 is within the range of the solar costs, thus appearing, at first blush, to support his claim that wind and solar are "essentially the same."

However, had Mr. Powers performed a fair-minded calculation that matched apples-toapples data, he would not have taken old wind capacity factor data from wind farms built using shorter towers used several years ago (pre-2010),<sup>48</sup> but instead he would have utilized the capacity factor of 37.5% that actually *accompanies* the wind capital cost estimate that he chose to use from the IRP.<sup>49</sup> As Rows 1 and 2 as compared to Row 5 in the above-table show, even if it were appropriate to compare Mr. Powers' favored 2016 analyst projection for global utilityscale solar capital costs with the 2014 IRP wind capital cost estimate from the IRP, the wind capital costs using the capacity factors that actually match-up with the approximately \$2,400/kW<sub>ac</sub> cost of wind used in the 2014 IRP are *far lower* than the comparison constructed by Mr. Powers when he chose to mix the data. Using the apples-to-apples figures, the wind capital cost is *\$63.38* per 1% of capacity factor as compared to solar capital costs (using his favored source of solar data) of about \$81/\$82 to \$94/\$95 per 1% of capacity factor.

<sup>&</sup>lt;sup>47</sup> As Mr. Powers concedes and as is obvious, the capacity factors are important, for it is clear that if one resource cost \$100 but produces one-half of the power produced by another resource costing \$200, the resources would, economically, be equal.

<sup>&</sup>lt;sup>48</sup> Exh. 68, p. 11 (showing older wind generation in Missouri almost all of which was installed pre-2010, and referring to 80-meter wind towers); Exh. 67, Executive Summary, p. xxxviii (showing that 80-meter tower heights were prevalent at the same time as the older Missouri wind generation was built).

<sup>&</sup>lt;sup>49</sup> Exh. 63. Notably, not a single party in Ameren Missouri's IRP (Case Number EO-2015-0084) claimed a flaw in the wind generation parameters used in the IRP, including no claim by anyone that the 37.5% capacity factor for wind at the cost and tower heights that underlie Mr. Powers' calculations was inaccurate or unreasonable. The Commission has taken administrative notice of that fact. Tr., Vol. 7, p. 373, p. 22 – p. 375, l. 22.

One can readily see that Mr. Powers cherry picked some data from the IRP (wind cost estimates from 2014, capacity data from wind generation with different characteristics pre-2010, and then solar cost projections from analysts for 2016), and after mixing-up these various data sources and vintages, he argues that wind and solar costs are currently "essentially the same." But it's quite obvious that using matched data, fairly presented, determined using *exactly* the method Mr. Powers himself used in his rebuttal testimony, wind and solar costs are not currently "essentially the same." To the contrary, wind is far cheaper.

This critical flaw in Mr. Powers' calculations undermines his hypothesis (and respectfully, his credibility) significantly, because if wind and solar costs are not "essentially the same" today, his reliance on one sentence in the *Assumptions to the Annual Energy Outlook 2015*, which states that wind costs are "assumed" to increase, fails to support his overall claim that solar costs will go down and thus overtake wind costs. Even if solar costs were to go down and wind costs stayed the same, that does not mean that solar costs would overtake wind costs because of the significant cost advantage wind enjoys today.

Moreover, the one sentence from one DOE document relied on by Mr. Powers is contradicted by DOE itself in a number of other recent DOE reports that Mr. Powers either ignored or didn't bother to research. Data summarized in Rows 3 and 4, as compared to Rows 5 and 6 of the above table, demonstrate that according to DOE (and other projections), solar capital costs are expected to *remain* significantly higher than wind capital costs in the future, including in 2020. Indeed, DOE's projections show that wind is projected to cost about \$55 per 1% of capacity factor in 2020 versus about \$80 - \$95 per 1% of capacity factor for solar in 2020, which directly contradicts Mr. Powers' entire theory and does so based primarily on data from the same sources Mr. Powers relies upon – the DOE.

16

Even if (as Mr. Powers would undoubtedly say) solar costs will be lower in the future than they are now, they would have to become much lower than the roughly \$1,800/kW<sub>ac</sub> that Mr. Powers' favored Sunshot presentation predicted for 2016<sup>50</sup> in order to become "essentially the same" with what DOE says wind costs will be in 2020 (even taking DOE's projections for the worst quality, highest cost wind in 2020, solar would have to fall even more if average quality and average cost wind resources in 2020 were used). As calculations confirmed during the hearings show, the solar capital costs would have to drop to about \$1,200/kWac<sup>51</sup> to equate to DOE's projection (again, for the highest-cost, worst wind DOE assumes) in 2020. And that would just make solar and wind costs *equal*; it would not make solar cost advantageous, and there is no evidence it would eviscerate further wind development, as Mr. Powers seems to claim.

DOE made other statements and issued other projections in 2015 that also indicate that the death of wind posited by Mr. Powers has been greatly exaggerated. DOE's recent (2015) Wind Vision Report is unequivocal on this point: "A high U.S. Wind Penetration Future is Achievable, Affordable and Beneficial."<sup>52</sup> DOE continues: "it is both viable and economically compelling to deploy U.S. wind power generation in a portfolio of domestic, low-carbon, low-pollutant power generation solutions at the *Study Scenario* levels."<sup>53</sup> The Study Scenario is that wind generation will comprise 10% of end-use electric demand by 2020, 20% by 2030 and 35% by 2050.<sup>54</sup> Since wind generation was about 4.5% of end-use demand (i.e., energy supplied) in 2013,<sup>55</sup> it is obvious that DOE believes that it is economic for substantially more wind generation to be built, in direct contradiction of Mr. Powers' claim that the prospects for wind development are "not

<sup>&</sup>lt;sup>50</sup> \$1,600/\$1,625/kWdc using a best-case 0.9 DC-AC conversion rate.

 <sup>&</sup>lt;sup>51</sup> Wind capital cost per 1% capacity factor of \$55/kWac using best solar capacity factor of 22% (\$55\*22 = \$1,210).
 <sup>52</sup> Exh. 67, Executive Summary, p. xxiii.

<sup>&</sup>lt;sup>53</sup> *Id.*, p. xxiv.

<sup>&</sup>lt;sup>54</sup> *Id.*, p. xxiii.

<sup>&</sup>lt;sup>55</sup> *Id.*, p. xxvii.

good." DOE doesn't just take the position that wind will remain economic in its Wind Vision Report. As part of its 2015 Annual Energy Outlook, DOE put solar and wind on the same basis by calculating the projected levelized cost of energy ("LCOE") for both resources in 2020. According to those DOE projections, there will continue to be a cost advantage for wind versus solar in 2020 and beyond, with DOE's projected solar LCOE in 2020 equal to \$114.3 to \$125.3/MWh (depending on tax incentives) versus DOE's projected wind LCOE in 2020 at \$73.6/MWh (with no tax incentives).<sup>56</sup>

Wind versus solar cost data is not the only evidence that rebuts what is clearly an exaggeration by Mr. Powers about solar generation's costs relative to wind generation costs. In fact, there is other evidence, in the marketplace and based on expert opinions from those actually involved in wind development, that also show that the prospects for wind development are good.

For example, a now-pending request exists to connect 400 mega-watts ("MW") of new wind to the Mark Twain line in Schuyler County, Missouri.<sup>57</sup> There is no evidence of any significant, planned solar generation in or near Missouri.<sup>58</sup> Despite Mr. Powers' claims that minimal effort would be needed to connect some amount of wind generation (he pointed to a 300

<sup>&</sup>lt;sup>56</sup> Exh. 70, p. 6. All of these various projections are averages across the country, meaning there could easily be much cheaper solar resources in places like California, or more expensive ones where the solar characteristics are not as good, or cheaper wind in the Midwest where the wind quality is good, and higher cost wind elsewhere where the wind quality isn't as good. Logic tells us that the location-specific costs of any project – wind or solar – may vary significantly, but the point is that sources Mr. Powers claims are reliable and credible when they suit him project far different relative costs for the two technologies, a fact Mr. Powers chooses to ignore or otherwise discount. The Neighbors undoubtedly will counter this overwhelming evidence from a source that its own expert relies upon by pointing to a couple of solar projects in the southwestern United States/California (West Texas and Southern California) where the solar energy contracts provide energy in the \$50-\$55/MWh range, which for those projects would be about \$10/MWh less costly than wind generation based on Ameren Missouri's 2014 IRP. Few details are known about these projects, but they are in locations more favorable to solar than we have in the Midwest, and despite their existence, DOE and others are reporting that overall wind is now, and will be in the future, cost-advantageous to solar.

<sup>&</sup>lt;sup>57</sup> Tr., Vol. 5, p. 182, l. 11-16.

<sup>&</sup>lt;sup>58</sup> Using the 37.5% capacity factor for wind versus a favorable 22% capacity factor for solar, to install solar generation that would equate to a 400 MW wind farm would require a solar project of 681 MW. Such a project would require, according to Mr. Powers, about 4,100 acres of land. Tr., Vol. 7, p. 423, l. 1-10. (Powers confirming that he estimates it takes about 60 acres of land for each 10 MW of utility-scale solar generation).

MW project examined more than seven years ago) to the existing 161-kV system in the area, no such projects (in the absence of a 345-kV line) have actually moved forward over the past several years. This despite the fact that over that period, wind costs were clearly advantageous to solar costs, as even Mr. Powers would surely have to admit given his claim that wind and solar costs are essentially the same now and that solar has fallen significantly in recent years. MISO witness Smith pointed out the problem MISO has seen with the absence of 345-kV system upgrades, such as the Mark Twain Project, when he noted MISO has seen wind projects enter its generation queue, only to see them drop out when faced with interconnection and other costs that would be needed to attempt to use the existing lower voltage systems (such as the 161-kV system in northeast Missouri), including 1,200 MW of generation that has entered and left the queue in northeast Missouri alone.<sup>59</sup>

With regard to the old wind project to which Mr. Powers points which he claims proves wind won't develop, as Mr. Smith testified, the interconnection study done on that project only concluded that if it were built a mere 60 MW of wind from it could *actually be delivered* using the existing 161-kV system, even if it could be "connected" and even with the upgrades that were identified.<sup>60</sup> It remains unknown whether that deterred the wind developer, but it's logical to assume that it did. And even Mr. Powers admits that simply because this one project did not develop several years ago does not prove that wind won't develop at all.<sup>61</sup>

By contrast, with Mark Twain in place, the transmission system can reliably and economically connect *and deliver* 1,347 MW of wind generation constructed in the Adair Wind Zone (designated by MISO as zone Mo-C), and thus this 400 MW project and significantly more

<sup>&</sup>lt;sup>59</sup> Exh. 35, p. 10, l. 18 to p. 11, l. 4.

<sup>&</sup>lt;sup>60</sup> Tr., Vol. 9, p. 572, l. 23 – p. 573, l. 15.

<sup>&</sup>lt;sup>61</sup> Tr., Vol. 7, p. 366, l. 12-16.

wind can be connected and delivered from that zone.<sup>62</sup> In addition, at least 290 MW of wind can be imported into Missouri as a result of the Project (all additive to the 1,347 that could connect in the Adair Wind Zone in Missouri).<sup>63</sup> Moreover, despite Mr. Powers' claims that wind and solar costs are essentially the same and that wind won't develop, MISO's actual interconnection experience shows that wind projects are proposed at a rate that is 17 times that of solar projects.<sup>64</sup>

The evidence that the wind resources in the Adair Wind Zone are of high quality is also

completely uncontroverted, as the only wind expert to provide testimony in this case (Mr. Robert

Vosberg) testified:

there is significant potential for wind development in north central and northeast Missouri, including in the Adair Wind Zone.<sup>65</sup>

\* \* \*

The northeast Missouri Energy Zone has the opportunity for significant generation development, more specifically renewable generation in the form of wind generation as shown on Schedule RMV-SR1. This region has topography and wind speeds favorable to the development of wind generation especially with current wind turbine technology.<sup>66</sup>

\* \* \*

Based upon my familiarity with the wind characteristics and other factors, including National Renewable Energy Laboratory data as shown in Schedule RMV-SR1, it is my opinion that the Ottumwa – Adair – Palmyra Project will facilitate the development of at least 1,000 MWs of wind generation in Northern Missouri.<sup>67</sup>

Mr. Vosberg's testimony stands entirely unrebutted and, aside from Mr. Powers' theories

about solar versus wind costs, which have been debunked, the only conclusion that the

<sup>&</sup>lt;sup>62</sup> To be clear, the 1,347 MW is not the maximum wind potential in the Adair Wind Zone from the standpoint of how much wind is there, but it is the maximum wind that can be connected in that zone to the Mark Twain line before transmission constraints would start to occur. Tr., Vol. 9, p. 570, l. 7-18.

<sup>&</sup>lt;sup>63</sup> Exh. 52, p. 2; Tr., p. 166, l. 14 – p. 168, l. 19.

<sup>&</sup>lt;sup>64</sup> Exh. 35, p. 18, l. 20 – p. 19, l. 3.

<sup>&</sup>lt;sup>65</sup> Exh. 17, p. 5, l. 1-3 (Vosberg Surrebuttal).

<sup>&</sup>lt;sup>66</sup> *Id.*, p. 7, l. 13-17.

<sup>&</sup>lt;sup>67</sup> *Id.*, p. 8, l. 6-10.

Commission can draw about wind development prospects in the Adair Wind Zone based on the evidence of record is that the prospects, with the Mark Twain Project, *are* good.

As Mr. Vosberg also testified, the Project provides an outlet for generation in this zone and from outside Missouri to load centers, including load centers in Missouri.<sup>68</sup> And the Project is "critical to resolving 161-kV overloads in northeast Missouri consistently show significant overloads on the existing 161-kV system when attempting to add new generation."<sup>69</sup> Mr. Vosberg's testimony in this regard was corroborated by Mr. Smith's testimony where, as explained earlier, he confirmed that the study that Mr. Powers relied upon only showed that 60 MW could be connected and actually delivered to load and, even to connect and deliver that quantity, the developer was going to have to spend about \$11 million.<sup>70</sup> To the point that merely "connecting" to the existing 161-kV system does not mean that the wind can economically be built, Mr. Vosberg testified that "while there may be opportunities to upgrade existing infrastructure to allow interconnection of some additional wind generation, these upgrades generally would not allow delivery of the generation to Ameren Missouri load without causing system congestion that would effectively limit the amount of energy that could be delivered."<sup>71</sup>

To be clear, wind generation does not have to develop *in* the Adair Wind Zone for there to be significant benefits from the Mark Twain Project and the MVP portfolio as a whole, as Mr. Smith testifies,<sup>72</sup> but the baseless claim that wind will not develop in this area because it hasn't done so yet and because it is not cost-competitive is just that, baseless, as are the claims that

<sup>&</sup>lt;sup>68</sup> *Id.*, p. 6, l. 1-6.

<sup>&</sup>lt;sup>69</sup> *Id.*, p. 6, l. 9-12.

<sup>&</sup>lt;sup>70</sup> Tr., p. 571, l. 12 to p. 573, l. 15.

<sup>&</sup>lt;sup>71</sup> *Id.*, p. 8, l. 12-16.

<sup>&</sup>lt;sup>72</sup> Tr., Vol. 9, p. 591, l. 20 – p. 594, l. 3; p. 594, l. 9-16; p. 596, l. 23 – p. 597, l. 9.

solar costs are or will be advantageous to the point that wind won't develop in MISO and that the MVPs therefore will not be beneficial.

#### iii. Reliability Benefits.

As earlier noted, the primary driver of the Mark Twain Project was not reliability concerns, but it does address reliability concerns that without it someone else – likely Ameren Missouri and ultimately its customers – would have to address (and pay for, without regional cost allocation). It is undisputed that there are several different configurations (*i.e.*, several different combinations of events, including loss of a line, piece of equipment, more than one line), based upon system modeling using peak conditions in 2021, that if they occurred, would cause voltages to drop below acceptable levels and in many instances, cause significant loss of load. There is also no dispute that under NERC<sup>73</sup> requirements, these events are classified such that they must be addressed. The concerns exist on the Ameren Missouri system, and, if they are not addressed by the Project, Ameren Missouri (and ultimately its customers) will have to address them.

Mr. Powers doesn't actually propose any particular solution, but posits that various solutions other than building the Project might be possible and that those solutions would be cheaper than the \$18 million Missouri share of the Project. Of course, his entire premise is that the Project has no other benefits (a premise thoroughly demonstrated as false), so the line might not be justified solely as a reliability project if he was right (no other benefits; a cheaper reliability fix). As the record stands, it really doesn't matter whether or not the line is needed to address reliability concerns, because the non-reliability-related benefits of the Project more than justify its construction.

<sup>&</sup>lt;sup>73</sup> North American Reliability Corporation.

The only evidence in this case from someone who has actually planned and operated transmission systems (ATXI witness Dennis Kramer) and who actually has responsibility to ensure the transmission system remains reliable, is that there are reliability concerns in northeast Missouri, that they must be addressed with improvements to the system, and that none of Mr. Powers' hypothetical (but not actually recommended) "solutions" actually solve the problems.<sup>74</sup>

Take Mr. Powers' claim that a piece of equipment called a static VAR compensator could be installed for a few million dollars and that since a few million dollars is less than \$18 million (and again, premised on the absence of other benefits), the static VAR compensator should be installed instead of building the Project. As Mr. Kramer testified, a static VAR compensator *will not work* to solve the low-voltage concerns that exist.<sup>75</sup> Mr. Kramer knows this because Ameren Services modeled the use of such a piece of equipment in 1 MegaVar ("MVAR") increments (from 1 MVAR to 450 MVAR), and no matter the amount of MVAR added at the Adair Substation by the equipment, the voltage collapse still occurred.<sup>76</sup> Mr. Powers can't credibly claim otherwise, because he doesn't purport to have *actually analyzed* the efficacy of his proposed solution, nor is there any evidence that he actually has the qualifications, training or means to do so.

As earlier noted, Mr. Powers' next item from his menu of possibilities to make the reliability concerns go away is to somehow try to get SERC,<sup>77</sup> who has been delegated authority in this area by NERC, to "reclassify" the NERC category C events (that NERC requirements require to be solved) so that they can be ignored. Mr. Powers suggests that the cooperatives, which also depend on the Adair Substation and the existing 161-kV lines that supply northeast

<sup>&</sup>lt;sup>74</sup> The Staff agrees as does MISO, which of course also has actual experience with planning and operating transmission systems.

<sup>&</sup>lt;sup>75</sup> Tr., Vol. 6, p. 209, l. 25 – p. 210, l. 24.

<sup>&</sup>lt;sup>76</sup> *Id.*, p. 210, l. 25 to p. 212, l. 3.

<sup>&</sup>lt;sup>77</sup> Southeastern Electric Reliability Corporation.

Missouri, could be enlisted to help with this effort. But Mr. Powers' ideas in this area are nothing more than pure speculation.

As Mr. Kramer explains in his surrebuttal testimony, there is no reason to believe that the cooperatives would support a reclassification, but there is reason to believe they would not support it. And why should the cooperatives, or even Ameren Missouri, support a reclassification which even if it were granted, would mean that the transmission system in northeast Missouri would have a lesser level of reliability than the overall Ameren Missouri transmission system? All of Ameren Missouri's customers wherever they live or wherever their businesses are located pay the same rates. As Mr. Kramer puts it, why should a level of reliability be accepted in northeast Missouri that is lower than elsewhere on the system?<sup>78</sup>

Moreover, reclassifying the events – even if it could be accomplished – does not make the problem go away but instead would just allow one to ignore it. There "would still be a loss of load for these events."<sup>79</sup> As Mr. Kramer explained, the contingencies that could lead to a voltage collapse could be called a chicken, instead of calling them a duck, but changing the label won't change it from a duck to a chicken if it still has yellow feet and a beak like a duck – it will still be a duck.<sup>80</sup> And as Mr. Kramer put it, "our [Ameren Services as the planner for Ameren Missouri] requirement is to keep the lights on, so we would strive to address the problems that remain" even if a reclassification occurred.<sup>81</sup>

All of these alternatives to taking advantage of the fact that the Mark Twain Project solves the low-voltage concerns (which no one, including Mr. Powers, disputes) is a red-herring in any event. There are huge benefits from the Project, even if it did not solve a single reliability

<sup>&</sup>lt;sup>78</sup> Exh. 4, p. 28, l. 16 – p. 29, l. 10.

<sup>&</sup>lt;sup>79</sup> Tr., Vol. 6, p. 187, l. 20-21.

<sup>&</sup>lt;sup>80</sup> Id., p. 188, l. 2-7.

<sup>&</sup>lt;sup>81</sup> *Id.*, p. 187, l. 24 – p. 188, l. 1.

issue. It thus ought to be built, even if it were not needed to solve reliability issues. That it also solves reliability issues is simply yet another benefit, showing the Project is most definitely an improvement worth its cost.

#### iv. Other Benefits.

The Project will also provide benefits not captured in the benefit-cost analyses discussed earlier and that are unrelated to reliability. As ATXI witness Dr. Geoffrey Hewings' analysis demonstrates, the Project will deliver benefits to Missouri in the form of approximately 1,880 job years over the life of the construction of the Project. Moreover, ATXI witness Joseph LaMacchia's testimony confirms there are substantial tax benefits from the Project. Mr. LaMacchia's testimony shows that once in operation, the Project is expected to provide incremental property tax revenues of about \$3.5 million annually across the five counties through which it will be built. While the benefits of the Project and the showing that it is needed, that the improvement is worth the cost, is easily shown by the MISO/Schatzki benefit-cost analyses and by reliability benefits, these additional benefits also demonstrate need, as has been recognized by the Commission in the past when it has cited similar benefits in approving section 393.170 applications. See, e.g., Tartan, supra (The proposed improvement will "represent a major capital investment . . . which will require the employment of workers during the construction phase of the project, and for the operation of the pipeline"); see Intercon Gas, supra (citing to evidence that the project at issue would produce fuel savings and lead to increases in employment and tax revenues in discussing the "need" criteria).

Simply put, the line is necessary or convenient for the public service because it is needed to realize the many benefits it provides, both individually and as an important part of the MVP portfolio as a whole.

25

#### B. Tartan Criteria Nos. 2 and 3 - Qualifications/Financial Ability

No party questions ATXI's qualifications to construct, own, operate or finance the Project, and the only party to address those issues at all – the Staff – has affirmatively stated that it agrees ATXI possesses the proper qualifications and that it has the requisite financial capability.

#### C. Tartan Criteria No. 4. - Economic Feasibility

The Staff agrees that the Project is economically feasible, relying upon the fact that under MISO's FERC-approved tariff (which will govern the open access transmission service to be provided by ATXI on the Mark Twain transmission line), ATXI is assured of receiving revenues to cover its revenue requirement through MISO transmission charges paid by load-serving entities in the MISO footprint. It is true that this fact is one reason the Project is economically feasible. However, the Staff takes a narrower view of economic feasibility than is necessary or that is traditionally taken by the Commission itself. In assessing economic feasibility, the Commission routinely relies on projections of the economics of the proposal. In Tartan, the Commission relied on projected propane versus natural gas costs (in the face of opposition to the gas pipeline by propane dealers). Necessarily, the MISO and Schatzki analyses rely on projections of lower production costs and emissions, and reduced system congestion to conclude that the benefits of the MVP portfolio and the Project far outweigh its costs. Projections or not, those analyses also show economic feasibility. The fact that ATXI's shareholders are willing to finance the Project also shows economic feasibility. See, e.g., Ozark Energy Partners, LLC, (GA-2006-0561) (Report and Order, Feb. 5, 2008) (where the Commission observed that an applicant's ability to secure financing for a project in a section 393.170 case is "overwhelming evidence that the proposal is economically feasible").

26

In summary, there is compelling substantial and competent evidence establishing that the Project is economically feasible.

#### D. Tartan Criteria No. 5 - The Public Interest

"The requirement that an applicant's proposal promote the public interest is in essence a conclusory finding. . . . Generally speaking, positive findings with respect to the other four standards will in most instances support a finding that an application for a certificate of convenience and necessity will promote the public interest." *In re: Tartan*, 3 Mo. P.S.C. 3d at 189 (*citing In re: Intercon Gas, Inc.*, 30 Mo. P.S.C. at 561). Consideration of the first four *Tartan* factors demonstrates that granting the requested CCN would be in the public interest. As demonstrated above, there is a need for the transmission line service, ATXI is qualified to provide the service, and the proposed transmission line project is economically feasible; moreover, no party disputes ATXI's financial ability to provide the transmission line service. Despite these facts, the Neighbors raise an array of reasons why they believe that the Project is not in the public interest.

Before addressing the Neighbors' arguments, it is important to note that the Neighbors support a view of public interest that is parochial in nature. As such, it is important to keep in mind that the public interest is not restricted to consideration of only those interests of affected landowners; instead, "the 'rights of the individual with respect to issuance of a certificate are subservient to the rights of the public . . . ." *In re: Union Elec. Co.*, 2003 Mo. PSC LEXIS 1053 at \*40-\*41 (Case No. EO-2002-0351 August 23, 2003) (*quoting Missouri Pac. Freight Transport Co. v. Pub. Serv. Comm'n*, 288 S.W.2d 679, 682 (Mo. App. W.D. 1956). *In re: KCP&L*, 2009 Mo. PSC LEXIS 200 at \*64 ("the rights of individual groups are subservient to the rights of the public in general"). Consequently, the public interest that is of concern to this

Commission is much broader than a consideration of the individual concerns of the Neighbors; it is instead a balancing of "the total interests of the public," recognizing that "some of the public may suffer adverse consequences for the total public interest." *In the Matter of the Joint Application of Great Plains Energy Inc.*, 2008 Mo. PSC LEXIS 820 at \*23 (Case No. EM-2007-0374, *Order Denying Motions for Rehearing, Clarifying Report and Order, and Denying Motion to Stay as Moot*, issued August 5, 2008); *see also In the Matter of Sho-Me Power Elec. Cooperative's Conversion*, 1993 Mo. PSC LEXIS 48 at \*27 (Case No. EO-93-0259, *Report and Order*, issued September 17, 1993).

It is inconceivable that any proposed construction project considered by this Commission does not have some impacts that some will find to be adverse to their interests. Based upon the applicable standard, however, the CCN requested by ATXI to construct the Project is clearly in the public interest because it advances the interests of the broader public and only minimally impacts the interests of the Neighbors. While ATXI has already demonstrated the broader benefits to the public, it now addresses the claims of the Neighbors to demonstrate that they are either unfounded or that the broader benefit clearly outweighs any minimal adverse effects of the Project.

# *i.* The EMF from the proposed transmission line does not pose a threat to public health.

Anything that generates, transmits or uses electricity has both an electric field and a magnetic field in the space surrounding it.<sup>82</sup> These fields, generated at a power frequency of 60 Hertz (the frequency of the proposed transmission line in this case), are commonly referred to as EMF.<sup>83</sup> Because all lines, devices, appliances, and wiring connected to the AC electric power system produce EMF at this frequency, these fields are virtually everywhere – including at

<sup>82</sup> Exh. 5, p. 6, l. 3-5 (Bailey Surrebuttal).

<sup>&</sup>lt;sup>83</sup> Exh. 5, p. 4, fn.1; p. 7, l. 1-4.

background levels in homes in the United States.<sup>84</sup> Because electric fields are blocked by most conductive objects (trees, fences, walls, the human body, etc.) and magnetic fields are not, EMF most often refers to and is primarily concerned with the magnetic fields produced by power sources such as the proposed transmission line.<sup>85</sup>

In his testimony, Neighbors' witness Dennis Smith, D.O., an emergency medical physician at Moberly Regional Medical Center, sounded the alarm that EMF exposure from the proposed transmission line could result in adverse health effects for those who "live their lives near the lines on a daily basis and in some cases 24 hours per day."<sup>86</sup> Dr. Smith, primarily pointing to studies linking childhood leukemia with EMF exposure from high voltage AC lines, argued that there was "evidence to raise concern for the health of people in the path of the proposed line."<sup>87</sup> Dr. Smith's ultimate concern, however, was with the use of eminent domain; in his words, "no one should be forced against their will to expose their family to any entity they fear on the property they have toiled to purchase and maintain."<sup>88</sup>

A basic problem with Dr. Smith's testimony, however, is that he did not possess any particular qualification to offer expert testimony on the subject in the first instance. Dr. Smith admitted that he had received only minimal training in the military with regard to EMF exposure, had not published any scientific or medical papers in any peer-related journal related to EMF, and had not worked as an epidemiologist.<sup>89</sup> During his entire career as a military and emergency room physician, Dr. Smith admitted that he had never treated anyone who he believed to be suffering from EMF exposure at the time.<sup>90</sup> Dr. Smith's interest in the effects of EMF arose only

<sup>&</sup>lt;sup>84</sup> *Id.*, p. 7, l. 4-6, 18-21.

<sup>&</sup>lt;sup>85</sup> *Id.*, p. 4, fn.1; p. 6, l. 8-10.

<sup>&</sup>lt;sup>86</sup> Exh. 40, p. 3, l. 4-5, 17-20 (Smith Rebuttal).

<sup>&</sup>lt;sup>87</sup> *Id.*, p. 4, l. 24-25; p. 5, l. 15-21.

<sup>&</sup>lt;sup>88</sup> *Id.*, p. 7, l. 4-9.

<sup>&</sup>lt;sup>89</sup> Tr., Vol. 9, p. 631, l. 9-21.

<sup>&</sup>lt;sup>90</sup> Tr., Vol. 9. p. 632, l. 1-8.

after the Grain Belt transmission line – a project he opposed – was proposed to cross his own property, and his expertise is simply the result of the Internet searches he made to support his opposition to that line.<sup>91</sup> While Dr. Smith lacked expertise in the field of EMF and its effects on human health, he certainly did not lack bias on the subject.

The health-related concerns raised by Dr. Smith to EMF exposure from the proposed transmission line simply are not supported by the evidence in this case. First, Dr. Smith was careful to testify only about *potential* health concerns (such as the formation of various cancers) related to the transmission line, admitting that studies – including those upon which he relied for his opinion – did not point to a specific cancer, including leukemia, as being caused by or attributed to EMF exposure<sup>92</sup> and that recent studies, in fact, demonstrated that there was no link between breast cancer and EMF.<sup>93</sup> At best, Dr. Smith admitted that the epidemiological studies he relied upon did not show causation between EMF and these cancers, but only a "possible correlation" between EMF and these cancers.<sup>94</sup> Dr. Smith was not open to contrary view, however; any study contradicting Dr. Smith's opinions – including the one performed in 2015 by the World Health Organization – was, according to Dr. Smith, biased and should not be relied upon.<sup>95</sup>

As ATXI witness Dr. William Bailey, Ph.D., points out, however, it is Dr. Smith's opinions that – if not biased – are flawed, at best. In reviewing Dr. Smith's testimony, Dr. Bailey (a scientist and researcher who has conducted research for 30 years in the field of bioelectromagnetics on exposure and potential health effects associated with electric utility facilities) is critical of Dr. Smith's conclusions as they are based upon a few "cherry-picked"

<sup>&</sup>lt;sup>91</sup> Tr., Vol. 9, p. 652, l. 9-21; p. 657, l. 17 – p. 658, l. 9.

<sup>&</sup>lt;sup>92</sup> Tr., Vol. 9, p. 635, l. 20 – p. 636, l. 3; p. 639, l.7-18; p. 645, l. 13-22.

<sup>&</sup>lt;sup>93</sup> Tr., Vol. 9, p. 642, l. 2-8.

<sup>94</sup> Tr., Vol. 9, p. 659, l. 4-20.

<sup>&</sup>lt;sup>95</sup> Tr., Vol. 9, p. 648, l. 23 – p. 650, l. 16.

studies selected to support his position without any demonstration that Dr. Smith evaluated or weighed the quality of that research.<sup>96</sup> An example of Dr. Smith's flawed approach is his reliance upon a 2007 study published in 2013 which he says provides "new evidence" linking EMF to childhood leukemia.<sup>97</sup> Dr. Smith admits that the study did not, in fact, find a direct causative link between leukemia and EMF exposure, that the researchers didn't measure EMF levels but relied only on GIS information regarding distance between the nearest line and the residence address, and that there was not an exact address for 30 percent of the cases studied.<sup>98</sup> According to Dr. Bailey, this study does not provide any new or stronger evidence, and it is fundamentally flawed because it does not measure actual EMF exposure based on line configuration and actual measured distances, but simply on GIS-provided distance from the nearest line which is an extremely unreliable approximation of exposure.<sup>99</sup> As Dr. Bailey points out, more reliable and recent studies have failed to show a correlation between EMF and childhood leukemia.<sup>100</sup>

Moreover, Dr. Smith's reliance on the fact that the World Health Organization has called for continued research on the effect of EMF as evidence of major health concerns is, according to Dr. Bailey, a *non sequitur*; instead, the purpose of the recommendation was to reduce "uncertainty in the current scientific information" in an area of study that is more extensive than most chemicals.<sup>101</sup> As Dr. Bailey notes, almost 40 years of research has failed to confirm any adverse health effects from EMF levels found in our environment, "including exposure levels found near high-voltage transmission lines."<sup>102</sup> Notably, Dr. Smith's reliance on a study by Pall

<sup>99</sup> Exh. 5, p. 21, l. 1-21.

<sup>&</sup>lt;sup>96</sup> Exh. 5, p. 1, l. 16 – p. 2, l. 2; p. 4, l. 20 – p. 5, l. 2; p. 11, l. 14-16.

<sup>&</sup>lt;sup>97</sup> Exh. 40, p. 5, l. 16-21.

<sup>&</sup>lt;sup>98</sup> Tr., Vol. 9, p. 646, l. 1 – p. 647, l. 8.

<sup>&</sup>lt;sup>100</sup> *Id.*, p. 22, l. 1-15.

<sup>&</sup>lt;sup>101</sup> *Id.*, p. 16, l. 1-17.

<sup>&</sup>lt;sup>102</sup> *Id.*, 1. 17-20.

in 2013<sup>103</sup> to argue that EMF adversely affects cell DNA is misplaced; the study itself fails to support Dr. Smith's assertion.<sup>104</sup>

Also fundamental to an understanding of the relative weakness of Dr. Smith's opinion that people living in the vicinity of the line might suffer adverse health effects from EMF is the fact that Dr. Smith had absolutely no information about the location of the transmission line route itself before he prepared his rebuttal testimony and based upon what he understood, did not know how close the closest residence was to the proposed line.<sup>105</sup> In addition to lacking any understanding of the location of the proposed transmission line in relation to residences along the route, Dr. Smith had performed no calculations of EMF levels at the closest residence and, as he admits, wouldn't even know how to perform such calculations.<sup>106</sup> Because he lacked this most basic information, even Dr. Smith admits that he could not tell the Commission that a single house on the proposed route would experience EMF levels that he claims are associated with an increased incidence of childhood leukemia.<sup>107</sup> While it is clear that Dr. Smith's testimony utterly fails to provide any evidentiary support for the proposition that the EMF generated by the Mark Twain transmission line will adversely affect human health, is there a concern? According to Dr. Bailey – no.

Dr. Bailey presented calculations of the magnetic field, or EMF, at the edge of the rightof-way for the various segments of the Project (as the load and configuration is different for each segment), and these calculations demonstrated that the exposure level was similar to those found under low voltage distribution lines.<sup>108</sup> Dr. Bailey also presented calculations of the magnetic

<sup>&</sup>lt;sup>103</sup> Exh. 40, Schedule DS-07.

<sup>&</sup>lt;sup>104</sup> *Id.*, p. 26, l. 14 – p. 27, l. 19.

<sup>&</sup>lt;sup>105</sup> Tr., Vol. 9, p. 636, l. 12 – p. 637, l. 5; p. 660, l. 13-20.

<sup>&</sup>lt;sup>106</sup> Tr., Vol. 9, p. 637, l. 6-12.

<sup>&</sup>lt;sup>107</sup> Tr., Vol. 9, p. 660, l. 13-20.

<sup>&</sup>lt;sup>108</sup> Exh. 5, p. 21, l. 11-13; p. 29, l. 1-6.

fields at average loading on the proposed Mark Twain transmission line in relation to the nearest residence for each segment of the route, and these ranges fell into the "range of magnetic fields similar to those that would be measured in residences in the absence of a transmission line."<sup>109</sup> No evidence was presented that contradicted these calculations; in fact, Dr. Smith admitted that he had not done any calculations of his own and had no way to dispute Dr. Bailey's calculations.<sup>110</sup> These levels are a fraction of the level of exposure relied upon by Dr. Smith in his testimony, and are below internationally-recognized recommended exposure guidelines.<sup>111</sup> Consequently, there is no risk to human health as a result of the Mark Twain transmission line.<sup>112</sup> The evidence also proves that there is no risk to animal or apian health from EMF exposure. Scientific study on dairy cattle and sheep, for example, concluded that there were no systematic differences in health, behavior and productivity noted as a result of EMF exposure on these livestock.<sup>113</sup> And, despite concerns voiced at local public hearings, the Mark Twain transmission line will not be a source of stray voltage, thereby posing no threat to cattle, livestock or people.<sup>114</sup> Likewise, EMF has not been demonstrated to adversely affect bee health or productivity.<sup>115</sup> Simply put, the proposed line does not pose a threat to animal or apian health.

<sup>&</sup>lt;sup>109</sup> *Id.*, p. 29, l. 7 – p. 30, l. 3.

<sup>&</sup>lt;sup>110</sup> Tr., Vol. 9, p. 637, l. 6 – p. 638, l. 12.

<sup>&</sup>lt;sup>111</sup> Exh. 40, p. 5, l. 10-14; Exh. 5, p. 29, l. 4-6; p. 37, l. 19 – p. 38, l. 10.

<sup>&</sup>lt;sup>112</sup> Exh. 5, p. 42, l. 1-12. The only other witness presenting evidence on EMF was Staff witness Shawn E. Lange, who testified that the results of studies on the relation between EMF and cancer demonstrated that "no large increases in risk have been found for any cancer in children or adults." Exh. 30, p. 4, l. 8-14 (Lange Surrebuttal). <sup>113</sup> Exh. 5, p. 31, l. 10 – p. 32, l. 4.

<sup>&</sup>lt;sup>114</sup> *Id.*, p. 32, l. 5-18; Exh. 14, p. 4, l. 16 - p. 5, l. 10 (Endorf Surrebuttal). Consistent with this testimony, ATXI witness Douglas Brown, who leads easement acquisition efforts for Ameren Services, is not aware of any claim made by a landowner that stray voltage has resulted in an injury to livestock, lost milk production, or injury to humans. Exh. 8, p. 7, l. 18 - p. 8, l. 6. While electric fences on the right-of-way may pick up an induced charge from the presence of a 345-kV line, ATXI will install at its own cost electric fence filters on these fences to filter out the induced 60 hertz charge to ground, thereby allowing the fence to operate properly. Exh. 14, p. 7, l. 14-17. <sup>115</sup> Exh. 5, p. 39, l. 12 - p. 41, l. 17.

## *ii.* The proposed transmission line route minimizes the adverse effect on the environmental habitats.

Although it presented no substantive testimony of its own on the issue,<sup>116</sup> the Neighbors' position is that the proposed transmission line is not in the public interest because it crosses through environmentally sensitive areas in which endangered species are known to reside.<sup>117</sup> The evidence presented, however, clearly demonstrated that while no route could entirely avoid environmental habitats, ATXI's proposed transmission line route minimized the adverse effects of the line on environmental habitats in northeast Missouri.

Environmental habitats were an issue taken into full account by ATXI during the route selection phase of the Project. Christopher Wood, ATXI's consultant who led routing efforts on the Project, testified that routing principles that ATXI considered during route selection included minimizing impacts to natural resources such as wetlands, woodlands and wildlife, and avoiding federal and state lands and conservation and restricted easement areas.<sup>118</sup> To that end, the routing team contacted state and federal agencies – including the Missouri Department of Conservation ("MDC"), the Missouri Department of Natural Resources ("MDNR"), and U.S. Fish & Wildlife Service ("USF&W") – in May 2014, requesting information on threatened and endangered species, wetlands, and wildlife resources.<sup>119</sup> As a result of the information gathered, ATXI made adjustments to the proposed routes under consideration in order to minimize stream crossings, wetlands, and other route considerations.<sup>120</sup> The routing team then evaluated the various proposed routes by analyzing each potential route in light of the previously-identified

<sup>&</sup>lt;sup>116</sup> Mr. Powers did refer to endangered species in his prefiled testimonies, but offered nothing of substance and by his own admission, has no expertise in these areas. Mr. Power's testimony on this and certain other issues is the subject of a motion to strike. *ATXI's Objection/Motion to Strike Portions of the Pre-filed Testimony of Neighbors United Witness William E. Powers, P.E.* [EFIS Item No. 154]. As of this writing, no ruling has issued.

<sup>&</sup>lt;sup>117</sup> Tr., Vol. 5, p. 80, l. 13-21.

<sup>&</sup>lt;sup>118</sup> Exh. 15, p. 8, l. 3-18 (Wood Direct).

<sup>&</sup>lt;sup>119</sup> *Id.*, p. 11, l. 20 – p. 12, l. 7.

<sup>&</sup>lt;sup>120</sup> *Id.*, p. 16, l. 1-5.

routing criteria and reduced the number of proposed routes to develop two route alternatives for each segment of the route.<sup>121</sup> Environmental considerations resulted in the elimination of several proposed segments; namely, avoiding paralleling the South Fabius River and its associated floodplain and crossing fewer acres of wetlands.<sup>122</sup>

The selection of the final routes took also into account environmental considerations. In the Maywood to Zachary portion of the route, the final route crossed fewer acres of wetland, avoided crossing federally-owned or operated lands and state-owned wildlife refuges, parks and conservation areas, and avoided Natural Resources Conservation Service watershed easements.<sup>123</sup> While the final route for this segment crosses approximately 0.8 acre of a privately-owned, state-operated easement along the South Fabius River, selection of this segment avoided crossing a similar state-operated, privately-owned easement 3.9 acres in size located on the alternate route.<sup>124</sup> ATXI considered environmental concerns – including those raised by the MDC – when it selected the southern route as the final route in the Maywood to Zachary segment of the line.<sup>125</sup> Environmental concerns were also considered in the selection of the final route in the Zachary to Iowa state line segment of the transmission project. The alternative selected as the final route for this segment minimized the length across forested lands and avoided crossing any state- or federally-owned or operated lands, such as wildlife refuges, state parks and conservation areas.<sup>126</sup>

Although ATXI's selection of final routes minimized the crossing of forested acres which also serves as habitat for certain bat species, the Neighbors sought to show at hearing that ATXI

<sup>125</sup> Exh. 16, p. 11, l. 14-23.

<sup>&</sup>lt;sup>121</sup> *Id.*, p. 18, l. 6 – p. 20, l. 3.

<sup>&</sup>lt;sup>122</sup> Id., p.19, l. 1-7.

<sup>&</sup>lt;sup>123</sup> *Id.*, p. 23, l. 5-15.

<sup>&</sup>lt;sup>124</sup> Id., p. 23, l. 10-15; Exh. 16, p. 11, l. 1-23 (Wood Surrebuttal).

<sup>&</sup>lt;sup>126</sup> Exh. 15, p. 26, l. 11-12, p. 27, l. 7-9.

had ignored the concerns of the MDC related to this habitat.<sup>127</sup> As Mr. Wood explained during redirect examination, however, impact of the line on wooded areas was most definitely a consideration during the routing process because ATXI was aware that it served as habitat for the Indiana bat.<sup>128</sup> Pointing to maps of the forested blocks identified by the Department of Conservation that were crossed by the final proposed route,<sup>129</sup> Mr. Wood demonstrated that very few of these forested segments demonstrated true fragmentation due to the transmission route.<sup>130</sup> Complete avoidance of forested areas would, according to Mr. Wood, be "very difficult" and rerouting the line could cause other impacts.<sup>131</sup> More importantly, Mr. Wood testified that the final route did not cross any of the locations identified as known habitat for Indiana bats.<sup>132</sup> Whether or not ATXI met with the MDC or USF&W when they suggested such a meeting just before selection of the final route,<sup>133</sup> ATXI's final route selection clearly contemplated and minimized impacts of the line on environmental habitats.<sup>134</sup>

# *iii.* The design and route of the proposed transmission line poses only a de minimis impact on farming practices.

Perhaps the primary argument lodged by the Neighbors that the Project does not promote the public interest is the claim that the Project would violate certain landowners' right to farm as guaranteed by the Missouri Constitution – a right that, as earlier addressed, the Neighbors argue

<sup>129</sup> Exh. 75

<sup>&</sup>lt;sup>127</sup> Tr., Vol. 7, p. 447, l. 14 – p. 450, l. 14.

<sup>&</sup>lt;sup>128</sup> Tr., Vol. 7, p. 467, l. 23 – p. 468, l. 12.

<sup>&</sup>lt;sup>130</sup> Tr., Vol. 7, p. 469, l. 18 – p. 474, l. 25.

<sup>&</sup>lt;sup>131</sup> Tr., Vol. 7, p. 472, l. 19 – p. 473, l. 8.

<sup>&</sup>lt;sup>132</sup> Tr., Vol. 7, p. 475, l. 1-21.

<sup>&</sup>lt;sup>133</sup> The Neighbors emphasize the fact that ATXI did not meet with MDC or USF&W prior to selection of the final route and point to a letter from MDC dated November 21, 2014. Tr., Vol. 7, p. 543, l. 19 – p. 544, l. 12. Apart from the fact that the evidence demonstrates that ATXI attempted to minimize the environmental impacts of the transmission line, the letter itself does not contain a request for a meeting before the final route was selected; instead, MDC states that it would be "willing" to meet with ATXI, its consultant and USF&W "if it would be helpful" to discuss MDC's comments on the project. Exh. 72, p. 6. Moreover, a meeting was subsequently held in April 2015 by ATXI with MDC, MDNR, USF&W and other federal agencies as a result of the request. Exh. 80, p. 1.

<sup>&</sup>lt;sup>134</sup> Exh. 16, p.12, l. 1-3.

is absolute.<sup>135</sup> The Neighbors raise a number of arguments here to support their claim that the right to farm will be meaningfully impacted: that the Project will "adversely affect, impact or destroy" over 300 farms and 50,000 acres of farmland,<sup>136</sup> that the routing of lines that bisect parcels as opposed to running it along properties' boundaries prevents farmers from farming their property, that construction activities will permanently destroy topsoil, that the presence of transmission lines will interfere with GPS-guided farm equipment, that the line will prevent pivot irrigation systems from being used, and that easements will result in cancellation of CRP contracts.

The Neighbors' witness Robert Jackson,<sup>137</sup> adopting the direct testimony of Charles Kruse, reiterated that these concerns demonstrate that ATXI has not met the *Tartan* criteria and, therefore, the Project is not in the public interest.<sup>138</sup> Even though much of Mr. Jackson's surrebuttal testimony focused on ATXI's failure to meet the *Tartan* criteria, Mr. Jackson testified at hearing that the *Tartan* criteria was not in his area of expertise.<sup>139</sup> Not only is Mr. Jackson not an expert on the criteria, he admitted at hearing that he did not, in fact, even know what the *Tartan* criteria *were*.<sup>140</sup> Consequently, Mr. Jackson's testimony that the Project is not in the public interest because it has not met the *Tartan* criteria must be entirely disregarded. Moreover, none of the Neighbors' arguments have merit. As ATXI demonstrated through the evidence, the adverse impacts on agricultural use of the land are *de minimis*. ATXI addresses these complaints in turn.

<sup>&</sup>lt;sup>135</sup> Tr., Vol. 5, p. 73, l. 4-25, p. 79, l. 14 – p. 80, l. 2, p. 83, l. 25 – p. 84, l. 6, p. 84, l. 21 – p. 85, l. 15; Tr., Vol. 12, p. 882, l. 14-17.

<sup>&</sup>lt;sup>136</sup> A member of the Neighbors, Margaret Wilson, made this assertion at the Kirksville Local Public Hearing. Tr., Vol. 4, p. 91, l. 24 – p. 95, l. 2.

<sup>&</sup>lt;sup>137</sup> Mr. Jackson's testimony is the subject of a motion to strike on the grounds that Mr. Jackson's opinions lack any foundation, constitute improper legal opinions and are based upon inadmissible hearsay. *Motion to Strike Surrebuttal Testimony of Robert D. Jackson* [EFIS Item No. 153]. As of this writing, no ruling has issued. <sup>138</sup> Exh. 44, p. 1, 1, 21 – p. 2, 1, 16, p. 4, 1, 5-6 (Jackson Surrebuttal).

 $<sup>^{139}</sup>$  Tr., Vol. 12, p. 873, l. 24 – p. 874, l. 21.

<sup>&</sup>lt;sup>140</sup> T. V. 1 12, p. 873, l. 24 – p. 874

<sup>&</sup>lt;sup>140</sup> Tr., Vol. 12, p. 874, l. 22-24.

### a. <u>The amount of agricultural property removed from production</u> totals less than one acre.

In stark contrast to the claim by Neighbors that thousands of agricultural acres will be lost because of the Mark Twain transmission line, the uncontroverted testimony in this case is that less than one acre of actual farmland will be taken out of production for the entire 95-miles of 345-kV line.<sup>141</sup> While the actual easement area includes 523 agricultural acres, the fact that less than one acre of farmland will be removed from production is due to the fact that the only land permanently removed from cultivation is the area of the footprint of the foundations for the monopole structures.<sup>142</sup> Specifically, the design of the transmission line utilizes monopole structures set atop concrete pier foundations that are seven to ten feet in diameter, with the typical span between monopoles measuring approximately 850 feet.<sup>143</sup> The monopoles will not require any guy wires but are instead self-supporting.<sup>144</sup> One of the benefits of using such a structure is to minimize the line's contact points with the land and allow better maneuverability around the structures.<sup>145</sup> Not only do these design elements minimize the impact on all properties, including agricultural properties, it is ATXI's intention to work with landowners to modify the placement of these structures where practicable so as to minimize adverse impacts even further.<sup>146</sup> In addition, construction activities will only temporarily prevent farming activities.<sup>147</sup> ATXI will reimburse the landowner for the time required to move livestock from one location to another or may also install temporary fences or gates to keep livestock out of the construction area; in addition, ATXI would compensate a landowner if the livestock needed to be

<sup>&</sup>lt;sup>141</sup> Exh. 7, p. 6, l. 6-12; Tr., Vol. 7, p. 488, l. 21-25.

<sup>&</sup>lt;sup>142</sup> Exh. 7, p. 6, l. 6-15; Exh. 8, p. 5, l. 1-11.

<sup>&</sup>lt;sup>143</sup> Exh. 13, p. 3, l. 10-16 (Endorf Direct).

<sup>&</sup>lt;sup>144</sup> *Id.*, p. 4, l. 2-5.

<sup>&</sup>lt;sup>145</sup> Exh. 14, p. 3, l. 22 – p. 4, l. 1, 12-15.

<sup>&</sup>lt;sup>146</sup> Id., p. 3, 1. 6-12; Tr., Vol. 5, p. 247, 1. 22 – p. 248, 1. 3, p. 255, 1. 3-6; Exh. 8, p. 13, 1. 2-6.

<sup>&</sup>lt;sup>147</sup> Exh. 8, p. 4, l. 15-18; Tr., Vol. 5, p. 235, l. 18 – p. 236, l. 16.

moved to rented grazing property due to construction activity.<sup>148</sup> During this period, ATXI will compensate the landowner for any damages associated with construction activities.<sup>149</sup>

### b. <u>The presence of a transmission line bisecting an agricultural parcel</u> has a minimal impact on its agricultural use.

One of the complaints made by members of the public who attended the local public hearings was the fact that the proposed transmission line ran diagonally across their farmland, adversely impacting their farming activities.<sup>150</sup> Mr. Jackson repeats this claim in his surrebuttal testimony.<sup>151</sup> It is true that ATXI's proposed line runs diagonally across certain parcels, but the impact of these diagonal lines is minimal. It is important to understand, however, that in designing the Project, ATXI attempted to follow property lines, fence lines and lines of division as much as possible; however, the process of selecting a route also requires avoiding constraints – forest lands, residences, conservation areas, culture resource sites, wetlands, habitats, etc. – which requires a diagonal placement of the line.<sup>152</sup> Although the final route runs diagonally on some parcels, the final route selected by ATXI was less diagonal than the alternative routes.<sup>153</sup>

The fact that ATXI's proposed transmission line bisects or runs diagonally across certain parcels is not a unique situation. Many of the existing 69-kV lines in northeast Missouri cut diagonally across parcels.<sup>154</sup> In fact, Neighbors' witness Mr. Jackson agrees that his own electric provider operates power lines that run diagonally across lands in Schuyler and Adair counties.<sup>155</sup> Mr. Harris, the Neighbors' appraisal expert, admits that it is common to see power lines bisecting a property at what he considers an "inconvenient angle"; moreover, Mr. Harris admits that he

<sup>&</sup>lt;sup>148</sup> Exh. 8, p. 6, l. 3-5; Tr., Vol. 5, p. 237, l. 16 – p. 238, l. 17, p. 260, l. 8-12.

<sup>&</sup>lt;sup>149</sup> Tr., Vol. 5, p. 260, l. 13 – p. 261, l. 12.

<sup>&</sup>lt;sup>150</sup> See, e.g., Tr., Vol. 2, p. 127, l. 4-13; Tr., Vol. 3, p. 22, l. 21 – p. 23, l. 1; Tr., Vol. 4, p. 164, l. 20 – p. 165, l. 11.

<sup>&</sup>lt;sup>151</sup> Exh. 44, p. 3, l. 10 – p. 4, l. 3.

<sup>&</sup>lt;sup>152</sup> Tr., Vol. 7, p. 455, l. 21 – p. 456, l. 6, p. 464, l. 21 – p. 465, l. 13.

<sup>&</sup>lt;sup>153</sup> *Id.*, p. 465, l. 14-20.

<sup>&</sup>lt;sup>154</sup> *Id.*, p. 466, l. 2-7.

<sup>&</sup>lt;sup>155</sup> Tr., Vol. 12, p. 881, l. 4-11.

farms around such lines each year.<sup>156</sup> In order to avoid diagonal lines and follow property boundaries, the number of transmission pole structures would increase, and the route would require the addition of costly angle structures,<sup>157</sup> which would, in turn, increase the amount of land taken out of production along the route.<sup>158</sup>

Other alternatives such as paralleling other lines or burying the transmission line are even less promising. Apart from the fact that paralleling lines does not necessarily require less right-of-way or necessarily reduce construction or maintenance costs, paralleling transmission lines increases the likelihood of common-mode failures – the likelihood that a line failure will cause an adjacent line to fail.<sup>159</sup> Where the transmission line parallels an existing line, a greater number of poles and associated foundations are required, which substantially increases the costs of the line and increases the impact of the line on the land.<sup>160</sup> Moreover, the notion that the Neighbors would not oppose the line if it paralleled other lines is belied by the fact that three-fourths of the owners along the 2.2 mile portion of line that actually does parallel an existing line<sup>161</sup> oppose the Project.<sup>162</sup> While it is possible to bury a transmission line, the general rule of thumb in calculating increased costs is a factor of 10 for buried lines due to the fact that a very expensive insulation is required around a high-voltage line when it is buried.<sup>163</sup> In addition,

<sup>157</sup> An angle structure is a pole designed to support a conductor that turns an angle; sharp angle structures (a 90-degree corner) are known as dead-ends; these angle structures are more costly than straight or light angle structures with a dead-end costing as much as four times the cost. Tr., Vol. 7, p. 489, l. 10 - p. 492, l. 13. <sup>158</sup> Exh. 14. p. 2, l. 10-13.

<sup>&</sup>lt;sup>156</sup> Tr., Vol. 10, p. 819, l. 24 – p. 820, l. 6.

<sup>&</sup>lt;sup>159</sup> Exh. 11, p. 3, l. 11 – p. 5, l. 21; p. 6, l. 8-17 (Hackman Surrebuttal).

<sup>&</sup>lt;sup>160</sup> *Id.*, p. 3, Î. 22 – p. 4, Î. 2; Tr., Vol. 7, p. 500, I. 4-17.

<sup>&</sup>lt;sup>161</sup> The reason that 2.2 miles of the proposed transmission line parallels an existing line is that ATXI must construct the Mark Twain Project so that it connects with a Mid-American line at the Iowa state line. Tr., Vol. 7, p. 508, l. 16-25. Paralleling lines on a limited basis is sometimes necessary. Exh. 11, p. 6, l. 18 - p. 7, l. 5.

<sup>&</sup>lt;sup>162</sup> Tr., Vol. 7, p. 509, l. 7-15.

<sup>&</sup>lt;sup>163</sup> Tr., Vol. 7, p. 501, l. 6 – p. 502, l. 20.

burying even a portion of the line decreases the efficiency of the line as part of the electricity reflects back when the size or kind of conductor changes.<sup>164</sup>

Based upon his years of experience in acquiring easements for transmission lines, ATXI witness Douglas Brown testified that there should be no impact on farming operations outside the easement area and, for that matter, only minimal farming-related impacts inside the easement area around the footings as farmers may continue to use the land under the transmission lines.<sup>165</sup> The same is true for farms where livestock are raised or grazing activities are taking place, as the monopole design minimizes the impact on areas both outside the easement and inside the easement.<sup>166</sup> *Schedule DJB-SR1* to Mr. Brown's testimony, in fact, demonstrates the fact that crop farming activities and grazing activities occur up to the base of the monopole structures within the easement area.<sup>167</sup>

Mr. Brown's experience is consistent with the testimony of ATXI witness Aaron DeJoia, an expert in agricultural restoration and agricultural operations on agricultural property subject to transmission and gas pipeline easements.<sup>168</sup> Based upon his experience and familiarity with farming, Mr. DeJoia opines that it is unlikely that cropland would need to be removed from production because of the presence of transmission poles; rather, farmers are often faced with obstacles that require them to maneuver farming equipment around objects, including transmission poles.<sup>169</sup> Similarly, the presence of transmission lines will not interfere with

<sup>&</sup>lt;sup>164</sup> Tr., Vol. 7, p. 503, l. 9 – p. 505, l. 4.

<sup>&</sup>lt;sup>165</sup> Exh. 8, p. 4, l. 1-19.

<sup>&</sup>lt;sup>166</sup> *Id.*, p. 5, l. 12-23.

<sup>&</sup>lt;sup>167</sup> Although not directly relevant to whether the easements needed for the Project impact agricultural use of property, Mr. Brown also points out that the presence of the transmission line does not preclude hunting activities both within and outside the easement area. *Id.*, p. 6, l. 11-19. Similarly, Mr. Brown is not aware of any claims that the construction of a transmission line has led to a decrease in "booked hunts." *Id.*, p. 7, l. 14-17. <sup>168</sup> Exh. 10, p. 1, l. 6 – p. 2, l. 14 (DeJoia Surrebuttal).

<sup>&</sup>lt;sup>169</sup> *Id.*, p. 8, l. 4-17.

existing terrace farming as the 850-foot intervals make it likely that the towers won't be placed on existing terraces.<sup>170</sup>

Neighbors' witness Noel Palmer asserts that the presence of ATXI's transmission line will prevent him from conducting aerial agricultural application operations, including in areas which cannot be treated by ground crews, and, as a result, crop yields could be reduced.<sup>171</sup> Aerial agricultural applications are not necessarily precluded by the presence of a transmission line in a farm field, although ATXI is aware that above-ground transmission lines pose a potential impact to these applications.<sup>172</sup> The presence of the transmission line may require a change in flight pattern near the lines, for example, but the impact, if any, on a particular parcel is specific to each property; if the presence of a line impacts the use of aerial applications and this impact has an effect on the market value of the property, ATXI will reflect that impact on the compensation offer.<sup>173</sup> This impact would be specific to each property.<sup>174</sup> Mr. Palmer agrees.<sup>175</sup>

This situation is unlikely, however. Despite his rebuttal testimony that 8-10 acres of cropland would be lost for each half-mile of transmission line, Mr. Palmer admitted at hearing that the presence of a transmission line in a field doesn't mean that the entire field cannot be sprayed; instead, Mr. Palmer agrees with Mr. Brown that he would only be unable to spray some portion of the field – basically 50 to 60 feet away from each side of the line, according to Mr. Palmer.<sup>176</sup> As for that portion he would be unable to spray aerially, Mr. Palmer doesn't know

<sup>&</sup>lt;sup>170</sup> *Id.*, p. 9, l. 15-22.

<sup>&</sup>lt;sup>171</sup> Exh. 37, p. 3, l. 8-22, p. 4, l. 16-20, p. 5, l. 5-8 (Palmer Rebuttal).

<sup>&</sup>lt;sup>172</sup> Exh. 8, p. 10, l. 3-6.

<sup>&</sup>lt;sup>173</sup> *Id.*, l. 10-19; Tr., Vol. 5, p. 253, l. 19 – p. 254, l. 4, p. 260, l. 1-7.

<sup>&</sup>lt;sup>174</sup> *Id.*, l. 11-13.

<sup>&</sup>lt;sup>175</sup> Tr., Vol. 10, p. 851, l. 4-10.

<sup>&</sup>lt;sup>176</sup> Exh. 37, p. 4, l. 8-11; Tr., Vol. 10, p. 846, l. 23 – p. 847, l. 5, p. 848, l. 11-23; p. 850, l. 5-25.

how many acres a farmer might not be able to use ground application techniques.<sup>177</sup> This is consistent with Mr. DeJoia's testimony that it is unlikely that land would need to be removed from production because ground-based applications are often used to cover areas no longer suitable for aerial application.<sup>178</sup> As Mr. DeJoia testified, farming techniques may need to be altered, but the farmer still has the ability to farm his land.<sup>179</sup>

Although Mr. Kruse asserts that storms will topple over the transmission structures thereby impacting farming operations, this is a highly unlikely scenario. The steel monopoles are designed to meet or exceed the National Electric Safety Code and will be able to withstand an extreme wind load of almost 100 miles per hour.<sup>180</sup> Although the conductors are designed to withstand the loads imposed by 1 inch of radial ice, along with a 40-mile per hour wind, the line is protected with relays that will open breakers to take the line out of service in the highly unlikely event where a conductor would break and fall to the ground.<sup>181</sup> That such an event is highly unlikely is evidenced by the fact that Mr. Endorf has never heard of a steel monopole failure experienced by an Ameren Services operating company or of any utility in the Midwest.<sup>182</sup> The Neighbors' unsupported and speculative claim that crops will be damaged by falling towers is not a reason to find that the Project is not in the public interest.

## c. <u>Construction activities will not result in permanent destruction of agricultural properties.</u>

Mr. Jackson also claims that construction of the transmission line will result in "very significant soil compaction."<sup>183</sup> ATXI acknowledges that construction will cause compaction of

<sup>&</sup>lt;sup>177</sup> *Id.*, p. 847, l. 21-24.

<sup>&</sup>lt;sup>178</sup> Exh. 10, p. 7, l. 1-14.

<sup>&</sup>lt;sup>179</sup> Tr., Vol. 7, p. 316, l. 24 – p. 317, l. 13.

<sup>&</sup>lt;sup>180</sup> Exh. 41, p. 6, l. 12-21 (Kruse Rebuttal); Exh. 14, p. 5, l. 11-16.

<sup>&</sup>lt;sup>181</sup> Exh. 14, p. 5, l. 14-19.

<sup>&</sup>lt;sup>182</sup> *Id.*, p. 6, l. 3-9.

<sup>&</sup>lt;sup>183</sup> Exh. 41, p. 3, l. 13 – p. 4, l. 2.

the soil – just as normal agricultural operations may cause compaction.<sup>184</sup> That does not mean, however, that soil compaction prohibits the return to productivity of the land if proper land reclamation techniques are used.<sup>185</sup> ATXI will address the soil compaction caused by construction activity by restoring the land using a deep ripper unless the landowner desires to make other arrangements.<sup>186</sup> Mr. DeJoia opines that the measures proposed by ATXI are adequate to address the issue of soil compaction, returning agricultural land to its former productivity.<sup>187</sup> ATXI will either compensate the owner for any compaction caused by construction activities or have a restoration contractor remove the compaction so that crop yields would not be compromised.<sup>188</sup> If soil issues remain following reclamation efforts, ATXI's procedures provide that ATXI will pay damages to the landowner.<sup>189</sup> Consequently, the fact that there may be temporary soil compaction associated with the construction of the line (as there would be with the construction of any transmission line) does not justify a determination that the Project is not in the public interest.

### d. <u>The presence of transmission lines does not interfere with the</u> <u>operation of GPS-guided farm or aerial application equipment.</u>

Although he demonstrated no expert qualification or foundation to provide this testimony, Neighbors' witness Mr. Jackson raised the issue that the presence of the transmission line would interfere with GPS-guided farming equipment, "causing serious problems for agriculture."<sup>190</sup> Those testifying at the local public hearings echoed the claim that the presence of the transmission line would interfere with GPS-guided precision farming equipment, preventing

<sup>186</sup> Id., p. 5, l. 1-14; Exh. 8, Sch. DBR-SR2.

<sup>&</sup>lt;sup>184</sup> Exh. 10, p. 3, l. 18 – p. 4, l. 15.

<sup>&</sup>lt;sup>185</sup> *Id.*, p. 4, l. 10-15.

<sup>&</sup>lt;sup>187</sup> *Id.*, 1. 15-28.

<sup>&</sup>lt;sup>188</sup> Tr., Vol. 5, p. 252, l. 8-15.

<sup>&</sup>lt;sup>189</sup> Exh. 10, p. 5, l. 26-28.

<sup>&</sup>lt;sup>190</sup> Exh. 41, p. 5, l. 6-13.

their use.<sup>191</sup> In addition, Neighbors' witness Mr. Palmer believes that he experiences GPS interference during aerial applications while flying near power lines.<sup>192</sup> This interference does not affect Mr. Palmer's instrumentation or ability to fly his plane, but the light bar he uses to track applications.<sup>193</sup> The simple fact is that these claims are unfounded.

ATXI witness Michael Silva is a professional engineer who has 43 years of experience related to electric power facilities, electromagnetic compatibility and high-voltage transmission lines.<sup>194</sup> In addition to his vast experience researching and designing GPS systems, Mr. Silva has conducted studies on the effects of high-voltage transmission lines on GPS systems.<sup>195</sup> According to Mr. Silva, high-voltage transmission lines do not interfere with GPS systems for one simple reason – frequency separation.<sup>196</sup> Simply put, the proposed transmission line will operate at 60 Hertz, which is an extremely low frequency, while GPS systems operate in the frequency range of 1.2 billion to 1.5 billion Hertz; because they operate at two different ends of the spectrum, there is no opportunity for one to interfere with the other.<sup>197</sup> This is why it is not uncommon for cell phone base stations and high accuracy GPS antennas to be mounted directly onto high-voltage transmission towers.<sup>198</sup> The only interference the transmission line could possibly have on GPS-aided agriculture operations is where the pole physically obstructs the satellite signal; however, Mr. Silva's own research has confirmed that this is "highly unlikely" to

<sup>&</sup>lt;sup>191</sup> See, e.g., Tr., Vol. 2, p. 127, l. 14 – p. 128, l. 6; Tr., Vol. 3, p. 114, l. 4-6; Tr., Vol. 4, p. 68, l. 11-20.

<sup>&</sup>lt;sup>192</sup> Exh. 37, p. 4, l. 1-7.

<sup>&</sup>lt;sup>193</sup> Tr., Vol. 10, p. 852, l. 9-21.

<sup>&</sup>lt;sup>194</sup> Exh. 6, p. 2, l. 1-3 (Silva Surrebuttal).

<sup>&</sup>lt;sup>195</sup> *Id.*, p. 2, l. 4 – p. 3, l. 11.

<sup>&</sup>lt;sup>196</sup> *Id.*, p. 6, l. 5-12.

<sup>&</sup>lt;sup>197</sup> *Id.*, p. 4, l. 1 – p. 5, l. 4, p. 6, l. 5-12.

<sup>&</sup>lt;sup>198</sup> *Id.*, p. 9, l. 17 – p. 10, l. 17; Sch. JMS-SR5; Sch. JMS-SR6. The fact that Trimble, a particular manufacturer of precision agriculture systems, warns against the use of receivers directly beneath or close to overhead power lines, does not contradict Mr. Silva's testimony; as he explained at hearing, Mr. Silva discussed this warning with Trimble because it was contained in some of their manuals but not others and was told that Trimble's lawyers wouldn't let them remove it.<sup>198</sup> In fact, Mr. Silva has taken Trimble engineers to power lines to prove otherwise, but acknowledges that some – but not all – manuals published by them contain this warning, despite the fact that there is no interference. Tr., Vol. 5, p. 228, l. 7-17.

occur because the physical obstructions are so minimal and GPS correction depends upon multiple satellite signals.<sup>199</sup>

As for Mr. Palmer's complaint regarding the interference he says he experiences during aerial applications, Mr. Silva's opinion is no different as to the connection – the principle of frequency separation precludes the notion that a transmission line will interfere with GPS operations.<sup>200</sup> Instead, Mr. Silva believes that the problems Mr. Palmer experiences are more likely due to the problems associated with normal aerial operations.<sup>201</sup> Consequently, there is no evidence to support the assertion that the presence of the transmission line will interfere with any GPS-related equipment or operations.

## e. <u>The Mark Twain transmission line does not impact current pivot</u> <u>irrigation systems and will not preclude the installation of future</u> <u>systems.</u>

Again without any indication as to the factual basis for his view, Mr. Jackson also opines that the transmission line proposed by ATXI "would make it an impossibility to irrigate the fields impacted by these [pivot irrigation] structures."<sup>202</sup> This is simply not true. First, as Mr. Wood testified, ATXI identified and avoided all known pivot irrigation systems along the transmission line route.<sup>203</sup> Moreover, Mr. DeJoia testified that transmission line monopoles do not prohibit the future use of pivot irrigation on a particular parcel as these systems may be designed to operate exclusive of the area where the monopoles are located.<sup>204</sup> In the unlikely event that during the Project a planned center pivot irrigation system is encountered that would be directly impacted by routing, ATXI will attempt to mitigate the impacts on such a system or

<sup>203</sup> Exh. 16, p. 6, l. 1-10.

<sup>&</sup>lt;sup>199</sup> Exh. 6, p. 11, l. 3 – p. 15, l. 2, p. 16, l. 1-10.

<sup>&</sup>lt;sup>200</sup> *Id.*, p. 16, l. 11 – p. 17, l. 8.

<sup>&</sup>lt;sup>201</sup> *Id.*, p. 17, l. 8-10.

<sup>&</sup>lt;sup>202</sup> Exh. 41, p. 4, l. 11-12.

<sup>&</sup>lt;sup>204</sup> Tr., Vol. 7, p. 309, l. 15 – p. 310, l. 7, p. 325, l. 20 – p. 326, l. 13.

avoid it altogether.<sup>205</sup> Furthermore, other irrigation systems are available that would not interfere with the transmission line.<sup>206</sup> Finally, although it would be rare that an irrigation system could not be accommodated during construction, the inability to install a center pivot irrigation system or other irrigation systems would be factored into the compensation offered the landowner.<sup>207</sup> In sum, there is very little likelihood that ATXI's proposed transmission line will interfere with the irrigation of crops.

## f. <u>Easements on CRP property will not result in the cancellation of</u> <u>CRP contracts.</u>

At the local public hearings, witnesses testified that the presence of the transmission line on their property subject to a Conservation Reserve Program ("CRP") contract would result in the cancellation of that contract and the repayment of previous payments.<sup>208</sup> This is not the case. The placement of an easement does not automatically result in the cancellation of the entire CRP contract, nor does it require repayment of past funds received by the participant; instead, only the CRP land acquired under threat of condemnation is removed from the program and the refund of payments received is waived – a fact confirmed by Missouri's state resource conservationist.<sup>209</sup> It is only where the presence of the transmission line would be entirely inconsistent with CRP objectives that an entire CRP contract would be cancelled; were this to happen wholly because of ATXI's actions, it would be an element of damages suffered by the landowner and eligible for compensation.<sup>210</sup> This is very unlikely. ATXI witness Douglas Brown, who in the past has negotiated easements with landowners who have CRP contracts, has testified that ATXI will

<sup>&</sup>lt;sup>205</sup> Exh. 14, p. 6, l. 10 – p. 7, l. 9; Exh. 8, p. 9, l. 7-10; Tr., Vol. 5, p. 255, l. 2-6.

<sup>&</sup>lt;sup>206</sup> Id., p. 7, l. 3-9; Exh. 10, p. 6, l. 1-16.

<sup>&</sup>lt;sup>207</sup> Exh. 8, p. 9, l. 11-10:2; Tr., Vol. 5, p. 259, l. 6-25.

<sup>&</sup>lt;sup>208</sup> See, e.g., Tr., Vol. 2, p. 23, l. 7-23; Tr., Vol. 3, p. 23, l. 2-11; Tr., Vol. 4, p. 40, l. 12-19.

<sup>&</sup>lt;sup>209</sup> Exh. 10, p. 10, l. 12-19; Tr., Vol. 7, p. 329, l. 3-14, p. 331, l. 6-11. CRP land temporarily used by ATXI during construction may be continued in the program without reduction in payment if notice is given by the landowner and ATXI restores the property consistent with the parcel's conservation plan. Exh. 10, p. 11, l. 1-7. <sup>210</sup> Exh. 10, p. 10, l. 19-20.

work with property owners to address the details of the existing CRP agreements so that the property owners can comply with their obligations under those contracts.<sup>211</sup> Furthermore, having led 12 major projects requiring the acquisition of hundreds of easements, Mr. Brown cannot think of a single instance where property owners were required to repay CRP payments they previously received.<sup>212</sup> The fears of the landowners are not supported by the evidence.

## *iv.* The proposed transmission line route has only a minimal impact on Amish and Mennonite communities in the area.

Another question put before the Commission regarded the impact of the proposed transmission line project on Amish and Mennonite communities in northeast Missouri. Jason Haxton, a witness on behalf of the Neighbors and a self-described advocate for Amish and Mennonite communities, offered quite startling testimony that the Zachary to Iowa State Line segment of the Project would "cut their [Amish] community property down the middle" and, as a result, would cause them to relocate if the transmission line "is allowed to cross their land."<sup>213</sup> At hearing, Mr. Haxton appeared to back off from his assertion that the transmission line would run through the middle of the Amish community, but insisted that he had spoken with two members of the Amish and Mennonite communities the night before and had confirmed that the transmission line would cross their properties, which were located north of Kirksville.<sup>214</sup> This is not the case.

As shown in the *Joint Report on the Location of ATXI's Transmission Line in Relation to Identified Amish- and Mennonite-owned Properties*,<sup>215</sup> the proposed transmission line traverses

<sup>&</sup>lt;sup>211</sup> Exh. 8, p. 3, l. 7-11.

<sup>&</sup>lt;sup>212</sup> Id., 1. 12-22.

<sup>&</sup>lt;sup>213</sup> Exh. 39, p. 5, l. 17-18, p. 6, l. 5-17 (Haxton Rebuttal). Mr. Haxton's testimony is the subject of a motion to strike on the grounds that Mr. Haxton is not qualified as an expert witness, and his entire testimony constitutes inadmissible hearsay. *Motion to Strike Testimony of Jason Haxton* [EFIS Item No. 138]. As of this writing, no ruling has issued.

<sup>&</sup>lt;sup>214</sup> Tr., Vol. 10, p. 767, l. 21-25, p. 769, l. 10-18, p. 770, l. 6 – p. 771, l. 8.

<sup>&</sup>lt;sup>215</sup> EFIS Item No. 257.

only one property identified by Neighbors as having an Amish or Mennonite owner, and that property is located southeast of Kirksville.<sup>216</sup> Although Mr. Haxton's testimony was almost entirely directed at Amish and Mennonite communities north of Kirksville and around Greentop and Queen City, no easements will be required from any Amish or Mennonite owner in those areas; in fact, the proposed transmission line route is more than one-half mile from the westernmost edge of the properties pointed to by Mr. Haxton – approximately 3,500 feet from Johnny E. Miller's property and approximately 4,000 feet from Mr. Graber's easternmost boundary.<sup>217</sup> Of the 377 individual parcels over which the proposed transmission line will be routed, an easement will be required from only one property – owned by Floyd and Sarah Miller – that has been identified as Amish- or Mennonite-owned property, and the Millers' home is located almost one-half mile away from the proposed transmission line.<sup>218</sup> Irrespective of whether the Millers are owed special consideration because of their religious beliefs, the proposed transmission line minimally impacts Amish and Mennonite communities in the area.

The reason why the proposed transmission line impacts only one property is that ATXI attempted to mitigate the impact on these properties during the routing process, as ATXI attempted "to minimize the impacts to everybody, including the Amish."<sup>219</sup> After ATXI developed its preliminary route network and identified all property owners within 2,500 feet of any alternative route, it held public open houses to not only educate the public about the Project, but also obtain additional information regarding the potential impacts of the line.<sup>220</sup> A second round of open houses was held in October 2014 for the same purpose after the reduced route

<sup>&</sup>lt;sup>216</sup> Joint Report at  $\P$  6.

<sup>&</sup>lt;sup>217</sup> Joint Report at  $\P$  7.

<sup>&</sup>lt;sup>218</sup> Tr., Vol. 5, p. 242, l. 14-23; *Joint Report* at Exh. C.

<sup>&</sup>lt;sup>219</sup> Tr., Vol. 7, p. 478, l. 3-5.

<sup>&</sup>lt;sup>220</sup> Exh. 16, p. 2, l. 13-16.

network had been identified.<sup>221</sup> Information provided at these open houses was important in providing additional information not otherwise known to ATXI; for example, county parcel records do not contain information regarding the religious affiliation of property owners.<sup>222</sup> During both rounds of open houses, ATXI gained information regarding the location of Amish and Mennonite communities, including the input of Mr. Haxton regarding the Amish and Mennonite communities located north of Kirksville.<sup>223</sup> Based upon the information that ATXI developed regarding the locations of the Amish and Mennonite communities of landowners along the proposed route and other considerations, ATXI selected the route that it believed impacted the fewest Amish and Mennonite property owners.<sup>224</sup> As the Commission now knows, only one Amish-owned property is impacted by the proposed route.

# v. The proposed transmission line does not significantly impact land values along the proposed route.

For this project, ATXI will need to acquire easements for the approximately 95 miles of 345-kV transmission line and the 2.2 mile-long 161-kV connector line.<sup>225</sup> The 345-kV route will require easements of 150 feet in width, and the 161-kV segment will require easements of 100 feet in width.<sup>226</sup> Construction of the line is expected to occur primarily within those easement widths, although ATXI may require some additional permanent or temporary access in excess of the easements.<sup>227</sup> The total easement area for the final route will contain approximately 1,754 acres, of which 523 acres is the amount of agricultural acreage within the required easements.<sup>228</sup>

<sup>&</sup>lt;sup>221</sup> *Id.*, p. 2, l. 16-20.

<sup>&</sup>lt;sup>222</sup> *Id.*, 1. 21-22.

<sup>&</sup>lt;sup>223</sup> *Id.*, p. 3, l. 14-23; *Joint Report* at Exh. A.

<sup>&</sup>lt;sup>224</sup> *Id.*, p. 4, l. 14 – p. 5, l. 23; Tr., Vol. 7, p. 481, l. 20 – p. 482, l. 13.

<sup>&</sup>lt;sup>225</sup> Exh. 7, p. 3, l. 19-21.

<sup>&</sup>lt;sup>226</sup> *Id.*, p. 4, l. 1-5.

<sup>&</sup>lt;sup>227</sup> Id., 1. 6-18.

<sup>&</sup>lt;sup>228</sup> *Id.*, 1. 11-12, p. 6, 1. 6-15.

While it is ATXI's intention to acquire these property rights through voluntary negotiations, it cannot rule out the possibility that eminent domain authority would be exercised if voluntary negotiations prove unsuccessful.<sup>229</sup> As Mr. Brown points out, however, the use of eminent domain to acquire easements in his 14 years of acquiring property has been relatively rare.<sup>230</sup>

While it is not the type of impact that is unique to the Project,<sup>231</sup> the Neighbors – through their witness Boyd Harris – asserted that the Project is not in the public interest because it will "significantly impact" both agricultural and residential property values.<sup>232</sup> Mr. Harris, a real estate appraiser, went so far as to suggest that property owners could suffer between a 63-percent and 91-percent loss in property value because of the presence of the Mark Twain transmission line.<sup>233</sup> Mr. Harris' testimony is quite remarkable for several reasons, but primarily because at the time he gave this opinion, he had never performed an appraisal involving the acquisition of a utility easement, didn't know the width of the easement required by the Project, didn't know the voltage of the proposed line, had not talked with any landowner along the route, and had not performed an analysis of the percentage of each parcel that would be subject to a transmission line easement.<sup>234</sup> This would explain why Mr. Harris's testimony as to the significant loss in property value was based upon a 2011 newspaper article regarding a transmission line that runs from northern New Hampshire to the Quebec, Canada border – an article that Mr. Harris had not independently verified or spoken to its author, didn't know whether the author was an appraiser,

<sup>231</sup> Mr. Harris cannot disagree – in point of fact, his rebuttal testimony in this matter was nearly identical to testimony he filed on behalf of landowners opposing the Grain Belt Express transmission line project [Exh. 89], and utilized the exact same source information. Tr., Vol. 10, p. 828, l. 1 - p. 829, l. 23.

<sup>232</sup> Exh. 38, 1. 3, 1. 2-8 (Harris Rebuttal). Mr. Harris's testimony is the subject of a motion to strike on the grounds that Mr. Harris lacks qualifications as an expert witness, his testimony lacks sufficient foundation and relevance, and his entire testimony constitutes inadmissible hearsay and improper legal opinion. *Motion to Strike Rebuttal Testimony of Boyd L. Harris* [EFIS Item No. 139]. As of this writing, no ruling has issued.

<sup>&</sup>lt;sup>229</sup> *Id.*, p. 4, l. 19 – p. 5, l. 2.

<sup>&</sup>lt;sup>230</sup> *Id.*, p. 2, l. 12-14.

<sup>&</sup>lt;sup>233</sup> Exh. 38, p. 6, l. 1-6.

<sup>&</sup>lt;sup>234</sup> Tr., Vol. 10, p. 807, l. 5-13, p. 808, l. 5 – p. 809, l. 8.

didn't know whether an appraisal had even been conducted on the subject property, didn't know what type of transmission line structures were going to be placed on the properties, and was not aware of any similar study that would support similar findings in Missouri.<sup>235</sup>

Mr. Harris suggested in his testimony that reasons for these significantly diminished agricultural property values included loss in productivity of cropland because of the placement of towers on farmland which impact its functionality, compaction from construction limiting grain production, and lack of demand on the market due to these impacts.<sup>236</sup> As he had when he opined that property values would be significantly impacted, Mr. Harris stated these opinions without providing a factual basis for these opinions. At hearing, Mr. Harris admitted that he did not know how high the monopole structures were or how many there were of them, that he had not talked with anyone about the monopole structures, that he had not seen where these towers were being proposed, had not reviewed the proposed form of easement that ATXI intends to use, and had not performed any analysis of the market impact associated with the ATXI easements.<sup>237</sup> Where Mr. Harris was actually aware of a transmission line traversing agricultural property (in Randolph County), he had to admit that he was unaware of any complaints related to the ability to farm the land or that there were any health impacts associated with the property.<sup>238</sup> Based upon Mr. Harris's own admissions and the efforts ATXI has taken to minimize the impact on farming operations,<sup>239</sup> it is readily evident that Mr. Harris's testimony consisted of conclusory and unsubstantiated opinions that can bear no weight on this issue.

The same thing can be said of Mr. Harris's opinions regarding the impact of the Project on residential property values. The value of residential properties, according to Mr. Harris, will

<sup>&</sup>lt;sup>235</sup> Tr., Vol. 10, p. 821, l. 19 – p. 823, l. 7.

<sup>&</sup>lt;sup>236</sup> Exh. 38, p. 3, l. 4-7.

<sup>&</sup>lt;sup>237</sup> Tr., Vol. 10, p. 810, l. 2 – p. 811, l. 13.

<sup>&</sup>lt;sup>238</sup> Tr., Vol. 10, p. 817, l. 23 – p. 818, l. 20.

<sup>&</sup>lt;sup>239</sup> Set out in subsection "D.iii" above.

be reduced because of the unsightly appearance of the power lines and health concerns related to stray voltage.<sup>240</sup> Again, Mr. Harris has no factual basis for these opinions. Mr. Harris admitted that he had not performed any analysis of the impact the "unsightly appearance" that the ATXI transmission line would have on residential properties and was unable to provide even one example of an appraisal where he himself had factored unsightly appearance into a value determination.<sup>241</sup> Likewise, Mr. Harris had not performed any analysis of the impact that health concerns related to the ATXI transmission line would have on residential properties and was unable to provide even one example of an appraisal where he himself had factored unsightly appearance into a value determination.<sup>241</sup> Likewise, Mr. Harris had not performed any analysis of the impact that health concerns related to the ATXI transmission line would have on residential properties and was unable to provide even one example of an appraisal where he had factored health concerns into a value determination.<sup>242</sup>

At hearing, Mr. Harris admitted the obvious – that an appraisal claiming a 90 percent reduction in property values because of a transmission line was "certainly curious" and "likely to be questioned as it seems to be unrealistic."<sup>243</sup> When questioned by Chairman Hall, Mr. Harris, however, backed down from his rebuttal testimony – admitting that because he had not performed any market research or analysis, he could not testify that there would be a "significant" impact to property values as a result of the transmission line, instead testifying that "there will be an impact."<sup>244</sup> But even for that impact, Mr. Harris admitted that a decrease in property value could be reflected in the valuation of the easement and "if the appraisers are doing their jobs," and the "courts do their jobs."<sup>245</sup>

ATXI witness Vickie Turpin, a real estate appraiser for 33 years who has appraised properties subject to transmission line easements numerous times, agrees with Mr. Harris on this

<sup>&</sup>lt;sup>240</sup> Exh. 38, p. 3, l. 7-8.

<sup>&</sup>lt;sup>241</sup> Tr., Vol. 10, p. 812, l. 25 – p. 813, l. 8.

<sup>&</sup>lt;sup>242</sup> *Id.*, p. 813, l. 15 – p. 814, l. 1.

<sup>&</sup>lt;sup>243</sup> *Id.*, p. 823, l. 14 – p. 824, l. 2.

<sup>&</sup>lt;sup>244</sup> *Id.*, p. 839, l. 8-20.

<sup>&</sup>lt;sup>245</sup> *Id.*, p. 841, l. 1-14.

last point – that any loss in fair market value of a property due to a transmission line easement is something properly considered in the appraisal process in condemnation cases.<sup>246</sup> Otherwise, Ms. Turpin strongly disagreed with Mr. Harris's conclusions. Specifically, Ms. Turpin testified that in her experience appraising properties over which a utility company was proposing an easement, she typically found little, if any, impact on the market value of properties – particularly outside the easement area and due to the fact that other factors have much more influence on market value.<sup>247</sup> Rather than seeing an entire agricultural parcel's value significantly diminished by a power line, Ms. Turpin's experience has been that only a portion of a parcel suffered some diminished value while the balance of the farm was not affected.<sup>248</sup> Finally, Ms. Turpin, relying on her familiarity with Missouri law and the jury instructions for condemnation cases in Missouri, rejects the notion put forth by Mr. Harris that there are damage considerations other than the diminution of fair market value due to the easement, including the concept that "market fear" is a compensable component of any appraisal or condemnation.<sup>249</sup>

As suggested by Chairman Hall's question to Mr. Harris at hearing, the fact that property owners may suffer a diminution in value of their property as the result of the Project is not a relevant consideration on the issue of public interest.<sup>250</sup> Every improvement for which a CCN is sought that requires the purchase or condemnation of property and/or easements will result in some impact to the property owner. But the landowner is not without a remedy. Whether the landowner and the utility reach agreement or whether a condemnation action becomes necessary,

<sup>&</sup>lt;sup>246</sup> Exh. 9, p. 2, l. 14-22, p. 3, l. 19 – p. 4, l. 10, p. 10, l. 1-9 (Turpin Surrebuttal).

<sup>&</sup>lt;sup>247</sup> *Id.*, p. 4, l. 1-14.

<sup>&</sup>lt;sup>248</sup> *Id.*, p. 5, l. 16 – p. 6, l. 3.

<sup>&</sup>lt;sup>249</sup> *Id.*, p. 10, l. 1-22.

<sup>&</sup>lt;sup>250</sup> The Commission recognizes this, as evidenced by the following statement regarding its lack of a role in issues regarding land acquisition and eminent domain in its *Order Regarding Motion to Dismiss*: "This assertion fails to distinguish between the legal significance of granting a CCN based upon a determination that the proposed project is in the public interest and the taking of property through eminent domain proceedings. The former is within the purview of the Commission, while the latter is within the exclusive jurisdiction of Article III courts."

compensation of the landowner for the diminution in value he or she suffers<sup>251</sup> is a legal remedy guaranteed the landowner without any action by this Commission. In this process, ATXI would employ a third-party independent licensed appraiser to provide market data studies of land values across each of the five counties and pay the landowner the fair market value for the easement as if ATXI was purchasing it in fee; in the instance of condemnation, ATXI would ask the appraiser to provide a full appraisal report to determine the loss in value of the property.<sup>252</sup> That the landowner has a remedy for any loss in property value they suffer does not suggest that the Project is against the public interest.

### III. DISCUSSION OF STAFF CONDITIONS

#### A. <u>Staff Conditions 1, 3 to 7</u>

Section 393.170.3 provides that the Commission may impose such conditions on a CCN

as it deems "reasonable and necessary." Conditions are sometimes included to insure the

proposed Project is in the public interest. See, e.g., In re Union Elec. Co., 2003 Mo. PSC LEXIS

1053 (Case No. EO-2002-351) (where Commission determined that the proposed Callaway-

Franks 345-kV line was in the public interest as long as certain conditions were attached to the

CCN).

The conditions agreed upon in this case between the Staff and ATXI<sup>253</sup> are as follows:

 The plans and specifications for construction of the proposed Mark Twain Project that ATXI is developing shall be filed with the Commission as required by 4 CSR 240-3.105(1)(B).<sup>254</sup>

 <sup>&</sup>lt;sup>251</sup> The estimated payments for easements and damages (e.g., for crops destroyed during construction) is not insignificant, totaling \$11,980,637. *ATXI's Response to Commissioner Question* [EFIS Item No. 159].
 <sup>252</sup> Tr., Vol. 5, p.250, 1, 1-9, p. 251, 1, 1-9, p. 258, 1, 6-14.

<sup>&</sup>lt;sup>253</sup> As discussed in more detail below, ATXI and Staff have a legal disagreement regarding one of the conditions proposed by Staff witness Beck.

<sup>&</sup>lt;sup>254</sup> Exh. 25, p. 16, l. 20-22 (Beck Rebuttal). This condition has been satisfied with the filing of the plans and specifications as part of the surrebuttal testimony of ATXI witness David Endorf. Exh. 2, p. 3, l. 5-8 (Borkowski Surrebuttal); Exh. 14, p. 8, l. 7 - p. 9, l. 20.

3. Throughout the right-of-way acquisition process, ATXI will use all reasonable efforts to abide by the depicted route on each of the 377 parcels identified as of the filing of its application as parcels over which an easement will be required, but will be allowed to deviate from the depicted route within one of the 377 parcels in two scenarios. First, if surveys or testing do not necessitate a deviation, ATXI may deviate from the depicted route on a particular parcel if ATXI and the landowner agree, *e.g.*, upon request of the landowner and ATXI's agreement with the request. Second, if ATXI determines that surveys or testing require a deviation, ATXI will negotiate in good faith with the affected landowner and if agreement can be reached ATXI may deviate from the depicted route on that parcel, as agreed with the affected landowner.

With respect to any parcel other than the 377 identified parcels where ATXI determines that testing or surveys necessitate acquisition of an easement on that parcel, ATXI will negotiate in good faith with the landowner of the affected parcel over which ATXI has determined an easement is needed and, if agreement is reached, may deviate from the depicted route by locating the line on the affected parcel but will notify the Commission of the deviation and parcels affected prior to construction on that parcel. If agreement is not reached, despite good faith negotiations, ATXI will file a request with the Commission to allow it to deviate from the depicted route onto the affected parcel and shall, concurrently with the filing of its request with the Commission, send a copy of its request to the owner(s) of record of the affected parcel via U.S. Mail, postage prepaid, as shown by the County Assessor's records in the county where the affected parcel is located, or at such other address that has been provided to ATXI by the owner(s). ATXI shall fully explain in that request why ATXI determined the change in route is needed and file supporting testimony with its request and the name(s) and addresses of the owner(s) to whom it provided a copy of its request. After Commission notice of the opportunity for a hearing on the issue of whether the change in route should be approved given to the owner, Staff and Public Counsel, the Commission will grant or deny the request.255

- 4. That absent a voluntary agreement for the purchase of the property rights, the transmission line shall not be located so that a residential structure currently occupied by the property owners will be removed or located in the easement requiring the owners to move or relocate from the property.<sup>256</sup>
- 5. Prior to the commencement of construction on a parcel, ATXI will secure an easement which will include a surveyed legal description showing the precise dimension, including the length and width, for the permanent transmission line easement area for each affected parcel. In addition, ATXI will track each easement grant by way of a spreadsheet that identifies each parcel by Grantor and County, and which contains the recording information for each parcel. Upon securing all necessary easements for the project, ATXI will file a copy of the spreadsheet with the Commission, to which a map will be attached.

<sup>&</sup>lt;sup>255</sup> Exh. 33; Tr., Vol. 5, p. 233, l. 5-15.

<sup>&</sup>lt;sup>256</sup> Exh. 25, p. 17, l. 9-12; Exh. 2, p. 5, l. 10-12.

For each parcel, the map and the spreadsheet will include a unique indicator that allows the Commission to see where on the map that parcel is located.<sup>257</sup>

- 6. That ATXI shall follow the construction, clearing, maintenance, repair, and right-of-way practices set out in *Schedule DB-R-2* attached to this Rebuttal Testimony.<sup>258</sup>
- 7. That ATXI shall be required to file with the Commission the annual report it files with FERC.<sup>259</sup>

Staff witness Daniel Beck's recommendation was that ATXI's application met the necessary requirements for the granting of a CCN under section 393.170 and should be granted as long as the seven conditions<sup>260</sup> he proposed were imposed upon the CCN.<sup>261</sup>

Leaving aside the disputed condition regarding assents (condition 2) and condition "1" which has already been met by ATXI, ATXI agrees that the conditions stated above may be imposed on the CCN granted ATXI for the Project.<sup>262</sup> These proposed conditions insure that the Project is in the public interest. Regarding the modification of Mr. Beck's original conditions, which the Staff agrees preserve the intention of the original conditions, condition "3" above is a modification to a condition originally proposed by Mr. Beck.<sup>263</sup> It fairly lets the parties agree to move the currently-proposed alignment on an already-identified parcel by agreement while allowing ATXI, if survey and geotechnical work requires it, to change the alignment but only on already-identified parcels.<sup>264</sup> Condition "4" above is a modified version of the original condition proposed by Mr. Beck<sup>265</sup> that also reflects ATXI's current acquisition practices yet still meets the

<sup>&</sup>lt;sup>257</sup> Exh. 34; Tr., Vol. 5, p. 234, l. 6-15.

<sup>&</sup>lt;sup>258</sup> Exh. 25, p. 17, l. 20-22; Exh. 2, p. 6, l. 6-7.

<sup>&</sup>lt;sup>259</sup> Exh. 25, p. 17, l. 24-25; Exh. 2, p. 6, l. 20-22.

<sup>&</sup>lt;sup>260</sup> This includes the condition in dispute, which is discussed elsewhere in this brief.

<sup>&</sup>lt;sup>261</sup> Tr., Vol. 10, p. 730, l. 12-24.

<sup>&</sup>lt;sup>262</sup> Tr., Vol. 5, p. 231, l. 6-13.

<sup>&</sup>lt;sup>263</sup> Exh. 25, p. 17, l. 3-7.

<sup>&</sup>lt;sup>264</sup> Exh. 8, p. 12, l. 10 – p. 14, l. 3.

<sup>&</sup>lt;sup>265</sup> Exh. 25, p. 17, l. 15-18.

intent of Mr. Beck's condition, which is to provide the Commission with recorded easement language that contains a specific, surveyed legal description of the location of the easement.<sup>266</sup>

The Neighbors' position is "that no condition will completely alleviate the impacts this project will have on landowners."<sup>267</sup> The Neighbors agree, however, that the conditions proposed by Mr. Beck in his rebuttal testimony should be placed on the CCN if it is granted; the Neighbors<sup>268</sup> disagree that condition denominated as "3" above should be modified from Mr. Beck's original proposal, claiming that the original condition promotes certainty for landowners.<sup>269</sup> It is difficult to determine how the modified condition does not provide the same certainty; the modified condition allows ATXI to deviate from the identified route with approval of the landowner or through condemnation if negotiation is unsuccessful; where the parcel was not previously identified as impacted, by receiving a variance from the Commission.<sup>270</sup> The modified condition is appropriate.

Because the agreed-upon proposed conditions are reasonable and insure that the Project will not be detrimental to the public interest, ATXI agrees that conditioning its CCN for the Mark Twain Project with those conditions is appropriate.

#### B. <u>Staff Condition 2</u>

There are two aspects to the Staff's second condition, one of which arises from the possible application of section 229.100, which deals with county assents relating to roads in a county, and the other arises from other permits (if any) that may be required for the Project. We first address the assent issue.

<sup>&</sup>lt;sup>266</sup> Exh. 8, p. 14, l. 12 – p. 15, l. 6.

<sup>&</sup>lt;sup>267</sup> Position Statement of Neighbors United, p. 10 [EFIS Item No. 150]; Tr., Vol. 5, p. 82, l. 9-11.

<sup>&</sup>lt;sup>268</sup> And, apparently, the OPC – although it offers no explanation as to why it opposes the modified conditions. Tr., Vol. 5, p. 61, l. 3-11.

<sup>&</sup>lt;sup>269</sup> Tr., Vol. 5, p. 82, l. 16 – p. 83, l. 10.

<sup>&</sup>lt;sup>270</sup> Exh. 8, p. 11, l. 9 – p. 14, l. 3.

#### *i.* County Assents

Section 229.100 provides as follows:

No person . . . [or] compan[y] shall erect poles for the suspension of electric light, or power wires, or lay and maintain pipes, conductors, mains and conduits for any purpose whatever, through, on, under or across the public roads or highways of any county of this state, without first having obtained the assent of the county commission of such county therefor; and no poles shall be erected or such pipes, conductors, mains and conduits be laid or maintained, except under such reasonable rules and regulations as may be prescribed and promulgated by the county highway engineer, with the approval of the county commission.

Given that no structure (pole) or any other Project asset will actually be located within any public road right-of-way, there are questions about whether the statute applies at all. Nevertheless, ATXI intends to obtain county assents. For purposes of the following discussion, ATXI will assume section 229.100 applies to the Project.

Staff basis its condition 2 on an interpretation of the requirements of section 393.170, but the Staff limits its analysis to only a portion of the statute. Under sub-section 2 of section 393.170, the Commission shall not issue "such [a] certificate" before the company proves that it has obtained the "required consent of the proper municipal authorities." That consent is in the form of a "franchise" and the statute also indicates that rights cannot be exercised under the franchise without obtaining the required Commission approval under sub-section 2. The Staff takes the position that a section 229.100 assent is a franchise and, therefore, is the "required consent" under section 393.170. Based on that position, the Staff concludes that the Commission is prohibited from "granting" a CCN in this case until ATXI proves it has obtained section 229.100 assents. As noted earlier, the Staff agrees, however, that the Commission can decide now whether the Project is "necessary or convenient for the public service," i.e., can apply the *Tartan* criteria and otherwise decide the case on the merits under the statutory standard applicable to applications such as this one.

If the Commission adopts the Staff's interpretation, it would give locally elected county commissioners a veto power over projects the Commission determines are necessary or convenient for the public service. In other words, the Commission would be subordinating its public-interest determination regarding electric transmission system improvements that have statewide (and regional) implications to the decisions of politically accountable commissioners in five counties.<sup>271</sup> This would not only be bad policy, a point elaborated on further below, but respectfully, it would be based upon reliance on the Staff's misreading and misapplication of section 393.170.

The Staff misreads and misapplies the statute in two ways. First, the franchise/municipal consent requirement in sub-section 2 does not apply in sub-section 1 cases such as this one. In other words, in sub-section 2, when it says the Commission shall not issue "such [a] certificate" before the company proves that it has obtained the "required consent of the proper municipal authorities," it means the Commission shall not issue an *area certificate* before the company proves that it has obtained local consent *to serve an area of the municipality*. Here, ATXI did not apply for an area certificate; ATXI applied for a line certificate. Nothing in sub-section 1 requires ATXI to prove it has obtained local consent. Therefore, section 393.170 does not bar the Commission from "granting" ATXI a line certificate with or without section 229.100 assents.

Second, even if the franchise/municipal consent requirement could apply in some line certificate cases, or even if there were no distinction between a sub-section 1 and sub-section 2 case, there is no franchise/municipal consent requirement in this case, on the facts at issue here, because this case involves a company (ATXI) that does not provide electric service to end-use customers in Missouri. As we will explain below, the franchise/municipal consent provisions only apply (in any kind of CCN case) when municipal consent is needed to provide service

<sup>&</sup>lt;sup>271</sup> And for longer projects, the number of counties with such veto power could be much higher.

within the municipality's boundaries (here, within unincorporated areas of a county). ATXI addresses each of these points below.

### a. <u>There are no franchise/municipal consent requirements in this sub-</u> section 1 line certificate case.

Missouri case law leaves no doubt about the following point: there are two, distinct kinds of permission and authority for which applications for a CCN can be made under section 393.170. Those two kinds of authority are sub-section 1 authority (referred to by the cases as a "line certificate"), and sub-section 2 authority (referred to by the cases as an "area certificate"). This case is a sub-section 1 line certificate case because ATXI simply seeks authority to construct the line. It does not seek (nor need it seek, given the fundamental nature of ATXI and the Project) authority to serve a territory. That there are two kinds of permission and authority that can be sought under section 393.170 was made clear by the Court of Appeals decision in *Harline*, 343 S.W.2d 177.

*Harline*, like this case, involved a transmission line that was opposed by landowners along the route. The landowners in *Harline* had filed a complaint with the Commission against the utility in an attempt to require the utility to obtain a specific CCN for the transmission line before it could be built. The landowners argued that subsection 1 of section 393.170 required a specific CCN for the transmission line proposed at the time because they said that the transmission line was "electric plant" within the meaning of sub-section 1. The landowner further argued that under the literal terms of sub-section 1, a CCN was required before any new electric plant could be built. The utility contended that its pre-existing area certificate, granted more than 30 years earlier, was sufficient authorization to build the transmission line since the transmission line was to be built within its certificated service territory. The area certificate at issue authorized the utility to "construct, maintain and operate electric transmission lines and distribution systems . . . with authority to furnish electric service to all persons in the area for which this certificate is granted . . . ." *Id.* at 180. Ruling for the utility, the Commission dismissed the complaint. The dismissal was affirmed by the circuit court, and the Court of Appeals affirmed the dismissal and rejected the landowners' contention, explaining that "Sub-section 2 has no application." *Id.* at 183. In discussing sub-section 1 and subsection 2, the Court said:

Certificate "authority" is of two kinds and emanates from two classified sources. Sub-section 1 requires "authority" to construct an electric plant. Sub-section 2 requires "authority" for an established company to serve a territory by means of an existing plant. We have no concern here with Sub-section 1 "authority". The 1938 certificate permitted the grantee to serve a territory – not to build a plant. Sub-section 2 "authority" governs our determination.

Id. at 185 (citations omitted).

Since *Harline*, the sub-section 1 versus sub-section 2 distinction has continued to be applied, as the cases cited below demonstrate. Even the Commission's rule governing section 393.170 applications such as this one recognizes that a sub-section 1 CCN case is distinct from a sub-section 2 CCN case, as evidenced by the fact that sub-section (A) of the rule applies by its express terms to "service area" applications and sub-section (B) of the rule applies by its express terms to "electric transmission lines" or "electrical production facilities." 4 CSR 240-3.105(1)(A) to (1)(B).

As noted, the cases have consistently continued to apply the distinction between a subsection 1 and sub-section 2 case. The first such case is *StopAquila.Org. v. Aquila, Inc.*, 180 S.W.3d 24 (Mo. App. W.D. 2005), in which the Court specifically reiterated *Harline*'s explanation of the two different kinds of authority (sub-section 1 and sub-section 2) contemplated by section 393.170. 180 S.W.3d at 24-25. The *StopAquila* Court also emphasized one of the key functions of the PSC – to allocate territory – and rejected the notion that the definition of "electric plant" in 386.020(14) necessarily was the same as a "transmission line," stating that the "terms 'electric plant' and 'transmission lines' are not synonymous under the PSC Law . . . . 'transmission line' is not defined." *Id.* at 36.

The second case that clearly continues to recognize that a sub-section 1 case and a subsection 2 case are not the same, as *Harline* teaches, is *State ex rel. Cass County v. Pub. Serv. Comm'n*, 259 S.W.3d 544 (Mo. App. W.D. 2008). That *Cass County* clearly continued to recognize the distinction is made clear because the Court described sub-section 2 cases as those giving Commission permission to "exercise rights or privileges under a franchise by *providing public utility services*," which the Court said "include the provision, *distribution*, and *sale* of electricity." (emphasis added). 259 S.W.3d at 548. As earlier noted, ATXI does not provide electric service; it does not provide, distribute or sell electricity at all. To the contrary, it provides open-access transmission service to (among others) utilities that do so, pursuant to MISO's FERC-approved open-access transmission tariff.

The bottom line is that while the Staff may *say* there is only one kind of CCN and that this means that a franchise is required in every single CCN case, and while the Staff may *say* that there is no distinction between sub-sections 1 and 2, controlling appellate authority in this state that has existed and been followed for 50 years says otherwise. Because there is not one word about a "franchise" or "consent" in sub-section 1 and because this is a sub-section 1 case, those requirements simply do not apply and there is nothing whatsoever in the statute that precludes this Commission from granting the CCN before ATXI obtains the assents, assuming they have to be obtained.

63

To be clear, nothing this Commission does in this case has or can have any effect at all on whether an assent is required. Staff may argue that section 229.100 definitely applies, or that as a matter of other (non-PSC Law) sources of law, the state, by some means, must give permission to cross the roads (*i.e.*, the Staff would say, grant a franchise) and that such permission must come under section 229.100. But even if the Staff were correct about that, it does not mean that this Commission can't exercise its authority under sub-section 1 of section 393.170. Section 229.100 either applies or it doesn't apply, but that is a question of law involving the application of *a non-PSC statute*. It has nothing to do with what the PSC statute involved here – section 393.170 – does or does not provide for or require.

## b. Even if there were no distinction between a sub-section 1 and sub-section 2 CCN, and assuming section 229.100 applies, under the facts of this case section 229.100 is not the kind of franchise contemplated by section 393.170.

#### As noted in Harline,

The company had the legal duty to serve the public in the certificated Jackson County area . . . [t]he Jackson County franchise [which supported the area certificate that the utility already had] implies an obligation to serve the public in return for the privileges granted by it. The certificate of convenience and necessity is a mandate to serve the area covered by it, because it is the utility's duty, within reasonable limitations, to serve all persons in an area it has undertaken to serve.

*Harline*, 343 S.W.2d at 181. The bottom line is that when an area certificate is involved, the granting of a franchise by the "proper municipal authority" involves a *quid pro quo*. For most utility systems, and certainly for an electric distribution system, use of the roads in the area is, as a matter of practicality, required. When the municipal authority gives permission to use the roads, a duty arises on the part of the utility (assuming it has or obtains the requisite permission and authority from the Commission under section 393.170) to serve the residents of the municipality. The Commission's role in such a

case is to prevent destructive competition and duplicative facilities, which is why it has a role under section 393.170.

However, in the case of a transmission line like ATXI's Mark Twain line, there is no utility service to the general public (i.e., to the counties' residents) in the traditional sense, because ATXI will not supply electricity to any end user. ATXI isn't being chosen as the counties' electric supplier. Instead, ATXI will transmit electricity for others (e.g., Ameren Missouri, wind generators, etc.) as part of the regional, interstate bulk power system. Put another way, a "franchise" for ATXI under section 229.100 does not in any way relate to an allocation of territory to ATXI for ATXI to serve the county residents, and thus does implicate one of the key reasons we have a PSC Law at all: to avoid wasteful duplication of utility services in the same area. Harline, 343 S.W.2d at 182 (citing Peoples Tele. Exchange v. Pub. Serv. Comm'n, 186 S.W.2d 531 (Mo. App. K.C. 1945)). Instead, the transmission line at issue is, by definition, a transmission line meeting overall state and regional needs and providing state and regional benefits. Applying Harline's words to ATXI's line: the CCN for a transmission line like this one is simply to get authority to construct the line in the first place; it is not authority to serve any territory – it is authority to "build a plant" (here, a line); not to "serve a territory." Harline, 343 S.W.2d at 185.272

Consequently, while a section 229.100 assent may be *a* type of franchise, the Staff is mistaken when it assumes that it is *the* type of franchise *contemplated by section 393.170* (that is, even if there is no sub-section 1/sub-section 2 distinction, which the Staff argues means the franchise language applies to all CCNs). To the contrary, the franchise *contemplated by section* 

<sup>&</sup>lt;sup>272</sup> As noted, this does not mean that ATXI does not need an assent, assuming section 229.100 requires it. It just means that the *PSC Law* doesn't require that it obtain an assent; section 229.100, independently, may.

393.170 is a franchise given by the municipal authority in exchange for the utility undertaking an

obligation to serve end-use customers in the area in question.

That not all "franchises" are a franchise within the meaning of section 393.170 is

supported by other analogous authority, including other provisions of the PSC Law.

The first such authority is section 393.010, which provides as follows:

Any corporation formed under or subject to chapter 351 or heretofore organized under the laws of Missouri for the purpose of *supplying* any *town, city or village with* gas, *electricity* or water shall have full power to manufacture and sell and to furnish such quantities of gas, electricity or water as may be required by the city, town or village, district or neighborhood where located for public or private buildings or for other purposes, *and such corporations shall have the power to lay conductors* for conveying gas, electricity or water *through the streets*, alleys and squares of any city, town or village *with the consent* of the municipal authorities thereof under such reasonable regulations as such authorities may prescribe, *and* such companies are authorized to set their poles, piers, abutments, wires and other fixtures along, across or under *any of the public roads, streets and waters of this state in such manner as not to incommode the public in the use of such roads*, streets and waters (emphasis added).

The takeaway from this statute is that it only applies to supplying utility service to a

city/town/village and if that city/town/village consents, the utility can use the city/town/village's

streets and can use any other road in the state as needed to discharge its public service

obligations, even if those other roads are outside the city/town/village limits.

Additional authority is found in section 71.520, which provides as follows:

Any city, town or village in this state may by ordinance authorize any person, or any company organized for the purpose of *supplying* light, heat, power, water, gas or sewage disposal facilities, and incorporated under the laws of this state, to set and maintain its poles, piers, abutments, wires and other fixtures, and to excavate for, install, and maintain water mains, sewage disposal lines, and necessary equipment for the operation and maintenance of electric light plants, heating plants, power plants, waterworks plants, gas plants and sewage disposal plants, and to maintain and operate the same along, across or under any of the public roads, streets, alleys, or public places within such city, town, or village, for a period of twenty years or less, subject to such rules, regulations and conditions as shall be expressed in such ordinance (emphasis added). This statute has long been understood to be the city/town/village "franchise" statute. *Union Electric Co. v. City of Crestwood*, 499 S.W.2d 480 (Mo. 1973) ("Section 71.520 relates to the granting of utility franchises by municipalities."). Moreover, according to the courts, sections 393.170 and 71.520 must be construed together.<sup>273</sup> Section 393.010 (according to the cases) gives the utility that has been awarded the 71.520 franchise the right to use the streets so long as the use does not "incommode" the public's use of them. Taken together, it is clear that use of the streets in a city, town or village that is contemplated by the franchise statute (71.520) is use so that "light, heat, power" [utility service] can be *supplied to the residents in the city/town/village*. This makes clear that the section 71.520 franchise statute has nothing to do with a transmission line from point A to point B where there *is no service to* the residents in the city/town/village.

This makes perfect sense when considered together with the purpose of the PSC Law, which is to allocate service territory in a manner that prevents destructive competition for customers to whom service is provided. One of the primary reasons that the Commission is given authority under section 393.170 to grant CCNs is to insure that very thing – to prevent destructive competition or unnecessary duplication of services. *Harline*, 343 S.W.2d at 182 (citing *Peoples Tele. Exchange v. Pub. Serv. Comm'n*, 186 S.W.2d 531 (Mo. App. K.C. 1945)). This case does not involve the allocation of service territories.

While the courts clearly recognize that sections 393.170 and 71.520 must be construed together (and while the terms of both make clear that they are concerned with *supplying* utility service to residents in a city/town/village), no court in this state has ever concluded or implied that whatever consent may be required to use a road given to a utility that is not providing

<sup>&</sup>lt;sup>273</sup> See, e.g., Holland Realty & Power Co. v. St. Louis, 282 Mo. 180, 221 S.W. 51, 189 (1920) (Addressing Mo. Rev. Stat. § 3367 (1909). Mo. Rev. Stat. § 9947 (1909), which are the predecessors to sections 393.010 and 71.520, respectively, and stating that "The two sections are cognate and should be construed together . . .."). The same has been said of sections 393.010 and 71.520 in substantially their current form, *see*, *e.g.*, *Mo. Utilities Co.*, 475 S.W.2d at 31).

service (to whatever municipality – county, city) is a "franchise" *within the meaning of* section 393.170. Indeed, there is not a single court case where the franchise requirement of section 393.170 was applied to an entity like ATXI that does not provide end-use electric service within a territory in Missouri. Indeed, not only is there no court case, but there is no such Commission decision, as discussed below. In other words, if the Commission adopts the Staff's interpretation in this line certificate case, it will be breaking entirely new ground and subordinating its jurisdiction in a way it has never done before.

There are two court cases that refer to section 229.100 as involving a "franchise" of some type, but both of those cases involved a county giving assent to use the roads so that the utility could supply utility service to the residents in the county. Those cases are StopAquila, and Public Water Supply Dist. v. Burton, 379 S.W.2d 593 (Mo. 1964). In StopAquila it is clear that Aquila did have county permission to use the county roads but had gotten that permission and had gotten a CCN from the Commission so that it could *provide electricity to those county* residents (i.e., it had an area certificate). In Burton, a section 229.100 assent was also referred to as a franchise from the county, but again, the issue was whether the utility's area certificate from the Commission that allocated a certain part of the county to the utility to provide water service allowed the utility to go serve outside that area. In other words, there are franchises which provide permission to use roads, without any obligation of service, and then there are *franchises* to use roads that give rise to an obligation to provide service (assuming this Commission has made or makes the proper determinations under section 393.170 so as to avoid wasteful competition and duplication of services). In the case of unincorporated areas of a county, both types of franchises are obtained under section 229.100, but they are distinct; only the *latter* is the kind of franchise referenced in section 393.170.

Not only are there no court cases that conclude or suggest in any way that a section 229.100 assent is a franchise within the meaning of section 393.170, but in the only two cases ever decided by this Commission involving transmission-only companies that do not provide electric service to end users but instead provide transmission service to entities that do (like ATXI), the Commission itself imposed no conditions regarding county assents or any other kind of "franchise" or municipal consent on the grant of the CCN, despite the fact that those lines crossed county roads. This was true in a case involving a 161-kV transmission line constructed in northeast Missouri by IES Utilities, Inc. See Order Granting Certificate of Convenience and Necessity, Granting Variances from Certain Commission Rules, and Authorizing Sale of Assets, IES Utilities, Inc., Case No. EA-2007-0485 (Sept. 7, 2007). It was also true for a 345-kV transmission line (similar in purpose to the MVP line at issue here, but approved through SPP's regional *transmission* planning process) constructed by Transource Missouri, LLC. See In re: Transource Missouri, Case No. EA-2013-0098 (Sept. 6, 2013). Common to the ATXI case before the Commission now, and the *IES* and *Transource* cases, is the fact that all three cases involved a CCN to *build a transmission line* and not to serve an area within the state. Once again, if the Commission adopts Staff's interpretation in this case, it will be going beyond anything the Commission or the courts have ever done.

ATXI acknowledges that the question of whether a franchise from a county for the road crossings was required by section 393.170 before the CCNs could be granted in the *IES* and *Transource* cases was not an issue of controversy in those cases, and ATXI's counsel indicated as much as to the electric line cases when Chairman Hall asked him. What inference, if any, can be drawn from the lack of controversy? Some might argue that there can be no inference at all, since the issue did not come up. However, those cases involved entities, including the Staff, who

69

were represented by lawyers, and the odds are there were commissioner-advisors who were lawyers advising commissioners at the time. The Staff now takes the position that this Commission is totally powerless to "grant" a CCN for a transmission line owned by a company with no service territory and that is located in an unincorporated area of a county and crosses roads, yet the Commission has clearly done so twice in recent years. None of these lawyers have ever before told the Commission – on the facts present here – that it cannot grant a CCN without such a transmission-only company with no service territory proving it has county assents. Nor did this Commission, in this case, interpret section 393.170 as does the Staff. The Commission previously indicated that it has the ability to grant the CCN, but could impose a condition subsequent on any such CCN that would not allow the construction to start until assents (or at least assent in the county where construction would occur) were obtained.<sup>274</sup> ATXI addresses such a condition, below.

It is against that backdrop that the Commission must ask itself whether the Staff's position makes sense. Whether it makes sense is legally relevant, as the cases teach us. *See, e.g., State ex rel. Valley Sewage Co. v. Pub. Serv. Comm'n*, 515 S.W.2d 845, 851 (Mo. App. K.C. 1974)) ("Basically, good law is common sense. If it is not common sense, it is not good law."). Statutes are to be construed in a manner consistent with practicality and common sense. *See, e.g., Concord Pub. House, Inv. v. Dir. of Revenue*, 916 S.W.2d 186, 184(Mo. 1996). Moreover, in construing a statute, the problems sought to be remedied at the time of its enactment and the circumstances existing at that time also inform what was intended by the legislature. *See, e.g., Bachtel v. Miller County Nursing Home Dist.*, 110 S.W.3d 799, 801 (Mo. 2013). And the whole act (here, the PSC Law as a whole) can (and should) be considered in

<sup>&</sup>lt;sup>274</sup> Order Regarding Motion to Dismiss, p. 5 [EFIS Item No. 75].

determining the legislature's intent. See, e.g., Altom Const. Co., LLC v. BB Syndication Services, Inc., 359 S.W.3d 146, 154 (Mo. App. S.D. 2012).

ATXI respectfully submits that it would be nonsensical for the General Assembly, on the one hand, to have created this Commission and clothed it with broad regulatory powers, while on the other hand, to have made the outcome of the Commission's determinations dependent on a county commission's assent regarding what are merely, in effect, simple road crossing permits. If that were the statutory scheme envisioned by section 393.170, then any county could entirely negate this Commission's public-interest determination that a transmission line ought to be built. Such a scheme makes sense in circumstances where a county is granting permission to use its roads so that an electrical system can be built to serve its residents, *i.e.*, where there is a *quid pro quo*. In that circumstance, the need for the line depends on the county franchise. But it makes no sense in these circumstances, where a transmission line is being built to meet statewide and regional needs.

Moreover, the county commissions retain power within reasonable limits to say *how* the line is constructed so that the transmission line does not interfere with the public's ability to use the public highways. But as noted earlier, that is a totally separate question from whether the General Assembly intended for this Commission's authority to be subordinated to the decisions of up to  $114^{275}$  separate county commissions who, in a case such as this, are not asked to select a supplier, but to regulate the crossing of their roads under regulations promulgated by the county highway engineer to prevent interference with travel. Common sense and principles of statutory construction indicate that such regulation may involve *a* franchise from a county, but it does not involve a franchise *of the type contemplated* by section 393.170. Consequently, this Commission can "grant" the CCN regardless of the status of county assents.

<sup>&</sup>lt;sup>275</sup> Missouri has 114 counties.

The Missouri Supreme Court's opinions in *Crestwood I* and *Crestwood II* are further support for the proposition that, in certain circumstances, the Commission's regulatory authority is superior to a local government's. *See City of Crestwood, supra* (499 S.W.2d 480) ("*Crestwood P*'), and its companion case, *Union Electric Cov. City of Crestwood*, 562 S.W.2d 344 (Mo. 1978) ("*Crestwood II*"). The *Crestwood* cases involved a transmission line to be built by Union Electric Company (now d/b/a Ameren Missouri), most of which was located within the city's municipal boundaries, but which was connected to two substations that didn't just serve the city, but served Ameren Missouri's system generally. The city passed an ordinance that purported to require that Ameren Missouri build the line underground at a far higher cost. Ameren Missouri brought a declaratory judgment action against the city claiming, among other things, that the ordinance invaded the field of regulation vested by the General Assembly in this Commission. The trial court ruled for the city, but the Missouri Supreme Court (in *Crestwood I*) reversed, concluding that the ordinance did invade the Commission's jurisdiction, and was therefore void. 499 S.W.2d at 483-84.

*Crestwood II* arose when Ameren Missouri then sought a permit from the city to actually construct the line, which the city denied, despite *Crestwood I*. The permit was called for by the city's zoning code under a different provision than the one invalidated in *Crestwood I*. In striking down the second ordinance, the Supreme Court stated that "[e]ach [ordinance] basically seeks to assert municipal control over the method of transmission of electric power anywhere within the borough, the first by absolute prohibition . . . and the second by requiring municipal permit . . . ."

Is the Commission willing to decide that it is powerless to grant a line certificate for an addition to the interstate transmission system in the region unless five local counties with no

72

public utility expertise or responsibility decides to grant assents? ATXI concedes that a municipality is entitled to refuse to grant a franchise to use its roads *to serve its residents*. After all, many municipalities supply their citizens' electric needs on their own. To say, however, that a municipality's bare permission to cross the roads is required before the Commission may issue a line certificate is to say, contrary to *Crestwood I* and *Crestwood II*, that a municipality can prevent construction of an interstate transmission line that goes well beyond serving local residents even after the Commission has determined that the Project is necessary or convenient for the public service. This would be a tremendous invasion of the Commission's regulatory authority. Yet, because the Staff treats all "franchises" alike, the Staff is effectively endorsing this result. It does not make sense for the Commission's important public necessity determination to be subordinated to local second-guessing. Not all franchises are franchises *within the meaning of section 393.170*.

The only way to square the holding of the *Crestwood* cases with section 393.170 is to recognize that when an area certificate is not involved, section 393.170 does not require, as a prerequisite to the exercise by and effectiveness of this Commission's authority, that the municipal authorities give any kind of assent. To repeat: this does not mean that if another statute (here, section 229.100) applies that ATXI is freed from complying with it, but it does mean that the PSC's authority under section 393.170 does not depend on what the counties may do.<sup>276</sup>

Finally, even if the Commission were to read section 393.170 such that a 229.100 assent, even in a case like this, is a "franchise" within the meaning of section 393.170, the Commission ought to waive the requirement that the franchise first be obtained just as it is waiving the need to file rate schedules as would be otherwise contemplated by section 393.140(11). Indeed, the Staff

<sup>&</sup>lt;sup>276</sup> And then the question will be the extent of the counties' authority under section 229.100.

agrees that the requirement to file rate schedules should be waived, since this Commission cannot set ATXI's transmission service rates.

## *ii.* The Commission should not otherwise condition ATXI's ability to construct the Project.

#### a. <u>County Assents</u>.

The Commission indicated in its *Order Regarding Motion to Dismiss* in November that it could (but did not rule that it would or must) grant the CCN but impose as a condition subsequent a requirement that construction not start (or at least not start in a county that had not given assent) until assents were obtained. While ATXI will not go so far as to say that the Commission could not impose such a condition, ATXI urges the Commission not to do so. Doing so, respectfully, would also subordinate this Commission's public interest determination to the decisions of multiple elected county commissions and could thwart the benefits projects such as the Mark Twain Project will bring to the state and the region.<sup>277</sup>

As discussed above, this Commission is charged with protecting a much larger public interest than the interests of just one segment of the public – be that a group of landowners, or certain counties. The Commission, as its name obviously implies, is the Public Service Commission of the *State of Missouri*. It's one thing for this Commission to effectively wait to see which electric supplier a municipal authority (city, county) chooses for the municipality's residents and not allow construction under a CCN until that choice is made, but it is entirely another thing to make the effectiveness of its decision in a CCN case dependent on what county commissions later do in a case like this one. Otherwise, the Commission could be viewed as having effectively placed decisions about the need/benefits of an improvement to the electric

<sup>&</sup>lt;sup>277</sup> ATXI has no objection to providing the Commission with informational evidence that assents were later obtained (or that they were not required), but doing so should not be a condition on any permission the Commission grants in this case.

system in the state and the region, the utility's qualifications and ability to build and operate it and the overall public interest in the hands of – stated with all due respect – local county commissioners who, unlike the PSC Commissioners, almost certainly have no background, experience or expertise in such matters.<sup>278</sup>

There is, simply stated, no reason to impose a condition subsequent relating to county assents, and there exist a myriad of reasons not to, as outlined above.<sup>279</sup>

### b. <u>Other Permits</u>.

In its Position Statement, the Staff indicated that it was its position that a condition should be imposed such that ATXI would have to submit "all required permits and approvals," such as from the Missouri Department of Transportation to cross state highways or from the U.S. Fish and Wildlife Service. Staff witness Dan Beck clarified the Staff's intention during the evidentiary hearing, making clear that (a) the Staff was not stating what permits may (or may not) be required (*e.g.*, the Staff had listed Fish and Wildlife in its Position Statement, but Mr. Beck indicated that he did not know of any specific permit that was needed from Fish and Wildlife), and (b) the Staff was not recommending that if a particular permit was issued for a particular part of the line (*e.g.*, from point A to point B) that all permits from that same agency had to be obtained before *any* construction could begin.<sup>280</sup> Instead, all the Staff is recommending is that before construction takes place in a particular location (*e.g.*, across a particular state highway at a particular point; over a particular water crossing) if a specific permit or approval is required in that location the construction in that location will wait until that approval is obtained. To take a practical example, if Highway 63

<sup>&</sup>lt;sup>278</sup> ATXI does not mean to imply that county commission decisions about assents can or should involve any of these topics – they shouldn't. Instead county decisions on assents must be limited to questions about any reasonable terms needed to prevent road interference. However, the Neighbors have clearly attempted to make all of the issues that only this Commission should be deciding into issues before the county commissions, as evidenced by the one-sided and inaccurate resolutions the Neighbors have convinced the county commissions to adopt. Exh. 45, p. 15 – p. 21. <sup>279</sup> If the Commission views its regulation, 4 CSR 240-3.105(D)1 as requiring proof of an assent absent a waiver, then the Commission should waive the rule, as it is empowered to do, and as it is being asked to do (including as recommended by the Staff) with respect to certain of its other rules. <sup>280</sup> Tr., Vol. 10, p. 726, l. 3 – p. 729, l. 20.

is being crossed at a particular place, the road crossing won't be built until the permit for that crossing is issued, but the line could be built on either side of the road without the permit for the crossing. ATXI has no objection to such a condition.

**WHEREFORE**, ATXI respectfully submits its initial post-hearing brief, and requests that the Commission enter its order granting it a line certificate for the Project, subject only to the Staff's recommended conditions 3 through 7.

Respectfully submitted, /s/ James B. Lowery

James B. Lowery, Mo. Bar #40503 Michael R. Tripp, Mo. Bar #41535 SMITH LEWIS, LLP P.O. Box 918 Columbia, MO 65205-0918 (T) 573-443-3141 (F) 573-442-6686 lowery@smithlewis.com tripp@smithlewis.com

and

Jeffrey K. Rosencrants, Mo. Bar #67605 Edward Fitzhenry, pro hac vice Eric Dearmont, #60892 **Corporate Counsel** Ameren Services Company One Ameren Plaza 1901 Chouteau Avenue P.O. Box 66149 (MC 1310) St. Louis, MO 63166-6149 (T) (314) 554-3955 (F) (314) 554-4014 jrosencrants@ameren.com edearmont@ameren.com efitzhenry@ameren.com Attorneys for Ameren Transmission Company of Illinois

## **CERTIFICATE OF SERVICE**

I do hereby certify that a true and correct copy of the foregoing Statements of Position

has been e-mailed, this 4<sup>th</sup> day of March, 2016, to counsel for all parties of record.

<u>/s/ James B. Lowery</u>

An Attorney for Ameren Transmission Company of Illinois