Exhibit No.:	
Issue(s):	Impact on Land Valuations
Witness:	Vickie Turpin
Type of Exhibit:	Surrebuttal Testimony
Sponsoring Party:	Ameren Transmission Company of Illinois
File No.:	EA-2015-0146
Date Testimony Prepared:	November 16, 2015

MISSOURI PUBLIC SERVICE COMMISSION

File No. EA-2015- 0146

SURREBUTTAL TESTIMONY

OF

VICKIE TURPIN

ON

BEHALF OF

AMEREN TRANSMISSION COMPANY OF ILLINOIS

St. Louis, Missouri
November, 2015

SURREBUTTAL TESTIMONY

OF

VICKIE TURPIN

FILE NO. EA-2015-0146

Q. Please state your name, business address and present position.

A. My name is Vickie Turpin. I am currently the Owner and President of Kinker Appraisal Service, Inc. Our office is located at 45 Southgate Drive, Troy, Missouri 63379.

Q. Please summarize your professional experience and educational background.

A. I have a degree in U.S. Agriculture Business/Economics from the University of Missouri. Since graduating I have worked in the real estate and appraisal industries for the past 33 years with an emphasis on appraisals of residential, commercial, industrial, and agricultural land, as well as for eminent domain proceedings. I am a certified real estate appraiser and hold a designation from the National Association of Independent Fee Appraiser's as a Residential Appraisal Specialist ("IFA"). I also hold a designation from the International Right of Way Association ("IRWA") as a Senior Right of Way Professional ("SR/WA") which is the IRWA's highest designation. I have performed hundreds of appraisals in Missouri on behalf of landowners, utilities and lenders. I have also served as a condemnation commissioner on several occasions. My credentials are attached as Schedule VT-SR1.

Q. On whose behalf are you testifying in the current proceeding?

A. I am testifying on behalf of Ameren Transmission Company of Illinois ("ATXI"), in support of its Application for a Certificate of Public Convenience and Necessity ("Application") for a transmission line project in northeast Missouri.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to address the impacts of the construction, operation and maintenance of overhead power lines upon land values, to address the specific impacts of ATXI's Project (described below) upon land values, and to address rebuttal testimony filed in opposition to the Project by a group that calls itself Neighbors United Against Ameren's Power Line (the "Neighbors") based upon my knowledge and experience.

Q. Are you familiar with what is referred to as ATXI's Mark Twain Project?

A. Yes. The Mark Twain Project ("Project") is a proposed transmission line consisting of a new 345,000 volt (345-kV) electric transmission line running generally from Palmyra, Missouri west to a new substation located near Kirksville, Missouri, and proceeding north to the Iowa border, and including a 2.2-mile 161-kV connector line to the new substation. The Project will include transmission facilities located in the following counties in Missouri: Marion, Shelby, Knox, Adair and Schuyler.

Q. Are you generally familiar with the electric utility industry and the various types of transmission line structures?

A. Yes. Over the 33 years I have been in the appraisal business I have worked with Cuivre River Electric Cooperative, Central Electric Power Cooperative, Northeast Missouri Electric Power Cooperative, and Union Electric Company d/b/a Ameren Missouri on several projects in which distribution and transmission lines were being installed through various types of properties, including residential and agricultural lands. I am familiar with several different types of transmission line structures including lattice towers, H-frame structures, and wood angle structures.

Q. Are you aware of the type of transmission structure design that is proposed for the Project?

A. Yes. I understand ATXI will utilize a single circuit design with structures consisting of a single steel shaft pole, referred to as a "monopole".

Q. Are you aware of the existence of transmission line structures and transmission lines crossing farmland in northeast and north central Missouri?

A. Yes. I have personally observed and am aware that there are numerous transmission lines and structures crossing farmland throughout the region.

Q. Are you aware of the existence of transmission line structures and transmission lines near residential and rural residential properties in northeast and north central Missouri?

A. Yes. It is quite common to see transmission lines and structures near residential and rural residential properties throughout the region.

Q. In your 33 years of experience have you been involved with, or are you aware of, a reported health issue to persons or livestock related to the existence of a transmission line or transmission structures on a farm or near a rural residential or residential property?

A. No.

Q. In your experience have you had occasion to perform an appraisal of a property which had a transmission line or structures either located on the property or proposed for that location?

A. Yes, on many occasions.

Q. In your experience have you had occasion to perform an appraisal of a property in which a utility company was proposing to purchase an easement over the property?

A. Yes. I have appraised numerous properties over the years where utility companies were purchasing easements, including projects for Union Electric Company d/b/a Ameren Missouri, Central Power Electric Cooperative, Cuivre River Electric Cooperative, and Northeast Missouri Electric Power Cooperative. I have also worked on behalf of property owners, as I am an independent appraiser and have no affiliation with any particular group. I have also worked on pipeline appraisals, and appraisals related to road expansion easements for numerous cities and counties (including counties within the proposed route of the Project).

Q. Based upon your experience what is the significance of the presence of a transmission line upon land values and use of the property?

A. I typically find little if any impact on the market value of the properties, particularly outside the easement area.

I find that there are many other factors that come into play that affect the market value of the property before the transmission line does. This is particularly true as the size of the property increases.

I find that property owners of proposed purchases typically look at many other features before they let the transmission line come into the decision. They look at location, highest and best use, amenities, topography, curb appeal, ease of access, etc. before they consider the impact of any utility easements or facilities. For agricultural properties, prospective purchasers consider such items as the production history of the land, quality of the soils, improvements such as

terraces or tiles, and access to water if grazing is to occur, before they consider the presence of electric lines.

Q. Can you provide an example?

A. Yes, I will provide two. The first example involves the subdivision where I live. That subdivision has approximately 80 homes that sit on 3 acre lots. There is a transmission line running through the development. The line was established before the subdivision was platted. I watched to see how the transmission line would affect the lot prices of the lots where the line adjoined and the lots that were in line of sight. I found that the lots did tend to sell close to asking price. This development is known as Southgate Estates located just outside the city limits of Troy Missouri off the west side of Hwy J. I noticed that where the transmission line went through subdivisions, the homes are actually built quite close to the lines. I found that the buyers of these lots and even some of the next purchasers that purchased the properties when they resold were more interested in location of development, ease of access to major roads, general appeal of the development and deed restrictions rather than any concerns over the existence of the transmission line.

The second example is a farm on Hwy E, Curryville, Missouri. I was hired to appraise a 275 acre parcel of land which was improved with a residence and some outbuildings. Northeast Missouri Electric Power Cooperative was proposing to acquire a permanent right-of-way easement which would run along the northern portion of the subject property and encompass 7.62 acres of land. The easement would include electric transmission lines of one or more circuits, poles, structures, conduits, cross-arms, foundations, footing, towers, wire, brace poles, guy wires, anchors, cables, fiber optics line, and other appurtenances. The owners stance was that the entire farm was diminished

in value due to this proposed transmission line. When this case went to trial, however, the jury supported my opinion that only the 7.62 acres of land was diminished in value and that the balance of the subject farm and site improvements were not affected whatsoever.

Q. Are you aware of any supporting documentation that supports your experience, either in peer review materials or otherwise?

A. Yes, in the January/February 2015 edition of Right of Way magazine, appraisers John Rolling and Marian Barnes, who also hold the SR/WA designation from the IRWA, discuss their study of the impact of electric transmission line easements on residential properties. The article included a study performed by the authors on the impact of high voltage transmission line ("HVTL") easements on improved properties, noting that the results were "consistent with other studies that find little, if any, impact on improved properties subject to an HVTL easement". The article goes on to conclude: "Neither the published studies nor our own study revealed a single percentage point diminution in value that can be applied uniformly to properties subject to a HVTL easement." (See "Utility Versus Proximity – A systematic approach to measuring the impact of electric transmission line easements on residential properties" Right of Way January/February 2015 pp. 34-36.) A copy of the article is attached to my surrebuttal as Schedule VT-SR2.

Q. In performing appraisals related to the impact of a transmission line or structures upon land values what factors do you consider?

A. I look at highest and best use of the property, the size of the property, and its present use. I consider the loss of land utility, loss of buildable land, loss of landscaping, percent of land encumbered and the proposed placement of easement on the property. I also consider the living area in proximity to the HVTL easement and how it affects the usual outlook, how close

are the poles to the buildings and whether there is any noise increase for the property owner, and also whether screening of external detriments was used, such as in the case of busy roads.

Q. In preparing your surrebuttal testimony did you review the testimony of the Neighbors' witness Boyd L. Harris?

A. Yes.

Q. What was your overall impression of Mr. Harris' prepared testimony?

A. I found Mr. Harris' opinions to be contrary to my experience. Specifically, I disagree with his conclusion that there will be a significant impact on the values of productivity of the cropland. My concerns are numerous. First, his opinion appears to be limited to cropland productivity. He does not touch upon the impact in the value of the land itself, only the decrease in income off a portion of the land (the crop portion) due to a claimed loss of productivity. His analysis does not address residential values, ranching or other activities. In addition, his rationale for how this loss of crop land production will occur is devoid of any analysis. In my experience, an assertion such as the one Mr. Boyd is making requires more than a simple litany of presumed impacts (e.g. placement of towers, compaction, unsightly appearance, etc.). There is simply nothing in his testimony that addresses any of these perceived impacts. To the contrary, having reviewed the surrebuttal witness testimony of ATXI witnesses, including Messrs, Endorf, Wood, DeJoia, Silva and Dr. Bailey, they provide a compelling argument addressing and refuting each of the presumed impacts identified in Mr. Boyd's brief testimony.

To demonstrate my point, I looked at one of Mr. Boyd's presumed impacts to cropland productivity – which is the "placement of towers impacting the functionality of farmland". In my experience working with properties in proximity to overhead facilities, the type of structures and the spacing between structures can be a significant factor. Multiple poles on a structure, guy

wires and anchors can all pose an issue as it relates to maneuverability of farm equipment around transmission structures. Moreover, the shorter distance between structures would impact the amount of cropland taken out of production. However, as the ATXI surrebuttal witnesses have testified, the current Project mitigates these concerns through the monopole design and a greater span between structures.

In preparation for my testimony I actually toured several miles of an Ameren Missouri transmission line in St. Charles County which used a monopole design. I was able to see firsthand an example of monopole line segment in proximity to farms, rural, and urban residences. The monopole design does not use guys or anchors and consists of a single structure that rises out of a relatively small concrete pad approximately 7-10 feet in diameter. The average spans are 850 feet, further minimizing the number of structures and physical contact with the land. Moreover, the monopole design allows for activities (such as farming) to take place up to the concrete pad itself, as is shown in Schedule DBR-SR1 to Mr. Brown's surrebuttal testimony. I was particularly impressed with how close the farmers were able to plant crops and perform farming and ranching activities next to the monopoles. That tour confirmed my understanding that a monopole transmission line in proximity to farms and rural and urban residences does not create a significant impact upon activities or the enjoyment of such farms and rural and urban residences.

In summary, the testimony of Mr. Boyd ignores the proper analysis that needs to be performed in any appraisal of farm land or residential properties. I see no evidence that any analysis of the highest and best use of the property has been performed, or that any of the factors that I identified in my earlier testimony were considered. From my research and experience, it is well established that with larger properties in particular, it is difficult to predict impact without

specifically considering how the siting of the line would affect the use of the property. In such situations formal appraisals are the only appropriate mechanism to assess impacts to individual properties. The presumptive conclusion of Mr. Boyd comes nowhere close to meeting the standards required of a certified appraiser and could not be relied upon to determine the compensation that would properly be due for a transmission line easement on this or any other project.

Q. Do you agree that the Randolph County property example provided in the testimony of Boyd L. Harris supports his opinion?

A. No. First of all, the example does not provide any information related to the site other than it is in Randolph County. There is no address, legal description or other information so this actual property could be researched, and there is no date provided as to when this property was on the market. Among my concerns are the many factors which could come into play with a particular property. For example, was the highest and best use of this property really rural residential development? The answer to that question appears to be "no" as Mr. Boyd concedes that the land was ultimately returned to a tract of agricultural pasture or crop land, notably *with* the transmission line on the property. The fact that this unspecified tract was sold for agricultural use also contradicts Mr. Boyd's claim that transmission lines interfere with such use. I would also question when the property was placed on the market, and what subsequent market conditions may have impacted the sale of the property. I have personally seen and appraised many proposed developments that reverted back to farmland due to the long recession and lack of purchasers for residential tracts of land. I do not see anything in Mr. Boyd's testimony that the existence of a transmission line was a factor in the failure of the development. More likely, it was a multitude of unrelated factors including the overall state of the economy.

Q. Do you agree with Mr. Harris testimony in which he states there are damage considerations, in excess of market value, that are nearly always applied in eminent domain proceedings?

A. No. I have been involved in many eminent domain proceedings, sometimes as a commissioner appointed by the court and sometimes as an expert witness. The jury instructions, and the Missouri statute that sets the compensation that is due in condemnation cases, indicate that the measure of just compensation is the diminution in the market value of the tract over which the easement is obtained before the easement versus after the easement is obtained. This reflects actual changes in market value, not compensation in excess of that sum.

Q. Do you have a response to the Eleasalo Ale article relied upon by Mr. Harris in his testimony?

A. Not really, but I would note that this is not information that a certified real estate appraiser would rely upon in determining the impact of a transmission line easement on a parcel of property. I would also note that it would be inappropriate for me to offer a legal opinion, as Mr. Harris does, as to what a majority of courts may have ruled on the admissibility of evidence. Neither of us are attorneys. That said, this perceived issue of "fear in the marketplace" as a relevant factor in property valuations, presumes that there is something to fear, and that the fear is reasonable. Again, Mr. Harris is attempting to establish as fact something that has not been demonstrated. I find it inappropriate to comment further, other than to refer to the surrebuttal testimony of other ATXI witnesses who have addressed this issue and to note that I am not aware of the application of "market fear" as a separate compensable component of any appraisal or condemnation that I have been a party to in Missouri.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

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 an Associated Substation Near Kirksville, Missouri.	)))))))	File No. EA-2015-0146

AFFIDAVIT OF VICKIE E. TURPIN

STATE OF MISSOURI)
) **ss**
COUNTY OF)

Vickie E. Turpin, being first duly sworn on his oath, states:

1. My name is Vickie E. Turpin. I work in Troy, Missouri, and I am employed by Kinker Appraisal Inc. as Owner + President

2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony on behalf of Ameren Transmission Company of Illinois consisting of 11 pages, and Schedule(s) VT-SR1 and VT-SR2 all of which have been prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.

Vickie E. Turpin

Subscribed and sworn to before me this 10th day of November, 2015.

Notary Public

My commission expires: 8/4/19

TIFFANY R. HARRIS
Notary Public - Notary Seal
STATE OF MISSOURI
Montgomery County
My Commission Expires: Aug. 4, 2019
Commission # 15387891

KINKER APPRAISAL SERVICE, INC.

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VICKIE TURPIN, IFA, SR/WA

MISSOURI STATE CERTIFIED GENERAL REAL ESTATE APPRAISER

SPECIALIZING IN RESIDENTIAL, COMMERCIAL, INDUSTRIAL, AGRICULTURE, AND CONDEMNATION

QUALIFICATIONS

EXPERIENCE

07-85 – Present	Owner and President of Kinker Appraisal Service, Inc.
01-96 – 01-99	Half owner Harrison Construction Company Inc.
02-85 – 07-85	Real Estate Appraiser for Kinker Appraisal Service, Inc
08-84 – 02-85	Deputy Assessor of Lincoln County, Missouri
02-84 – 07-84	Appraiser and Review Appraiser for Bison Appraisal Company
05-82 – 01-84	Appraiser and Review Appraiser for Missouri Mass Appraisal

EDUCATION

Graduate	Bowling Green R-1 School District 1978
Graduate	University of Missouri – Columbia 1981 U.S. Agricultural Business/Economics

CONTINUED EDUCATION

07-20-83	International Association of Assessing Officers Courses 1,2,3, Assessment and Appraisal Institute, Chicago, Illinois
05-15-85	National Association of Independent Fee Appraisers Course, Principles of Real Estate Appraising I, Wichita, Kansas
10-24-85	National Association of Independent Fee Appraisers Course, R-4/B Seminar, St. Louis, Missouri
11-26-85	Professional Education Resource of Kansas Institute, Advanced Narrative Report Writing, Topeka, Kansas
11-26-86	National Association of Independent Fee Appraisers Course, Income Property Appraising 1A, Fairview Heights Illinois
03-23-87	National Association of Independent Fee Appraisers Course, Income Property Appraising 1B, Osage Beach, Missouri
04-08-87	Society of Real Estate Appraisers, Relocation Appraisal Seminar, Maryland Heights, Missouri
05-19-87	Career Education System, Salesperson Prelicense Course 60 hours, Olive Blvd., Creve Coeur, Missouri
10-15-87	National Association of Independent Fee Appraisers, Marshall & Swift Residential Cost Approach Seminar, Union, Missouri
04-18/20-88	National Association of Independent Fee Appraisers, Farm, Ranch & Rural Appraisal Course, St. Peters, Missouri

04-21-88	National Association of Independent Fee Appraisers, 2032A Cash Rental Value Appraisal Seminar, St. Peters, Missouri
10-14-88	International Right of Way Association Course 403, Easement Valuation Seminar, St. Charles, Missouri
01-27-89	International Right of Way Association Course 403, Easement Valuation Seminar, Maryland Heights, Missouri
02-01/04-89	National Association of Independent Fee Appraisers Course, Income Property Appraising 1A, Oklahoma City, Oklahoma
03-08/11-89	National Association of Independent Fee Appraisers Course, Income Property Appraising 1B, Oklahoma City, Oklahoma
01-13/14-90	East Central Board of Realtors, Continuing Education Courses 12 hours, Warrenton, Missouri
03-01-90	International Right of Way Association Course 214, Skills of Expert Testimony, St. Louis, Missouri
04-20-90	International Right of Way Association Course 802, Legal Aspects of Easements, St. Louis, Missouri
06-08/09-90	National Association of Independent Fee Appraisers Course, Professional Practice, Hutchinson, Kansas
10-25/26-90	International Right of Way Association Course 205, Bargaining Negotiations, St. Louis, Missouri
02-11/13-91	International Right of Way Association Course 101, Principles of Real Estate Acquisition, Engineering, St. Louis, Missouri
09-04-92	International Right of Way Association Course 901, Engineering Plan Development and Application, St. Louis, Missouri
10-05/06-92	International Right of Way Association Course 801, Land Titles, St. Louis, Missouri
09-23-93	International Right of Way Association Course 103, Ethics and the Right of Way Profession, St. Louis, Missouri
12-17-93	National Association of Independent Fee Appraisers Course 4.5, The New Uniform Residential Appraisal Report (URAR), St. Louis, Missouri
08-26-94	National Association of Independent Fee Appraisers Course 5.0B, Limited Scope Appraisals and the Uniform Standards of Professional Appraisal Practice, St. Louis, Missouri
05-15/16-96	Missouri State Highway Department, Right of Way Seminar, Maryland Heights, Missouri
10-30 – 11-01-96	International Right of Way Association Course 201, Communications in Real Estate Acquisition, Ames, Iowa
12-13/14-96	National Association of Independent Fee Appraisers Course, Professional Standards of Practice, Pryor Creek, Oklahoma
6-12/13-98	National Association of Independent Fee Appraisers Course, New Internet Course, Chicago, IL
12-11/12-98	National Association of Independent Fee Appraisers Course, Professional Standards of Practice, St. Louis, Missouri
04-22-99	International Right of Way Association Course H003, Negotiating Effectively with a Diverse Clientele, Branson, Missouri
08-06-99	National Association of Independent Fee Appraisers, 5.0A Standards Review, Austin, Texas

10-10-99	International Right of Way Association, Leadership Development Workshop, Springfield Illinois
12-4-99	National Association of Independent Fee Appraisers, 4.7 Basic Residential HUD Appraisal, Troy Missouri
3-28/31-00	Lowman & Company, Principles of Capitalization, Sedalia Missouri
8-12-00	Missouri Real Estate School, CC3050 Have you appeared in the MREC newsletter lately, St. Peters, Missouri
8-16/18-00	International Right of Way Association Region 2 Seminar, College Station Texas
3-9-01	National Association of Independent Fee Appraisers, 5.0 USPAP, Troy Missouri
3-1-02	National Association of Independent Fee Appraisers, 99.1A Flips, Fraud, & the FBI, Troy Missouri
3-1-02	National Association of Independent Fee Appraisers, 8.0 Appraisers and the Internet, Troy Missouri
3-18-02	National Association of Independent Fee Appraisers, Alamode Presentation-Computer Program, St. Louis, Missouri
3-23-02	Missouri Real Estate School, CC3162 State and Federal Laws, Troy Missouri
4-26-02	National Association of Independent Fee Appraisers. 15.7A Partial Interest, Troy Missouri
4-26-02	National Association of Independent Fee Appraisers, 15.4A 1031 Tax Exchange, Troy Missouri
10-11-02	National Association of Independent Fee Appraisers, 7.5 Appraising Stigmatized Properties, Vancouver, BC Canada
10-11-02	National Association of Independent Fee Appraisers, 16.9 Recognizing and Appraising Special Use Properties, Vancouver, BC Canada
-2-3/4-03	National Association of Independent Fee Appraisers, 2.0 Financial Analysis of Income Properties, St. Louis, Missouri, 16 hours
9-9-03	National Association of Independent Fee Appraisers, 16.2C The Appraisal of Foreclosure Properties, Charleston, South Carolina, 4 hours
9-10-03	National Association of Independent Fee Appraisers, 6.0A Appraising Historic Properties, Charleston, South Carolina, 8 hours
1-16-04	East Central Board of Realtors, Course CC3134 Who's on First? The Good the Bad, the Ugly, Core class, Troy, Missouri, 3 hours
1-16-04	East Central Board of Realtors, Course V30534 Ethics Dilemmas & Practices, The code and the law, Troy Missouri, 3 hours of elective

2-6-04	National Association of Independent Fee Appraisers, 5.0A National USPAP 2004Update 7 hours, Troy Missouri
3-27-05	International Right of Way Association, Uniform Relocation Assistance & Real Property Acquisition Policies 8 hours, Kansas City Missouri
6-3-05	National Association of Independent Fee Appraisers, 5.0A 2005 National USPAP Update 7 hours, Troy Missouri
7-29-05	National Association of Independent Fee Appraisers, 9.8 2005 Fannie Mae Forms 8 hours, Troy Missouri
5-1-06	National Association of Independent Fee Appraisers, 16.2 The Appraisal of Foreclosure Properties 7 hours, Troy Missouri
5-11-06	National Association of Independent Fee Appraisers, 9.7 Fannie Mae Updated Property & Appraisal Guidelines 8 hours, Troy Missouri
12-11-06	National Association of Independent Fee Appraisers, 7 hour National USPAP Course, Troy Missouri
5-14-2007	National Association of Independent Fee Appraisers, 1.5 Residential Analysis for Small Income Properties, Troy Missouri
9-8-07	International Right of Way Pipeline Right-of-Way Agent's Program on Web CD-ROM., 16 hours
9-9-07	International Right of Way Course 103 Ethics & The Right of Way Profession, 8 hours
4-11-08	Missouri Real Estate Appraisers Commission, Lake of the Ozarks Missouri, 7 hours, 2 seminars, Commission Presentation on Fraud, and Review Residential and Commercial Appraisals
8-8-08	National Association of Independent Fee Appraisers, 5.0A 2008 National USPAP Update, Moscow Mills Missouri 7 hours
4-3-09	Missouri Real Estate Appraisers Commission, Lake of the Ozarks Missouri, 7 hours, 2 seminars, Commission Presentation on Most Common Mistakes Interpreting and applying USPAP, & Appraising in a Declining Market
12-4-09	National Association of Independent Fee Appraisers, Valuing Real Estate in a Changing Market, Moscow Mills Missouri 8 hours
2-5-2010	National Association of Independent Fee Appraisers, Appraising in the Foreclosure Market, Moscow Mills, Missouri 7 hours
10-1-2010	National Association of Independent Fee Appraisers, 5.0 2010 National USPAP Update, Moscow Mills, Missouri 7 hours
12-3-2010	National Association of Independent Fee Appraisers, The HP12C Calculator and the six functions of a Dollar, Moscow Mills, Missouri 7 hour
3-1-2012	National Association of Independent Fee Appraisers, 5.0 2012 National USPAP Update, Moscow Mills, Missouri 7 hours
3-16-2012	Missouri Real Estate Appraisers Commission, Lake of the Ozarks Missouri, 7 hours, 2 seminars, Commission Presentation: 2012 & The appraisal work file
4-5-2012	International Right of Way Association, Principles of Real Estate Appraisal, Online Course 16 hours
4-4-2012	International Right of Way Association, Ethics and the Right of Way Profession, Online Course 8 hours
1-14/17-2013	The American Society of Farm Managers and Rural Appraisers, Louisville KY, Cost Approach for General Appraisers (A301)
3-11/14-2013	The American Society of Farm Managers and Rural Appraisers, Denver CO, Sales Comparison Approach for General Appraisers (A302)
12-5-2013	East Central Board of Realtors, Bob the Broker Core 3 hour class, Troy MO
4-12-2014	Missouri Appraisers Advisory Council; USPAP Update, Port Arrowhead, Lake Ozark, MO
4-10-2015	Missouri Appraisers Advisory Council; How to adjust for concessions, Port Arrowhead, Lake Ozark, MO 3.5 hours
4-10-2015	Missouri Appraisers Advisory Council; Determining Appraisal Adjustments, Port Arrowhead, Lake Ozark, MO 3.5 hours
4-11-2015	Missouri Appraisers Advisory Council; Rejected Appraisals, Port Arrowhead, Lake Ozark, MO 7 hours

PROFESSIONAL SEMINARS AND CONVENTIONS

NATIONAL ASSOCIATION OF INDEPENDENT FEE APPRAISERS

09-24-86	Hot Springs, Arkansas	08-96	Orlando, Florida
09-17-87	Norfolk, Virginia	09-97	Tulsa, Oklahoma
09-26/10-01-88	Cleveland, Ohio	08-98	Philadelphia, Pennsylvania
09-18/24-89	Reno, Nevada	08-99	Austin, Texas
09-13/17-90	Nashville, Tennessee	08-00	St. Louis, Missouri
09-03/08-91	New Orleans, Louisiana	10-02	Vancouver, BC Canada
09-92	Newport Beach, California	09-03	Charleston, South Carolina
09-93	Tampa, Florida	10-04	Chicago, Illinois
09-21/24-94	Las Vegas, Nevada	10-05	Portland, Oregon
08-95	Baltimore, Maryland	10-06	Chicago, Illinois

INTERNATIONAL RIGHT OF WAY ASSOCIATION

06-12/17-92	Charlotte, North Carolina	06-01	Vancouver, Canada
06-20/24-93	Calgary, Canada	06-02	Mobile, Alabama
06-24/07-30-94	Pittsburgh, Pennsylvania	07-03	Kansas City, Missouri
06-95	Louisville Kentucky	06-04	Philadelphia, Pennsylvania
06-96	San Diego, California	06-05	Toronto, Canada
06-97	Anchorage Alaska	06-06	Denver, Colorado
06-98	Minneapolis, Minnesota	06-07	Sacramento, California
06-99	Albuquerque, New Mexico	06-08	Houston, Texas
06-00	Tampa, Florida	06-10	Calgary, Canada
		06-14	Hartford, Conn

PROFESSIONAL ORGANIZATIONS

May 1991	State Certified General Estate Appraiser for State of MO RA 001164
May 1997	Earned Senior Right of Way Designation, International Right of Was Association
President Elect	International Right of Way Association Gateway Chapter 37 – 1991
President	International Right of Way Association Gateway Chapter 37 – 1992
State Director	National Association of Independent Fee Appraisers – 1990-91
National Director	International Right of Way Association Gateway Chapter 37 – 1992, 93, 94, 95, 96, 97, 06
Member	National Association of Independent Fee Appraisers – Member since 1986
Member	Professional Women's Appraisal Association – 1986-91
Vice President	St. Charles Chapter National Association of Independent Fee Appraisers – 1986-87
President	St. Charles Chapter National Association of Independent Fee Appraisers – 1987-88
Chairman	Missouri NAIFA Appraiser of the Year Committee – 1990
Chairman	Missouri NAIFA State Conference Committee – 1990-91
Member	National Association of Independent Fee Appraisers National Membership Committee – 1989-94, 99-2004

Chairman	National Association of Independent Fee Appraisers National Membership Committee – 1991-94
Chairman	National Association of Independent Fee Appraisers National Recertification Committee – 1994-95
Member	International Right of Way Association Gateway Chapter 37 – Member since 1988
Member	National Association of Independent Fee Appraisers National Public Relations Committee – 1995-98
Secretary	International Right of Way Association Gateway Chapter 37 – 1989-90
Member	Business and Professional Women's Club – 1989-95
Treasurer	Business and Professional Women's Club – 1989-90
President	Lincoln County Chapter National Association of Independent Fee Appraisers – 1989-92, 95-96, 2011-present
Secretary-Treasurer	Lincoln County Chapter National Association of Independent Fee Appraisers – 1993-94, 97-2004
Member	The East Central Board of Realtors - since 1987
Member	St. Charles County Board of Realtors - since 1987
Approved	Veterans Administration Appraiser Panel – approved since 1987
Member	St. Louis Metro Chapter National Association of Independent Fee Appraisers Public Relations Committee 1987-88
Region Vice-Chair	International Right of Way Association, Region 3 – 1992-93
Region Chair	International Right of Way Association, Region 3 – 1993-94
Member	International Right of Way Association International Membership Committee – 1994-98
Vice-Chair	International Right of Way Association International Membership Committee – 1995-97
Chair	International Right of Way Association International Membership Committee – 1997-99
Charter Member	Troy Elks Lodge 2805 since 1998
Lecturing Knight	Troy Elks Lodge 2805 - 1998-99
Trustee	Troy Elks Lodge 2805- 2002-04
Chairperson	Troy Elks Lodge, House Committee 2000, 2002-04
Co-Chair	International Right of Way Association Young Leadership Council Taskforce 1998-99
Chairperson	Troy Elk Lodge 2805, Lapsation Committee 1998-99
Deputy Regional Governor	National Association of Independent Fee Appraisers (Mid Central Region) 1998-2001
Member	National Association of Independent Fee Appraisers Operating Procedures Committee – 1999 - 2001
Loyal Knight	Troy Elks Lodge 2805 - 1999-2000

Exalted Ruler	Troy Elks Lodge 2805-2000-01
Chairperson	Troy Elks Lodge 2805 – House Committee 2000-04
Chairperson	Troy Elk Lodge #2805, Lodge Activities Committee, 1999-2000
Chairperson	Troy Elk Lodge 2805, Lodge Community Activities Committee, 2003-04
Member	International Right of Way Association Special Task Force to look at relocation of International Headquarters, 2000-02
Member	National Association of Independent Fee Appraisers, Convention and Meeting Planning Committee 1999-2004
Member Chairperson	National Association of Independent Fee Appraisers, Education and Research Trust, 2004-2008 2005-2008
National Director	National Association of Independent Fee Appraisers, National Board of Directors 2004-2006
Trustee	International Right of Way Association Education Foundation 2003-2011
Vice-President	International Right of Way Association Education Foundation 2008-2011
Member	National Association of Independent Fee Appraisers, National Fiscal Committee 2004-2006
Secretary	NAIFA Realty Corporation 2004-2006
Member	Troy Elk Lodge 2805, House Committee 2014-?

CLIENTS Client list available upon request

EXPERT WITNESS

Warren County Circuit Court
Clayton County Circuit Court
Pike County Circuit Court
Lincoln County Circuit Court
St. Charles County Circuit Court
Boone County Circuit Court

HONORS

Selected to be a member of Who's Who in the Midwest for 1987 through 1994
Selected to be a member of Who's Who of Emerging Leaders of 1988 through 1994
Selected as 1988 Young Career Woman of Lincoln County
Selected as 1991 and 1999 Professional of the Year, International Right of Way Association, Gateway Chapter 37
Selected as First Runner up Missouri Appraiser of the Year, National Association of Independent Fee Appraisers 1991
Selected to be a member of Sterling Who's Who for Executives 1994
Selected as 1998-International Right of Way Professional of the Year – Balfour Award
Selected to be a member of Who's Who in Executives and Businesses 2000-2001

State of Missouri

Division of Professional Registration
State Certified General Real Estate Appraiser

VALID THROUGH JUNE 30, 2016
ORIGINAL CERTIFICATE/LICENSE NO. RA001164
VICKIE E TURPIN
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45 SOUTH GATE DRIVE
TROY MO 63379
USA

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State of Missouri

Department of Insurance, Financial Institutions and Professional Registration
Division of Professional Registration
Real Estate Appraisers Commission
State Certified General Real Estate Appraiser

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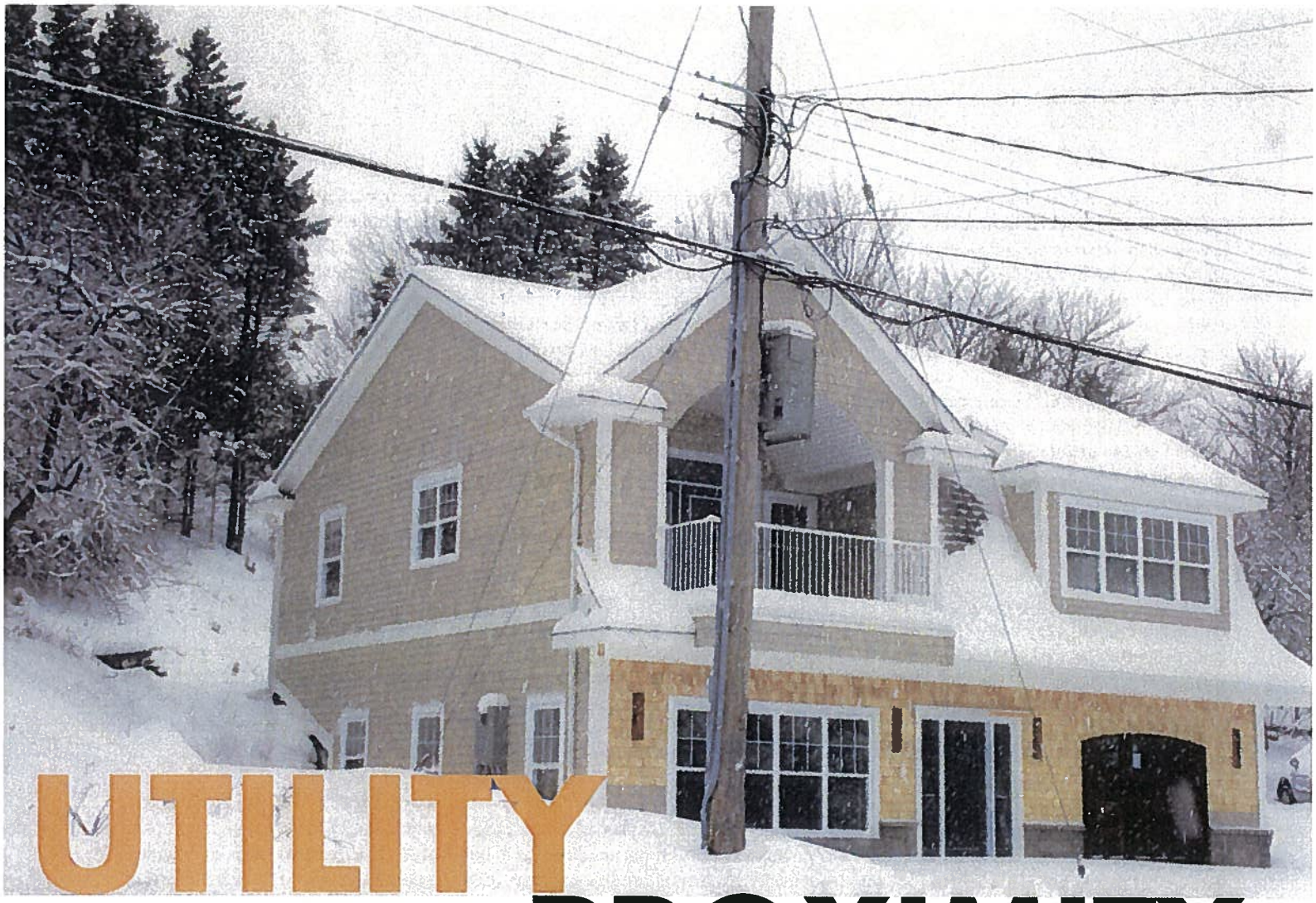
TROY MO 63379
USA

Vanessa Beauchamp
EXECUTIVE DIRECTOR

Jane A. Packwood
DIVISION DIRECTOR



UTILITY VERSUS PROXIMITY

A systematic approach to measuring the impact of electric transmission line easements on residential properties

BY JOHN ROLLING, SR/WA AND MARIAN BARNES, SR/WA

The valuation of easement interests ranks among the most complex assignments that appraisers encounter. All easement acquisitions are, by definition, partial acquisitions requiring consideration of remainders as well as the property interest taken. Since the effect of each easement on its larger parcel is unique, easement valuations are performed using the before and after methodology.

Many easement valuation problems involve distinguishing between direct and indirect impacts. Direct impacts of the easement are within the defined easement area itself, such as restrictions on use or the elimination of a structure or site improvements. Indirect impacts affect the area outside of the easement area, including reduction in utility. Restrictions within the easement area itself may make efficient use of adjoining land impractical. It also includes a diminution in market appeal to the remainder, such as objections to aesthetics or health and safety concerns that apply to the entire property.

In the November/December 2014 issue of Right of Way Magazine, Donnie Sherwood's article on

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"The Valuation of Easements" presented factors to consider when valuing an easement and investigating its impact on property. We applied similar concepts to improved residential properties where an easement was acquired for a 345-kilovolt electric transmission line. By developing an evaluation matrix to systematically consider the impact of the easement to the encumbered land and to the remainder, we were able to maintain consistency in our evaluation while recognizing that each property is unique.

The Assignment

Our appraisal company was contracted to estimate the value of easements needed from properties located along a 48-mile segment of a proposed 345-kilovolt electric transmission line crossing three counties in western Wisconsin. The three-wire transmission line will be supported by steel monopoles that are spaced approximately 800 to 1,000 feet apart with heights of up to 190 feet. The width of the easement right of way is typically 150 feet which is often split between adjoining private properties and/or public roads.

The project required that we appraise 32 improved residential properties as well as vacant recreational, residential and agricultural land. Sixteen of the 32 improved residential properties were subject to an existing 161-kV transmission line easement. The improved residential properties were primarily in rural locations, with only four of the 32 served by municipal utilities.

Easement rights to be acquired are typical of high-voltage electric transmission line projects. The landowners are not permitted to construct any buildings, structures or other objects or plant trees in the easement area without written permission from the utility. The utility has the right to construct, operate, maintain, use, upgrade, rebuild, relocate, or remove the transmission line facilities; install additional equipment and facilities for the distribution of energy, light, and communication impulses; remove any trees located in the easement area; and to trim or remove any trees located adjacent to the easement area that may interfere with the electric line.

Literature Review

A number of studies have been conducted on the implications of high-voltage electric transmission lines (HVTLs) for residential property values. About half of the studies found that HVTLs negatively impact the value of nearby properties, while the other half of the studies found no statistically significant or systematic impacts on property values. In those studies where a negative effect on value has been quantified, it was almost always less than 10 percent, usually falling somewhere between three percent and six percent.

Most of the early studies made no distinction between effects on properties that are proximate to a transmission line and those subject to an actual easement encumbrance. A common assumption is that buyers discount the prices they are willing to pay for dwellings proximate to an HVTL based on aesthetic objections, as well as health and safety concerns. Proximity may involve properties under a transmission line, properties adjacent to but not under a transmission line, or properties simply near a transmission line. Utility, on the other hand, is an attribute specific to properties that are subject to easement restrictions. Owners of land under an easement may be prohibited from planting trees and erecting buildings or other structures. The utility of that part of their property under an easement is reduced to at least some degree.

In addressing the proximity versus utility issue, a 2008 study conducted by economists and real estate appraisers James Chalmers and Frank Voorvaart examined the impact of a 345-kV line on rural and suburban residential properties in Connecticut and Massachusetts. A multiple regression analysis was used to determine the influence of several factors on one dependent variable (sales price). Four study areas were delineated, with the number of sales in each study area ranging from 153 to 475. The study found no systematic effects of proximity on sales price. Encumbrance or utility, however, was shown to have a systematic effect on price, and that effect was estimated to be -1 percent of the total property value.

Local Market Research

In recent years, our firm has performed several studies of HVTL easement impacts on properties within local markets around Wisconsin. In 2013, we studied sales of vacant parcels and improved single-family dwellings in a suburban subdivision located

A preschool playground is located in a 161-kV transmission line easement in western Wisconsin. The house is approximately 25 feet from the edge of the easement.

in western Wisconsin close to the subject area. A 161-kV transmission line mounted on wooden H-frame structures predates this subdivision.

Eight sales of vacant lots occurred between January 2009 and January 2012. Two of these lots that sold were subject to the HVTL easement. A regression model analysis considered the lot size, date of sale, and presence or absence of an easement. The model indicated that vacant lots with the HVTL easement sold for 21 percent *higher* unit prices than for otherwise similar non-easement lots. We then identified sales of improved properties. Three improved properties that sold with HVTL easements were compared to sales of non-encumbered properties within the same subdivision. Standard adjustments were made to the comparable sales. The adjusted sale price of the non-encumbered properties varied from the sale price of the encumbered properties by -6.86 percent to +1.88 percent. This range is consistent with other studies that find little, if any, impact on improved properties subject to an HVTL easement.

Constructing the Evaluation Matrix

Neither the published studies nor our own study revealed a single percentage point diminution in value that can be applied uniformly to properties subject to a HVTL easement. The various studies have, however, identified factors believed to influence the degree to which any one property might be affected. These factors are:

- Percentage of parcel that is encumbered
- Placement of the easement strip on the parcel
- Loss of vegetation—natural or landscaping
- Loss of screening against external detriments
- Distance from the transmission line to the dwelling
- Visual prominence of the facility

Type of Impact	Area Impacted	Impact Quantified *(example terms)*
Loss of Land Utility: • Loss of Buildable Land • Loss of Landscaping/Wooded Character	Easement Area	X square feet Natural or cultivated
% Land Encumbered	Remainder	X%
Placement of Easement on Property	Remainder	Edge, corner, bisecting
Living Area Proximity to HVTL Easement: • Visual • Pole Proximity • Noise	Remainder	X feet Wires, poles On/off property Intensity
Screening of External Detriments	Remainder	Busy roads, etc.

To judge the impact of the HVTL on each subject property, these factors were categorized in the matrix above. The type of impact includes direct loss of utility, proportion of land encumbered, location of encumbered area, proximity of structures and wires to dwelling, potential for visual or noise disturbance and loss of screening. The area of impact is the defined easement area or the remainder area. The impact quantified indicates how much land is affected and the proximity of the transmission line to the dwelling.

The matrix above addresses both utility and proximity effects. Loss of utility considers the percentage of the entire property encumbered, the position of the easement on the property (edge, corner, bisecting), and any loss of landscaping or natural woods from the easement area itself. Proximity is quantified as the distance of the living area from the edge of the easement, aesthetic effects of pole and wire location, noise from the wires and the loss of screening of external detriments.

Rural residential property in western Wisconsin on 3.47 acres. An HVTL easement was acquired over .70 acres, resulting in the loss of trees that provided screening from a major highway.

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The matrix was used to first judge the percentage loss in value to the land under easement. The after land value calculation includes the value of the residual rights for the encumbered land plus the value of the unencumbered remnant. Next, the matrix helped guide the estimation of a percentage diminution in value to the improvements. This percentage was applied as an adjustment to the improved comparable sales in the after condition comparison grid.

By using the matrix in our appraisals, the range of damage conclusions for the 32 properties appraised was 0.91 percent to 12.13 percent of the total property value. Many of the properties at the low end of the range were already subject to an electric transmission line easement in the before condition. Properties at the high end of the range typically had a higher percentage of land under the new easement and/or the transmission line easement was close to the dwelling.

A Prime Example

One of the properties that we appraised is an improved rural residence on 3.47 acres. The parcel adjoins a four-lane highway. The 165 feet between the house and the highway right of way is wooded. The dwelling is a ranch-style home of 1,435 square feet above grade living area with 965 square feet of finished basement area. The home was built in 1981 and is in fair condition. There is an attached two-car garage and a large detached storage shed.

The HVTL easement is over 0.70 acres (20 percent) of the subject's land, and the edge of the easement is 82 feet from the house. This means that more than half of the trees lying between the house and the highway will be removed. One metal pole, 170 feet in height, will be located on the property adjacent to the highway right of way. The completed evaluation matrix for this property is as follows.

Type of Impact	Area Impacted	Impact Quantified
Loss of Land Utility: • Loss of Buildable Land • Loss of Landscaping/Wooded Character	Easement Area	0.70 acres 83-foot strip of woods
% Land Encumbered	Remainder	20%
Placement of Easement on Property	Remainder	Edge
Living Area Proximity to HVTL Easement • Visual • Pole Proximity • Noise	Remainder	82 feet Wires, one pole On property Occasional
Screening of External Detriments	Remainder	U.S. Highway

More than half of the easement area (0.42 acres) is subject to a highway building setback requirement that prohibits structures. We considered that this land had a 25 percent diminution in value in the before state based on its restricted use. In the after state, with the HVTL easement, it suffered an estimated additional 25 percent loss in value. The additional 0.28 acres subject to the HVTL easement alone was considered to suffer a 50 percent diminution in value. The remaining unencumbered land retains its before unit value as it is of sufficient size to continue its current use.

The landscaping and the dwelling were concluded to suffer losses in value. We estimated a 42 percent loss in the contributory value of the landscaping due to the loss of natural woods that are common in the area. This degree of loss recognizes that the woods function as a screening from the highway. We estimated a two percent loss in value to the dwelling based on its 82-foot proximity to the HVTL easement and visibility of one pole structure. The total damages associated with both the utility and proximity effects of the easement were estimated at 6.62 percent of the before value. The overall damage percentage lies within the range of damages estimated from published studies described earlier.

Summary

Using an evaluation matrix may be beneficial for any appraiser facing a utility easement assignment. It can also be used for valuation of the before state if there is an existing easement on the property. For a multi-parcel linear project, the matrix provided a consistent way to address factors that might affect each property, while also recognizing that damages are relative between the 32 different properties appraised. Overall, it enabled us to distinguish between the effects of the easement within the easement area itself and the effects on the remainder property. ✪

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Thomas O. Jackson and Jennifer Pitts, "The Effects of Transmission Lines on Property Values: A Literature Review," Journal of Real Estate Literature, 2010, Vol. 18, No. 2.

James A. Chalmers, "High-Voltage Transmission Lines and Rural, Western Real Estate Values," The Appraisal Journal, Winter 2012.

James A. Chalmers and Frank A. Voorvaart, "High-Voltage Transmission Lines: Proximity, Visibility, and Encumbrance Effects," The Appraisal Journal, Summer 2009.

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Marian is a managing member of Rolling & Barnes, LLC. She appraises for eminent domain and public works projects in Wisconsin and Michigan, applying her background in geology and environmental investigation.

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