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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. EA-2016-0358

SURREBUTTAL TESTIMONY OF

RICHARD J. RODDEWIG

ON BEHALF OF

GRAIN BELT EXPRESS CLEAN LINE LLC

February 21, 2017

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I. INTRODUCTION

A. Witness Identification

Q. What is your name and business address?

A. Richard J. Roddewig, Clarion Associates, The Inland Steel Building, 30 West Monroe Street, Suite 810, Chicago, Illinois, 60603.

Q. By whom are you employed and what is your title?

A. I am President of Clarion Associates, Inc.

Q. Who are you testifying on behalf in this proceeding?

A. I am testifying on behalf of Grain Belt Express Clean Line LLC ("Grain Belt Express").

B. Background and Qualifications

Q. What are your duties and responsibilities in your current position?

A. I am President of Clarion Associates, Inc. ("Clarion"). Clarion is a real estate consulting, real estate appraisal, and land use planning firm with affiliated offices in Chicago, Denver, Cincinnati, Philadelphia and Chapel Hill. Our Chicago and Philadelphia offices specialize in appraisals, feasibility studies, and market analyses of single-family and multi-family residential, retail, commercial office, industrial, hotel and motel properties and vacant sites all over the country. We also undertake land use planning/zoning assignments especially out of our Denver, Cincinnati, and Chapel Hill offices. As President of the Chicago affiliate of the larger Clarion organization, I am responsible for supervising all of the activities of the Chicago office.

Q. Please summarize your educational qualifications.

A. I received a Bachelor of Arts degree, summa cum laude, in 1970 from the University of Notre Dame, where I was elected to membership in Phi Beta Kappa. I hold a Masters of Arts degree in political science and a Juris Doctor degree from the University of Chicago.

Q. What relevant professional certifications and licenses do you hold?

A. I am a Member of the Appraisal Institute (designated MAI), a member of the Counselors of Real Estate (designated CRE), a member of the Royal Institution of Chartered Surveyors (designated FRICS) and am currently licensed as a Certified General Real Estate Appraiser in Missouri, Minnesota, Illinois, Michigan, Wisconsin, Indiana, Ohio, Pennsylvania, New York, West Virginia, Maryland, Virginia, Tennessee, South Carolina, North Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Oklahoma, Colorado, Arizona, Nevada, California, Washington, and Hawaii. I am also a licensed real estate broker in Illinois and am licensed to practice law in the State of Illinois. Although I do not now actively practice law, I have legal experience concentrated in land use and zoning.

Q. Mr. Roddewig, please briefly describe your professional experience in the real estate appraisal and land use planning and zoning areas.

A. During the past 35 plus years, I have:

- Appraised thousands of residential, commercial, and industrial properties as well as undeveloped land (including agricultural land) in more than 40 states and in Mexico, the Caribbean, and South America for individuals as well as major corporations, financial institutions, developers, and government agencies;
- Served as a Senior Vice President of a real-estate appraisal and consulting firm, and as a Senior Principal in the real estate division of a major national accounting firm; and

- Acted as an appraiser and land use planning consultant undertaking land use and zoning studies for numerous public and quasi-public agencies.

Q. Do you have any professional experience in the evaluation of the impact of environmental conditions on real estate markets and property values?

A. Yes. Much of my appraisal and real estate counseling work in the past 25 plus years has involved analysis of the impact, if any, of actual or perceived environmental conditions and risks on property values. I have analyzed concerns arising out of the development, operation, or expansion of power plants, airports, regional malls, landfills, and quarries. Clarion has a national reputation for analyzing the impact of environmental factors and conditions on property values and for planning the areas surrounding significant regional developments. Some of the environmental issues I have researched for their impacts on improved and unimproved properties include soil, air, groundwater, and river water contamination as well as odor and noise.

Q. Do you have any professional experience in the evaluation of the impact of transmission lines on property values?

A. Yes. In four transmission line proceedings before the Illinois Commerce Commission, I analyzed the sales data in studies done by intervenors concerning the possible impact of transmission lines on property values in northeastern Illinois, including the Chicago metropolitan area, and in one of those assignments, I reviewed, summarized and analyzed national studies of the impact of transmission lines on property values. In a fifth proceeding before the Illinois Commerce Commission, I analyzed the potential impact of the proposed Illinois segment of the Grain Belt Express Project on farmland values in Illinois and again summarized the published national studies on transmission line impacts on property values.

As part of my teaching work involving the relationship between environmental factors and real estate markets, I keep current on research related to transmission lines and property values.

Q. Have you testified before governmental agencies?

A. Yes. I have testified before many government agencies and in state courts in Lake County, Cook County, Kane County, and DuPage County in Illinois. I have also testified in state courts in Alaska, Arizona, Colorado, Wisconsin, Pennsylvania, and Maryland, and in federal courts in Illinois, Minnesota, Colorado, Florida, and Louisiana as an expert witness in the areas of real estate valuation, real estate market analysis, and land use planning. In Illinois, I submitted testimony in the following Illinois Commerce Commission proceedings involving transmission line corridors:

- Docket No. 92-0221, ComEd's Petition for a Certificate of Public Convenience and Necessity, under Section 8-406 of the Illinois Public Utilities Act to construct, operate, and maintain a new electric transmission line and substation in DuPage County, Illinois.
- Docket No. 94-0179, ComEd's Petition for a Certificate of Public Convenience and Necessity, under Section 8-406 of the Illinois Public Utilities Act to construct, operate, and maintain a new electric transmission line in Kane and DuPage Counties, Illinois.
- Docket No. 96-0410, ComEd's Application for a Certificate of Public Convenience and Necessity, under Section 8-406 of the Illinois Public Utilities Act, and for an Order, under Section 8-503, of the Illinois Public Utilities Act, authorizing and

directing ComEd to construct, operate, and maintain new electric transmission lines in Kane and McHenry Counties, Illinois.

- Docket No. 13-0657, ComEd's Application for a Certificate of Public Convenience and Necessity, pursuant to Section 8-406.1 of the Illinois Public Utilities Act, and an Order pursuant to Section 8-503 of Illinois Public Utilities Act, to Construct, Operate and Maintain a new 345 kilovolt transmission line in Ogle, DeKalb, Kane and DuPage Counties, Illinois.
- Docket No. 15-0277, Grain Belt Express' Application for a Certificate of Public Convenience and Necessity, pursuant to Section 8-406.1 of the Illinois Public Utilities Act, to Construct, Operate and Maintain a high voltage electric transmission line and to conduct a transmission public utility business in connection therewith in Illinois.

Q. Please describe your teaching experience and publications related to real estate valuation and land use planning issues.

A. I have taught Real Estate Valuation as an adjunct professor in the Department of Finance at DePaul University, as well as various courses as an adjunct lecturer at other universities including Northeastern Illinois University, Governor's State University, and the University of Illinois at Chicago. I have also authored, co-authored, edited, or contributed to 14 books and published more than fifty articles in such publications as *The Appraisal Journal*, *Real Estate Issues*, *Urban Land*, *The Urban Lawyer*, and *The John Marshall Law Review*. For a number of years in the 1990s, I was the regular environmental columnist for *The Appraisal Journal*, the peer-reviewed professional publication of The Appraisal Institute, and have developed and taught various seminars and courses for The Appraisal Institute.

Q. What is The Appraisal Institute?

A. The Appraisal Institute is the largest professional organization of real estate appraisers. It develops courses and publications for the real estate appraisal profession and awards a series of designations to real estate appraisers who successfully complete the required set of courses and demonstrate the relevant level of experience.

Q. Have you developed any seminars or courses or done any teaching for the Appraisal Institute related to valuation of property affected by environmental factors?

A. Yes. I am the co-developer of three seminars for the Appraisal Institute on the topic of the impact of contamination and other types of environmental conditions on property prices and values. I have taught those seminars to appraisers all across the country. I have also developed and taught a number of other seminars for the Appraisal Institute including seminars at the 2013, 2014, 2015, and 2016 annual meetings of that organization.

Q. Are the seminars you have developed and taught for the Appraisal Institute its official seminars on evaluating the impact of environmental risks on property values and property markets?

A. Yes.

Q. Who wrote the course books for the three Appraisal Institute seminars related to environmental issues?

A. I co-authored all three of the course books.

Q. As part of the Appraisal Institute seminars you teach, do you instruct appraisers how to consider whether transmission lines have an impact on the value of particular parcels of property?

A. Yes. That has been one of the topics in some of the seminars.

Q. Do any of your published articles deal specifically with the impact of transmission line corridors on real property prices and markets?

A. Yes. An article entitled "Power Lines and Property Prices" that I co-authored with my Clarion colleague Charles T. Brigden appeared in *Real Estate Issues* in 2014. It summarizes the published transmission line impact studies in the real estate appraisal and real estate economics literature and also discusses results of transmission line impact studies we have undertaken at Clarion Associates, Inc.

Q. Do you have any particular appraisal or land use analysis experience which is particularly relevant to the valuation of property on or near a utility corridor?

A. Yes. In addition to the research I did in the previously mentioned Illinois Commerce Commission transmission line proceedings, I have appraised a great deal of land near and on utility and transportation corridors such as transmission line rights-of-way. I was one of the appraisers selected by the federal bankruptcy trustee in the reorganization of the Rock Island Railroad, and in that assignment appraised over 1,300 miles of railroad right-of-way in five states, including Missouri. Much of that land was undeveloped farmland or land with future potential for development. I was also involved in the valuation of the commuter rail lines of the Chicago & Northwestern, Milwaukee Road, Illinois Central Gulf, and Rock Island during the negotiation of their sale to the Northeast Illinois Regional Commuter Railroad Corporation, also known as METRA. I have been involved in a number of appraisal assignments for the Illinois Department of Transportation and the Illinois Toll Highway Authority involving right-of-way acquisitions, most recently an appraisal of the land to be taken along the western edge of O'Hare Airport in Chicago for construction of the Elgin-O'Hare Western Access Project. I also have substantial

experience appraising land abutting forest preserves and other open space land. I also have considerable experience involving natural gas and petroleum pipelines, including analyzing the impact of pipeline spills on property prices and values.

Q. Have you been involved as a real estate appraiser in the acquisition of any transmission corridor rights-of-ways?

A. Yes. I was involved as one of the appraisers working for ComEd in Illinois in the acquisition of the right-of-way for the 138 kV line between Huntley and Algonquin in McHenry County, Illinois.

Q. Do you have experience appraising agricultural land?

A. Yes. I have appraised farmland and grazing land in various states, including Illinois, Missouri, Kansas, Nebraska, Minnesota, Iowa, Colorado, Utah, Wyoming, Montana, Texas, Nevada, California, and Hawaii, and am currently involved in an assignment involving agricultural land in Louisiana.

Q. Do you have a resume that states your qualifications and experience in more detail?

A. Yes. A copy of a current resume is included in my report, Schedule RJR-1.

C. Purpose of Testimony

Q. What is the purpose of your testimony?

A. There are four purposes to my testimony:

- first, to summarize the conclusions in the published national real estate appraisal literature concerning the impacts of transmission lines on real estate prices and values including their impact on farmland prices;
- second, to summarize my prior research into the effect of transmission line corridor easements on farmland prices in Illinois;

- third, to summarize my prior research into the effect of transmission lines on adjacent home prices;
- fourth, to review and analyze the accuracy of the research and conclusions concerning transmission line impacts expressed in the Rebuttal Testimony submitted by MLA witness Mr. Kurt C. Kielisch; and
- fifth, to review and comment on the testimony of Charles (and Robyn) Henke dated January 24, 2017.

Q. Are you sponsoring any schedules to your rebuttal testimony?

A. Yes. I am sponsoring Schedule RJR-1, which is the Expert Report and Declaration of Richard J. Roddewig.

D. Summary of Conclusions

Q. What conclusions have you reached from your review of the published literature, your own past research, and your review of the Rebuttal Testimony of Mr. Kielisch?

A. More than half of the published research literature has found no adverse impact on prices and values of the properties studied. When adverse impacts are found in the published literature, they are typically quite small, and in a range between -2% and -10%. My research into farmland prices in Christian County, Illinois, indicates that currently existing transmission line corridors have had no more, on average, than a negative price impact of -2.0% on the properties on which they are located. That means the impact of the existing easement is typically less than the fee value of the easement corridor on those farms. Finally, my past research into prices paid for residences near or adjacent to existing transmission lines demonstrates that there has been no adverse impact on property values. My conclusions concerning the rebuttal testimony of Mr. Kielisch are as follows:

- first, the published real estate literature as summarized by Mr. Kielisch does not support his conclusions that transmission line easements have significant impacts on property prices and values;
- second, the transmission line impact studies in the rebuttal testimony of Mr. Kielisch contains significant misrepresentations and factual and methodological errors;
- third, when the errors in the Kielisch transmission line impact studies are corrected, they do not support the Kielisch conclusion that the proposed Grain Belt Express Project will have "at a minimum" negative impacts on the value of the right-of-way easement areas acquired ranging between -10% and -34%; and a negative impact on land "near but not on the right-of-way" in excess of the value of the easement;
- fourth, there is not enough information presented in the testimony of Charles and Robyn Henke to support their conclusion that the price paid for a specific tract of land was adversely impacted by the presence of a transmission line; and
- fifth, the proposal by Grain Belt Express to pay owners of farmland an amount equal to 110% of the market value for each acre of farmland occupied by the transmission line corridor will adequately compensate the farm property owners for the effect of the transmission line on the value of their property.

II. METHODOLOGY USED TO EVALUATE INTERVENOR CLAIMS

Q. Mr. Roddewig, on what is your testimony based?

A. My testimony is based upon the following:

- my familiarity with the published real estate appraisal and real estate economics literature related to the impact of transmission lines, and other environmental conditions, on real estate generally;
- my review of maps of the proposed transmission line corridor in Missouri;
- my review and analysis of the data in the rebuttal testimony presented by Mr. Kielisch;
- research undertaken by me and by Clarion on the market for single-family homes and farmland on and near transmission rights-of-way;
- my own personal knowledge of farm and residential real estate markets; and
- my professional expertise in the area of land valuation, especially the impact of environmental factors on property markets and values, and in the area of land use planning, including my past experience in evaluating the impact of transmission lines on property values.

III. THE PUBLISHED STUDIES OF IMPACT OF TRANSMISSION LINES ON PROPERTY VALUES

Q. Have you reviewed national and international studies related to the impacts of transmission lines on property values, and do they support the claims of some intervenors that values of properties on or adjacent to transmission lines will be significantly impacted in value by the proposed transmission line in Missouri?

A. Yes, I have been collecting and reviewing the published literature for more than 25 years. That published literature does not support the claims of the intervenors.

Q. Do the published studies typically find that nearby power lines negatively impact the prices and values of adjacent homes?

A. No. Quite the opposite. The majority of the published studies as referenced and summarized in Schedule RJR-1, my Expert Report and Declaration find no adverse impact on prices or values of adjacent homes and neighborhoods.

Q. In the published studies in which price impacts on homes are found, what is the range in impacts and are the impacts permanent or temporary?

A. When impacts are found, they are typically quite small, and range between 2% and 10%. Some of the studies have found that the impacts on prices, when they do occur, are temporary rather than permanent. That is, when the lines are first announced or installed, there is a small impact on prices, but then the adverse impact goes away over time as the marketplace of buyers and sellers becomes comfortable with the presence of the transmission lines. Some studies have even found that adjacent prices can be higher due to the benefit created by the additional open space in the adjacent transmission line corridor.

Q. Do any of the studies in the published literature involve farmland?

A. Yes, many of them.

Q. What does the published peer reviewed literature state about the impact of transmission line corridors on farmland prices?

A. As discussed in Schedule RJR-1, most of the studies over the last 40 years have found little or no impact on agricultural land prices. For example, an early 1972 study found little empirical evidence to support any adverse price reductions due to transmission lines, and two 2012 articles also found no evidence to support adverse impacts on prices. One study of rural land transactions in Wisconsin between 2002 and 2008 found a small price impact ranging from -2.1% to -3.4% based on an analysis of 88 transactions.

Q. You indicated that your national research has been conducted over the past 25 years. Have you seen any changes in the conclusions reached in the national sales data research studies over the past 25 years?

A. No. The conclusions have been very consistent, whether the studies were done in the late 1980s, the 1990s, or the 2000s. The majority of the published studies from each decade have found no adverse impact on prices or values.

IV. IMPACT OF TRANSMISSION LINE CORRIDORS ON ILLINOIS FARMLAND PRICES

Q. You indicated that your second task involved an analysis of existing transmission line corridors on the value of farmland in Christian County, Illinois. What was the nature of that research?

A. My staff and I did two things. First we reviewed the published peer reviewed literature analyzing the effect of power lines and transmission line corridors on agricultural land prices and values. Second, we collected and analyzed sales prices in Christian County to determine if prices for farmland containing transmission line corridors are lower than prices for similar farmland not located on a transmission line corridor.

Q. Why did you choose Christian County as a location to study farm price effects in Illinois?

A. For a number of reasons. First, the proposed transmission line involved in the Illinois Grain Belt Express proceeding passes through Christian County. Second, there are existing transmission line corridors in that county. Third, the portions of the country through which the existing corridors pass are generally open farmland with few streams and natural areas

which allows ready comparisons of one sale property to another. And fourth, sales data and soil quality ratings are readily available from publicly available on-line county records.

Q. What did your Christian County research indicate?

A. It indicated that farmland with an existing transmission line corridor crossing the property sold at an average price that was about 6.0% lower but at a median price that was about 4.0% higher than the price for similar farmland not located on a transmission line corridor. Further discussion is provided in my expert report, Schedule RJR-1. Overall, giving equal weight to the average price and median price differential, the Christian County data indicates no more than about a 2.0% impact on farmland prices due to the presence of transmission line corridors.

V. STUDIES OF IMPACT OF TRANSMISSION LINES ON HOME PRICES IN ILLINOIS

Q. You indicated that the third task you undertook was to review and summarize your prior research into the impact of transmission line proximity on adjacent home prices and values in Illinois. What specific studies have you done in Illinois?

A. The studies I have previously undertaken include the following developments:

- The Sugar Ridge and River Ridge single-family home subdivisions in South Elgin, Illinois.
- The Coventry townhouse development project in Lake in the Hills, Illinois.
- The Concord Pointe townhouse development in Carol Stream, Illinois.
- Hampton Park townhouse development in Naperville, Illinois.

Q. How are those above-listed studies relevant to the current proceedings?

A. Those studies are relevant for a number of reasons:

- First, all of those neighborhoods are adjacent to transmission line corridors so they can be studied to determine if prices closest to the corridor are lower than prices for similar homes in the same neighborhood not located in close proximity to the transmission line corridor
- Second, the Sugar Ridge and River Ridge single-family home subdivisions in South Elgin, Illinois were the subject of a 1990s Commission proceeding (Docket No. 94-0179) related to approval of power line construction in an existing railroad right-of-way. I presented testimony in that proceeding. Some residents in the 1990s opposed the construction of the power line based on claims that it would adversely impact home prices. As a result, prices paid since the construction of that 1990s power line can be studied to determine if the property value impact concerns of some of the residents were correct.
- Third, the Coventry townhouse development project in Lake in the Hills, Illinois indicates that vacant land adjacent to a newly approved transmission line corridor can be developed in a way that does not result in an adverse impact on home prices.
- Fourth, analysis of resale prices in the Concord Point study indicates that even multiple sets of power lines can have little or no effect on prices paid for adjacent homes.

Q. What did these studies indicate?

A. As discussed in detail in my article published in *Real Estate Issues* and attached to my report, Schedule RJR-1, these studies concluded that there was no impact from proximity to the adjacent transmission line corridor and power lines. One of the studies also demonstrates how land developers can plan a project next to a transmission line corridor

to avoid any potential adverse impact on prices and values. The studies also indicate that the installation of a second power line in an existing transmission corridor does not necessarily cause an adverse impact on prices and values.

VI. REVIEW AND ANALYSIS OF THE REBUTTAL TESTIMONY OF MLA WITNESS KURT KIELISCH

Q. You indicated that your fourth task involved an analysis of the accuracy of the research and conclusions concerning transmission line impacts expressed in the rebuttal testimony submitted by Mr. Kielisch. What was the nature of your review and analysis of that testimony?

A. It involved a review, analysis and testing of the accuracy of five of his eight "impact studies."

Q. Which of the five Kielisch impact studies did you review and analyze?

A. We reviewed and analyzed his study of farmland sales in central Illinois (Kielisch study No. 1), in Marathon County, Wisconsin (Kielisch study No. 4), and in Tuscola and St. Clair counties in Michigan (Kielisch studies No. 5, No. 6 and No. 7.)

Q. Did you find any errors in those five Kielisch impact studies?

A. Yes.

Q. How would you summarize those errors?

A. The errors can be generally summarized as follows: (1) an insufficient number of sales to have a reliable statistical model; (2) inclusion of an inappropriate outlier in a statistical model; (3) cherry picking ("data mining") sales to support a pre-conceived judgment; (4) misrepresentations concerning sales and failure to make proper adjustments to sales in a

paired sales analysis; and (5) comparisons of sales in one submarket to sales in another submarket rather than in the same submarket.

Q. Did you correct the errors in the five Kielisch impact studies you reviewed?

A. Yes.

Q. What conclusion did Kielisch reach in his impact studies?

A. Kielisch claims that his impact studies demonstrate that transmission line corridors have an overall negative impact on the values of land they cross ranging between -10% and -34% (Kielisch Submission, p. 33). He claims the variation is caused by differences in the manner in which the transmission line crosses a property. He also concluded that impact on value from transmission line easements substantially exceed the market value of the actual acreage on a farm devoted to the transmission line corridor easement.

Q. What happened when you corrected the errors in the Kielisch impact studies?

A. The corrected studies do not support the Kielisch claims. Once the studies are corrected to remove the errors, the corrected studies indicate that the impacts of transmission lines on farm prices is generally between 0% and no greater than -8.4%. When corrected, the Kielisch studies also indicate that the effect of transmission lines on farmland prices is less than the market value of the acreage devoted to the transmission line corridor on farm properties; in other words, the transmission line corridor does not affect the value of the land outside the easement area.

Q. Did all five of the Kielisch studies you reviewed involve the same type of analysis?

A. No. His Impact Study No. 1 used a statistical multiple regression model. The other four we reviewed were paired sales studies, sometimes called matched pairs analyses or paired data analyses.

Q. What were the problems with the first Kielisch impact study involving farmland in central Illinois?

A. There were two significant problems. First, the Kielisch model did not include a sufficient number of sales to be a statistically reliable regression model. Second, the Kielisch model included an outlier that significantly skewed the outcome of the model.

Q. How many sales were utilized in the Kielisch multiple regression model?

A. He used only 70 sales.

Q. According to generally accepted standards of the appraisal profession, how many sales, at a minimum, should he have included in his model to have a statistically reliable model.

A. The textbooks, courses and seminars of the appraisal profession emphasize that a statistical regression model must have sufficient sales to accommodate all of the variables included in the model. The 14th edition of the textbook The Appraisal of Real Estate states that the suggested minimum ratio of sales (observations) to variables "should be in the range of 10 to 15 observations per independent variable, with a ratio of 4:1 to 6:1 as an absolute minimum."

Q. How many variables were in the Kielisch regression model and what does that say about how many sales he should have analyzed?

A. Kielisch began with 21 independent variables in his model. At a minimum he should have had 84 sales, but preferably he should have had 210 to 315 sales to have a statistically reliable model.

Q. You stated that one of the sales used by Kielisch in his model was an outlier. What is an outlier?

A. An outlier is defined in *The Dictionary of Real Estate Appraisal* as "an observation with an extreme value (outside the typical range)."

Q. What made the one sale an outlier?

A. It was more than five times larger than the next largest property on the transmission line and sold at a price more than 40% lower than the other six sales on a transmission line in the Kielisch central Illinois study.

Q. Why did it sell for such a low price?

A. It was adjacent to a major electrical power generating plant, the Dominion Kincaid Generation Station, a coal fired power plant with a significant coal ash impoundment lagoon that is also adjacent to the outlier property.

Q. Did the Kielisch study even mention the fact that the outlier property was adjacent to a coal fired generating plant?

A. No.

Q. Did Kielisch make any adjustments to the sale price of that outlier to account for its location next to a coal fired power station?

A. No.

Q. What conclusion did Kielisch reach in his model when he included the inappropriate outlier?

A. The incorrect modeling resulted in a conclusion that the impact on value from the transmission line significantly exceeded the value of the transmission line corridor easement area. Mr. Kielisch claimed it was equal to 2.47 times the value of the area of a farm devoted to a transmission line easement.

Q. Can that Kielisch conclusion be translated into a percentage impact on value?

A. Yes, although it will vary depending upon the acreage devoted to the easement compared to the size of the entire farm parcel crossed by the transmission line. When his 2.47 number is applied to the seven transmission line sales in his central Illinois study, the indicated impacts on value are between -3.29% and -22.53% with an average impact of -14.07% and a median impact of -14.62%.

Q. Did you reproduce and test the Kielisch regression model with and without that outlier to determine its effect on the outcome of his model?

A. Yes.

Q. What happened when you tested the Kielisch model?

A. When we tested the Kielisch regression model by excludng the outlier and running it as a linear regression model, the impact on value from the transmission line was less than the value of the transmission line area, or 0.91 times the value of the area of the farm devoted to the transmission line easement.

Q. Does that mean that the corrected model indicates that a transmission line had no impact on value outside the area of the farm parcel devoted to the easement itself?

A. That is correct.

Q. Can your conclusion be translated into a percentage impact on value?

A. Yes. Again, the result depends upon the amount of acreage devoted to the easement compared to the size of the entire farm parcel crossed by the transmission line. Applying the correct 0.91 number to the seven transmission line sales in his central Illinois study, the indicated impacts on value are between -1.21% and -8.3% with an average impact of -5.23% and a median impact of -5.39%.

Q. Did you review the Kielisch Impact Study No. 4 in Marathon County, Wisconsin?

A. Yes.

Q. What did Kielisch conclude from that study?

A. Kielisch concluded that the negative impacts from transmission lines ranged from -15% to -34% depending on the manner in which power line traversed the property.

Q. What were the problems and errors in the Kielisch Impact Study No. 4?

A. Kielisch claimed that his Marathon County study was based on an analysis of all sales of farmland comparable in size and use to the sales he found of farmland traversed by transmission lines in the townships he studied. That is simply not true. We found seven additional farmland sales not considered by Kielisch but located in the same townships and not considered by Kielisch even though comparable in size and use to the other sales.

Q. Did you rerun the Kielisch paired sales analysis after including those seven additional sales?

A. Yes.

Q. Did the inclusion of the seven additional sales change the results of the analysis?

A. Yes. Significantly. When the seven additional sales ignored by Kielisch are included, the corrected analysis shows no impact on farmland prices from the presence of a transmission line.

Q. Was it appropriate for Kielisch to include only some of the sales and disregard the others?

A. No. That is an example of "cherry picking" sales, also technically called "data mining", designed to prove a pre-existing conclusion. It is evidence of appraiser "bias," which is prohibited by the *Uniform Standards of Professional Appraisal Practice* ("USPAP") that must be followed by all licensed real estate appraisers.

Q. Were all the sales used in Kielisch Impact Study No. 5 and No. 6 located in the same county?

A. Yes. They are all located in Tuscola County, Michigan.

Q. Why is it significant that all of the sales in those two impact studies were located in the same county?

A. It is significant because he could have combined the sales into a single matched pairs impact study for that county.

Q. Is his method separating the sales data in Tuscola County, Michigan, into two studies consistent with his method in his other impact studies?

A. No. In his central Illinois analysis (Impact Study No. 1) he did a single study involving farmland sales in four different counties. His Marathon County, Wisconsin study, involved a single study of sales he collected in a number of different townships in the same county. And, as explained later, his St. Clair County, Michigan study involved sales widely scattered in a number of townships in a single county.

Q. What claim did Kielisch make about the impacts shown by his two Tuscola County, Michigan impact studies?

A. Kielisch claims his Impact Study No. 5 demonstrates a negative -16% to -18% impact on the value of a 78.05-acre farm property and claims his Impact Study No. 6 demonstrates a transmission line negative impact on value of -20%.

Q. What is the result if all of his Tuscola County sales are combined into a single study?

A. When all of the sales in Tuscola County are considered in a single matched pairs analysis consistent with the method he used in his other studies, they demonstrate a much lower

impact on farmland prices due to the presence of transmission lines than when the sales are broken into two separate studies.

Q. Are there other problems with each of the two Kielisch Tuscola County impact studies when considered as separate studies?

A. Yes.

Q. What are those other problems?

A. Documents produced by Mr. Kielisch related to his Impact Study No. 6 demonstrate that his rebuttal testimony misrepresents the analysis he actually undertook, misrepresents opinions of a lawyer involved in the sales transactions involved in that study, fails to make a necessary upward adjustment for access to one of the two transmission line sales, and makes an inaccurate downward adjustment to one sale price. He also makes unsupported and inaccurate adjustments to sales in his Impact Study No. 5.

Q. How did Kielisch misrepresent his actual analysis in Impact Study No. 6?

A. In his testimony, Kielisch claims he compared two transmission line sale prices to two sales that occurred on the same day by the same seller but not located on the transmission line. However, the "Matched Pairs Analysis" table in his document production uses only one of the two transmission line sales – the lower priced sale – in his analysis. If the higher priced sale had also been included, the Kielisch conclusion of a negative -20% impact is not supported.

Q. How did Kielisch misrepresent opinions of the lawyer involved in the Impact Study No. 6 sales?

A. In the "Comments" to the "Matched Pairs Analysis" table produced by Kielisch, he claims he contacted the attorney for the seller of the farm properties who told him that presence

of the transmission line on two of the properties "did negatively influence the value of the land." One of my colleagues at Clarion called the attorney on February 15, 2017, to confirm the Kielisch claim. When asked whether the presence of the transmission line adversely impacted the prices paid, the attorney responded "No, not at all." When asked if he recollected ever making representations in the past that the presence of the transmission lines negatively impacted the prices paid, the attorney responded "Absolutely not." That directly contradicts the Kielisch claim about the opinion of the same attorney.

Q. What upward adjustment did Kielisch fail to make to one of the transmission line sales used in Impact Study No. 6?

A. The lawyer for the seller told my colleague that the transmission line parcel used by Kielisch in his analysis was landlocked and lacked road access and that lowered the price paid by the buyer. We located the parcel on the township maps and confirmed its lack of access. Landlocked farm parcels without access typically sell for a lower price per acre. Kielisch does not mention the lack of access and does not make any upward adjustment to it to account for lack of access.

Q. What was the inaccurate downward adjustment Kielisch made to one of the other sales transactions?

A. One of the two farm parcels without a transmission line had a house and barn on it. Kielisch deducts $25,500 from that sale price in order to compare its price to the price paid for the transmission line parcel that was vacant farmland. Kielisch provides no support for that deduction. Our review of photos of the house and barn and review of recent sale prices for farm houses on rural roads in St. Clair County indicates the house and barn had a higher

value. Kielisch should have made a larger downward adjustment to account for the contribution of the house and barn to value.

Q. When the Kielisch Impact Study No. 6 is corrected for its various errors and misrepresentations, does it support his conclusion of a negative -20% impact on value of the farmland crossed by a transmission line?

A. No. It indicates only a negative -8.37% impact – not -20% as claimed by Kielisch.

Q. What did Kielisch do in his Impact Study No. 5?

A. He compared the price paid in 12 sales of farmland sales unencumbered by a transmission line easement to the price paid in one transmission line property sale.

Q. Are all of the sales located in the same townships?

A. No. They are located in six different townships in Tuscola County.

Q. What are the unsupported adjustments to the sales used by Kielisch in his Impact Study No. 5?

A. Kielisch makes an upward adjustment for location to seven of the 12 unencumbered sales.

Q. How large are the upward location adjustments to the seven sales not on a transmission line?

A. The upward adjustments range between +10% and +17%.

Q. Does he provide any explanation or support for those upward adjustments?

A. No. They simply appear in a table in his production and there is no explanation of the basis or support for those adjustments in either his Rebuttal Testimony or in his production.

Q. Have you tried to analyze those sales to understand the possible basis for his adjustments?

A. Yes.

Q. What analysis did you do and what did it show?

A. We mapped the 12 sales and then plotted their distance from the location of the one transmission line sale property. Kielisch made no upward adjustment to the three sales located closest to the transmission line sale property and made the highest upward adjustment for location (+17%) for the two sales located farthest (about 12 miles) from the power line sale location and a +16% upward adjustment for three sales located about 7.1 to 7.5 miles from the power line location.

Q. So does distance from the location of the one transmission line farmland sale explain his upward adjustments?

A. No, not entirely. He makes no upward adjustment for another sale located 10 miles from the power line sale and makes an upward adjustment of only 10% to two sales located farther (7.75 to 8.5 miles) from the transmission line sale than the three sales he adjusted upward by 16% (7.1 to 7.5 miles distant).

Q. What happens if his unsupported upward adjustments for location to sales in the same county are eliminated from his Impact Study No. 5 matched pairs analysis?

A. The average negative impact from the presence of a transmission line drops to only -6.95% from the Kielisch claim of negative -16% to -20%.

Q. Did Kielisch make any upward – or downward -- location adjustments to sales in different townships in the same county in his Marathon County, Wisconsin study?

A. No.

Q. Did Kielisch make any upward or downward location adjustments to the sales he used in his Impact Study No. 7 in St. Clair County, Michigan

A. He makes upward adjustments of between 16% and 43% to sales in seven townships (Berlin, Emmet, Grant, Greenwood, Mussey, Riley and Brockway) and no upward or downward adjustments to sales in three other townships (Columbus, St. Clair, Casco, and China) in St. Clair County.

Q. Does Kielisch provide any support for his upward adjustments to some sales in St. Clair County, Michigan?

A. No.

Q. What did Kielisch do in his Impact Study No. 7?

A. He compared prices paid in six transmission line sales in St. Clair County, Michigan, to 12 unencumbered sales prices paid in the same county.

Q. What did Kielisch conclude from his Impact Study No. 7 in St. Clair County?

A. He claims it shows that transmission lines have a negative impact on prices between -11% and -24% depending upon the manner in which the lines cross a property. He also claimed the average negative impact was -16%.

Q. What are the problems and errors in the the Kielisch Impact Study No. 7 in St. Clair County, Michigan?

A. In addition to making unsupported upward adjustments to some of the sales but not others, he also uses only a small set of sales in his analysis. We found other sales not considered by Kiliesch which, when added into to the analysis, change the result. There were also errors in his descriptions of the physical characteristics of some of the sales he considered, errors in his adjustments to the sales to account for differences in their dates of sale, and inconsistency in some of his adjustments that cannot be explained by the information he has provided about his sales in his document production.

Q. When you corrected the Kielisch Impact Study No. 7 analysis by adding the additional sales, what does it allow you to do and what is the result?

A. Adding the additional sales allows us to compare transmission line prices in three townships to unencumbered sales in the same township. That eliminates the need to make any upward adjustments for differences in location between townships. In two of the three townships, the corrected analysis indicates no negative impact on prices, and in the third township it indicates a potential negative impact of -10.3%. When we consider the average impact in the comparison between the five transmission line sales we compared to 15 unencumbered sales, the average impact is negative -4.5%.

Q. Did you make all of the same adjustments that Kielisch made in your corrected analysis?

A. No. Since there were errors in his descriptions of some of the physical characteristics of his sales, and inconsistencies in some of his adjustments, we cannot replicate or even understand the basis for many of his adjustments. We were able, however, to correct the errors in his adjustments for differences in the dates of sale, and as a result could compare time adjusted prices.

Q. What is an example of an error in his description of the physical characteristics of a sale?

A. For example, two of his "HVTL encumbered" sales are located in China Township. He states in his adjustment table that each property had the same soil type, crop productivity index rating, and same percentage of woodlands (0%) and wetlands (0%). As a result, Kielisch adjusted each of them upward by the same amount (6%). In fact, however, the

detailed description sheet for one of the two sales states that 30% of the site was covered by woods while the other had no wooded acreage.

Q. So in summary, what is your conclusion concerning the Kielisch impact studies that you reviewed?

A. I concluded that the Kielisch impact studies contain significant errors and misrepresentations. When those errors and misrepresentations are corrected, they do not support the Kielisch conclusions of negative impacts between -11% and -34% depending upon the manner in which the transmission lines cross a property.

Q. When the errors and misrepresentations are corrected, what conclusions do the Kielisch studies support?

A. They support a conclusion that the negative impact, if any, is generally between 0% and no more than a negative -8.4%.

Q. Are the results of the corrected Kielisch studies generally in line with what you have found in your own investigations of transmission line impacts and the impacts in the published real estate appraisal literature?

A. When the errors and misrepresentations are corrected, the corrected results are generally in line with the range of impacts we have found elsewhere and those found by other researchers as summarized in the published literature.

Q. Do the corrected Kielisch impact studies support a conclusion that the impact of a transmission line on the market value of a farm property through which it crosses will significantly exceed 100% of the value of acreage of the easement corridor alone?

A. No. When the Kielisch analysis is corrected, it indicates that the impacts, if any, will be less than the market value of the acreage on which the corridor will be located.

VII. REVIEW AND ANALYSIS OF OTHER TESTIMONY

Q. Did you review any other testimony?

A. Yes. I reviewed the testimony of Intervenors' Property Witness Charles (and Robyn) Henke dated January 24, 2017.

Q. What was their testimony?

A. They made representations related to a tract of land traversed by a transmission line. They stated that the tracts sold at a significant discount when compared to two other tracts sold on the same day in the same land auctin.

Q. Based on the information presented by the Henkes, is it possible to determine if the differences in price paid per acre were attributable to the presence of the power line?

A. No. It is not.

Q. Why is that?

A. There may be other factors such as differences in soil/crop productivity, improvements, configuration and access, or percentage of tillable land vs. non-tillable land and drainageways that may also explain the difference in price.

VIII. CONCLUSION

Q. Are you aware that Grain Belt Express is proposing to pay not only 110% of the market value of each acre of farmland to be acquired for the transmission line corridor, but also structure payments and payments for any agricultural-related impact resulting from the construction, maintenance, or operation of the Project?

A. Yes.

Q. Based on your experience and research as a licensed real estate appraiser in Missouri and many other states where you have studied transmission line impacts, is it your professional opinion that these combined payments adequately compensates the farm property owners for the effect of the transmission line on the value of their property?

A. Yes, it will.

Q. Does this complete your prepared rebuttal testimony

A. Yes.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

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

AFFIDAVIT OF RICHARD J. RODDEWIG

STATE OF Illinois)
) **ss**
COUNTY OF Cook)

Richard J. Roddewig, being first duly sworn on his oath, states:

1. My name is Richard J. Roddewig. I am President of Clarion Associates, Inc.

2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony on behalf of Grain Belt Express Clean Line LLC consisting of 34 pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Richard J. Roddewig

Subscribed and sworn before me this 21st day of February, 2017.

Notary Public

My commission expires: 12/10/2017

DOUGLAS G. KOSKE
OFFICIAL SEAL
Notary Public - State of Illinois
My Commission Expires
December 10, 2017