

2013.05.03 16:17:29  
Kansas Corporation Commission  
/S/ Patrice Petersen-Klein



**MAY 03 2013**

by  
State Corporation Commission  
of Kansas

**DIRECT TESTIMONY**

**OF**

**KRISTINE M. SCHMIDT**

**ON BEHALF OF**

**ITC GREAT PLAINS, LLC**

**AND**

**MID-KANSAS ELECTRIC COMPANY, LLC**

**13-ITCE-677-MIS**

**MAY 3, 2013**

1 I. INTRODUCTION

2 Q. Please state your name and business address.

3 A. My name is Kristine M. Schmidt. My business address is 3500 SW Fairlawn Road,  
4 Suite 101, Topeka, Kansas, 66614.

5 Q. By whom and in what capacity are you employed?

6 A. I am President of ITC Great Plains, LLC (“ITC Great Plains”), a wholly-owned  
7 subsidiary of ITC Grid Development, LLC, which, in turn, is a wholly-owned  
8 subsidiary of ITC Holdings Corp. (“ITC”).

9 Q. How long have you held that position?

10 A. I have served as President since September 2012.

11 Q. Please describe your educational background and previous work experience.

12 A. I have approximately 30 years of experience in the energy industry, with expertise  
13 in transmission and energy policies and strategic planning. Prior to joining ITC  
14 Great Plains, I co-founded and managed ESPY Energy Solutions, LLC, a Virginia-  
15 based energy consulting firm formed in 2009. In that role, I worked closely with  
16 energy clients to identify emerging opportunities and develop unique corporate and  
17 business development strategies. Prior to my role at ESPY, I served as director,  
18 transmission business development at Xcel Energy where I developed business  
19 plans to support new transmission expansion projects. I also previously served as  
20 technical advisor to former FERC Commissioner Nora Mead Brownell.

21 I hold a Master of Public Policy from Georgetown University, a Master of  
22 Business Administration from University of Minnesota and a Bachelor of Arts from  
23 University of Wisconsin.

1 **Q. Have you provided testimony in prior regulatory proceedings?**

2 A. Yes, I have. I testified before the Federal Energy Regulatory Commission for Xcel  
3 Energy Northern States Power Company's transmission formula rate case in Docket  
4 No. ER07-1415-000.

5 **Q. What is the purpose of your direct testimony?**

6 A. The purpose of my testimony is to provide an overview of the Elm Creek-Summit  
7 Transmission Line siting project.

8 **Q. On whose behalf are you testifying?**

9 A. I am testifying on behalf of ITC Great Plains and Mid-Kansas Electric Company,  
10 LLC ("Mid-Kansas") (collectively, the "Companies"). Because Mid-Kansas will  
11 co-own the line with ITC Great Plains, the Commission determined in its *Order*  
12 *Approving Application for a Limited Certificate of Public Convenience and*  
13 *Authority* ("Order"), Docket No. 13-ITCE-271-COC (Feb. 27, 2013), that ITC  
14 Great Plains and Mid-Kansas should jointly file an application for a line siting  
15 permit for their portion of the Elm Creek-Summit Line. See Order at ¶ 9.

16 **II. OVERVIEW OF FILING**

17 **Q. What is the purpose of this filing?**

18 A. The purpose of this filing is for the Companies to obtain siting authority to build  
19 their segment of the Elm Creek-Summit Line, described more fully below.

20 This filing explains the need for the Elm Creek-Summit Line and details the  
21 extensive process that was used to select a proposed route for the line. This filing  
22 also includes testimony and exhibits that: (1) describe the proposed route for the  
23 line, (2) list all affected land owners whose land would be crossed by the proposed

1 route or whose land lies within 1,000 feet of the center line of the proposed route,  
2 (3) summarize the environmental characteristics of the area studied for siting the  
3 line, and (4) explain the benefits of the proposed line to Kansas electric customers,  
4 electric customers in the region and economic development within Kansas.

### 5 III. DESCRIPTION AND BACKGROUND OF THE PROJECT

6 **Q. Please describe the Elm Creek-Summit Line.**

7 The Elm Creek-Summit Line is an extra high voltage single-circuit 345 kilo-Volt  
8 (“kV”) transmission line designed to address reliability issues related to the north-  
9 central Kansas area for the loss of the Elm Creek-Northwest Manhattan 230 kV line  
10 (including potential voltage collapse). This project will also support future  
11 Southwest Power Pool, Inc. (“SPP”) energy markets, provide for wide-ranging  
12 dispatch savings, lower reliability margins, improve dynamic performance and grid  
13 stability during extreme events and provide additional societal economic benefits.  
14 Further, construction of the Elm Creek-Summit Line will provide for more efficient  
15 use of existing generation resources and reduce line losses.

16 The Elm Creek-Summit Line runs from ITC Great Plains’ existing Elm  
17 Creek Substation near Concordia, Kansas, south to an interconnection point with  
18 Westar Energy, Inc. (“Westar”), and will continue south to Westar’s existing  
19 Summit Substation near Salina, Kansas. The total project is approximately 58 miles  
20 in length, with the Companies’ portion approximately 30 miles. A map of the route  
21 proposed for the Companies’ segment of the line is attached as **Exhibit 1** to my  
22 testimony.

23 **Q. How was the need for the Elm Creek-Summit Transmission Line Identified?**

1 A. On January 31, 2012, the SPP Board of Directors approved the Elm Creek-Summit  
2 Line to be constructed as part of the 2012 Integrated Transmission Planning 10-  
3 Year (“ITP10”) Assessment. The ITP10 Assessment integrates the 20-year  
4 assessment (primarily assessing the 230 kV and above facilities within SPP) with  
5 the 100 kV and above facilities within SPP to incorporate such needs as: (a)  
6 resolving planning criteria violations; (b) mitigating known or foreseen congestion;  
7 (c) improving access to markets; (d) staging of transmission expansion; and (e)  
8 improving interconnections.<sup>1</sup> The primary need driver for the Elm Creek-Summit  
9 project is resolving planning criteria violations in order to maintain system  
10 reliability under certain contingency scenarios. Alan Myers will describe this  
11 further in his testimony.

12 **Q. Has SPP issued Notifications to Construct for the Elm Creek-Summit Line?**

13 A. Yes. On April 9, 2012, SPP issued its Notification to Construct with Conditions  
14 (“NTC-C”), SPP-NTC-200187, to ITC Great Plains pursuant to Section 3.3 of its  
15 Member Agreement and Attachment O, Section VI, of its Open Access  
16 Transmission Tariff (“OATT”), directing ITC Great Plains to build a new 345 kV  
17 transmission line and associated station work from ITC Great Plains’ Elm Creek  
18 Substation to Westar’s Summit Substation. Also on April 9, 2012, SPP issued an  
19 NTC-C, SPP-NTC-200182, to Westar. Westar was also directed to build a portion  
20 of the Elm Creek-Summit Line. ITC Great Plains and Westar submitted an updated  
21 project cost estimate to SPP in February 2013. On March 7, 2013, SPP issued a  
22 Letter of CPE Acceptance to both ITCGP and Westar, accepting the revised project  
23 cost estimate thereby removing the conditions to the NTCs.

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<sup>1</sup> “2011 ITP10 Scope” (app’d ESWP, Nov. 15, 2012; app’d TWG, Dec. 12, 2010), at 5.

1 Pursuant to the NTC-Cs, both ITC Great Plains and Westar were to decide  
2 who shall build how much of this line and inform SPP of the same. As a result of  
3 the Routing Study provided as Exhibit 1 to the Direct Testimony of Salvatore  
4 Falcone, ITC Great Plains and Westar have reached an agreement concerning which  
5 part of the project will be constructed by each company, described more fully in the  
6 Direct Testimony of Salvatore Falcone.

7 **Q. Has SPP provided cost allocation for the Elm Creek-Summit Line under the**  
8 **SPP Open Access Transmission Tariff (“OATT”)?**

9 A. Yes. The cost of the facilities associated with the Elm Creek-Summit Line will be  
10 allocated pursuant to SPP’s Highway-Byway cost allocation method. Alan Myers  
11 and Noman Williams will each provide a more detailed description of the facilities’  
12 cost allocation in their testimony.

13 **Q. Describe Mid-Kansas’ interest in the project.**

14 A. On December 17, 2008, ITC Great Plains filed an application to amend its  
15 Certificate for the limited purpose of owning, operating and maintaining two  
16 electrical transmission substations, the Flat Ridge Interconnection Substation and  
17 the Elm Creek Substation, which it acquired from Mid-Kansas pursuant to Asset  
18 Purchase Agreements. See In the Matter of the Application of ITC Great Plains,  
19 LLC for a Limited Certificate of Public Convenience and Authority to Transact the  
20 Business of an Electric Public Utility in the State of Kansas, Docket No. 09-ITCE-  
21 508-COC. On July 31, 2009, the Commission issued its *Order Approving*  
22 *Application for a Limited Certificate of Public Convenience and Authority.*

1 Per the settlement agreement reached in Docket No. 08-ITCE-936-COC and  
2 by contract,<sup>2</sup> ITC Great Plains agreed that if it received an SPP NTC for any facility  
3 interconnecting to either the Flat Ridge or Elm Creek substations, it would give  
4 Mid-Kansas the option to construct such interconnecting facility. See, e.g., ¶ 13 of  
5 Stipulation and Agreement, Docket No. 08-ITCE-936-COC (Jun. 1, 2009).

6 Pursuant to the CDA and the Stipulation and Agreement in Docket No. 08-  
7 ITCE-936-COC, ITC Great Plains gave Mid-Kansas notice of the SPP NTC-C on  
8 April 13, 2012. Mid-Kansas elected joint ownership in lieu of exercising its option  
9 to construct the facilities. Noman Williams will discuss the joint ownership  
10 construct.

11 **Q. When do you anticipate that the Elm Creek-Summit Line will be completed?**

12 A. The current SPP NTC-Cs issued on April 9, 2012 require that the Elm Creek-  
13 Summit Line will be completed no later than March 1, 2018. The Companies are  
14 currently targeting to place the project in-service in 2016.

15 **Q. Is the Elm Creek-Summit Line in the public interest?**

16 A. Yes. As stated in Mr. Myers' testimony, the primary purpose of the Elm Creek-  
17 Summit Line is to address reliability issues related to the north-central Kansas area  
18 for the loss of the Elm Creek-Northwest Manhattan 230 kV line (including potential  
19 voltage collapse). Without this project, customers will be subject to a reduction in  
20 system reliability after the project need date affecting the availability and quality of  
21 the power supply. This project will also further facilitate competition in the future  
22 SPP energy markets, provide for wide-ranging dispatch savings, lower reliability

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<sup>2</sup> The business arrangements between Mid-Kansas and ITC Great Plains detailing the option and procedures for exercise and for certain other matters are set forth in a Co-Development Agreement ("CDA") that was previously furnished to the Commission.

1 margins, improve dynamic performance and grid stability during extreme events  
2 and provide additional societal economic benefits.

3 In primary part, though, the Elm Creek-Summit Line is designed to improve  
4 electric reliability by mitigating the voltage issues described above and in the NTC-  
5 Cs.

6 Furthermore, as I will expound on in my testimony below, an ancillary  
7 benefit of the project, primarily attributed to the construction of the project, is the  
8 expectation the project will create roughly 328 jobs in the state of Kansas and  
9 increase the State's GDP by \$34.7 million.

10 **Q. How much will it cost to construct the Companies' portion of the Elm Creek-**  
11 **Summit Line?**

12 A. The Companies currently estimate the line will cost approximately \$46.8 million.  
13 This is an estimate that is subject to change as we move forward to the final design  
14 of the line. Factors that could materially affect the final cost will be commodity,  
15 equipment and labor cost fluctuations, as well as costs to procure rights-of-way,  
16 among others.

17 **IV. DESCRIPTION OF ITC GREAT PLAINS**

18 **Q. Please explain ITC Great Plains' corporate structure.**

19 A. ITC Great Plains is a wholly owned subsidiary of ITC Grid Development, LLC  
20 ("ITC Grid Development"), a Michigan limited liability company. ITC Grid  
21 Development, in turn, is wholly owned by ITC Holdings Corp. ("ITC Holdings"), a  
22 publicly traded, Michigan-based corporation.

1 ITC Holdings also wholly owns three operating independent transmission  
2 companies. ITC Holdings' subsidiary ITC Midwest, LLC owns high voltage  
3 electric transmission facilities in the states of Iowa, Minnesota, Illinois and  
4 Missouri. In addition, ITC Holdings' subsidiaries ITC*Transmission* and Michigan  
5 Electric Transmission Company, LLC together own the high voltage electric  
6 transmission facilities covering substantially all of Michigan's Lower Peninsula.  
7 ITC Holdings' regulated operating companies currently operate, maintain and  
8 improve approximately 15,000 miles of high voltage transmission lines and have a  
9 total system peak load of approximately 25,000 MW.

10 **Q. Can you provide some background information regarding ITC Great Plains'**  
11 **business plan and vision for transmission expansion in Kansas?**

12 A. Yes. The purpose of ITC Great Plains is to identify relevant transmission needs and  
13 serve as a transmission builder, owner and operator in the state of Kansas and the  
14 surrounding SPP region. This area has been identified by the SPP and the U.S.  
15 Department of Energy as lacking the transmission infrastructure necessary to  
16 support economic interregional transfers of electricity. ITC Great Plains plans to  
17 construct SPP-approved projects in Kansas that increase transmission system  
18 reliability, reduce congestion and provide open, non-discriminatory access to  
19 energy resources and wholesale energy markets. By developing needed  
20 transmission in Kansas' transmission system, ITC Great Plains aims to provide  
21 consumers in Kansas with equal access to competitively priced electricity and to  
22 improve the reliability of the state's transmission system.

23 **Q. Is ITC Great Plains a member of the SPP?**

1 A. Yes. Shortly after it commenced operation, ITC Great Plains became a member of  
2 SPP, and in 2009, ITC Great Plains executed the SPP membership agreement as a  
3 transmission owner.

4 **Q. Does ITC Great Plains maintain an office in Kansas?**

5 A. Yes. ITC Great Plains has maintained an office in Topeka, Kansas, since its  
6 formation in 2006. In 2012, ITC Great Plains opened an office in Dodge City,  
7 Kansas.

8 **V. ENVIRONMENTAL CONSIDERATIONS**

9 **Q. Summarize the environmental conditions that were evaluated and considered**  
10 **for development of the V-Plan route.**

11 A. ITC Great Plains considered numerous environmental concerns while developing  
12 potential routes, including locations of water bodies, intact grassland habitats,  
13 known habitats of threatened or endangered species, other sensitive wildlife species,  
14 important wildlife habitats and protected areas, parks, etc.. This topic is discussed  
15 in more detail in the Routing Study provided as Exhibit 1 to the Direct Testimony  
16 of Salvatore Falcone.

17 **Q. Were environmental agencies and stakeholders consulted during development**  
18 **of the route?**

19 A. Yes. ITC sent letters with study area maps to multiple federal and state agencies,  
20 more fully described in the Direct Testimony of Salvatore Falcone, including the  
21 Kansas Department of Health and Environment, Kansas Department of Wildlife,  
22 Parks and Tourism, Kansas Natural Heritage Inventory, Kansas State Historical  
23 Society, United States Army Corps of Engineers, United States Department of

1 Agriculture's Natural Resources Conservation Service and the United States  
2 Department of the Interior - Fish and Wildlife Service. These letters asked for the  
3 agencies' input and comments on resources (such as threatened or endangered  
4 species) or other items of concern that would arise from the construction of an  
5 electric transmission line within the study area.

6 **Q. Did you receive feedback from the federal and state agencies and other  
7 environmental stakeholders?**

8 A. Yes, we did. For example, the response we received from the Kansas Department  
9 of Health and Environment provided us information on the location of an Atlas  
10 missile site in the study area. We used that information to ensure that all of our  
11 preliminary routes avoided this area.

## 12 VI. ECONOMIC DEVELOPMENT BENEFITS OF THE LINE

13 **Q. Previously you described the need for the Elm Creek-Summit Line, including  
14 the benefits of reliability and grid stability. Are there other benefits of the  
15 line?**

16 A. Yes. In addition to addressing known voltage issues, providing grid stability and  
17 utilizing existing facilities more efficiently to benefit the state and SPP region, this  
18 project will also provide economic development benefits in Kansas.

19 **Q. Please describe the economic benefits for Kansas.**

20 A. Initially, during the construction phase of the Elm Creek-Summit Line, there are  
21 short-term economic benefits for Kansas. The Companies estimate that  
22 construction of the line could result in roughly 328 additional jobs and grow the  
23 state's GDP by an estimated \$34.7 million. These estimates are based on a study

1 conducted by ITC Holdings Corp. which assessed the economic activity that the  
2 Elm Creek-Summit Transmission line is expected to create. This analysis was  
3 produced using the Regional Input-Output Modeling System (“RIMS II”)  
4 developed by the United States Bureau of Economic Analysis (“BEA”). This  
5 model analyzes trade patterns that have been observed in the past to measure the  
6 economic ‘multiplier’ effect of an investment such as the Elm Creek-Summit  
7 project.

8 The multiplier effects are calculated from data collected for the national  
9 input-output program, which measures how much industries buy from and sell to  
10 other industries.<sup>3</sup> This analysis found that roughly \$46.8 million of investment,  
11 primarily attributed to the transmission line portion of the project (e.g. labor and  
12 locally sourced material – concrete for foundations), will have a direct impact on  
13 the state’s economy. Of this amount, at least \$13 million will be spent directly  
14 within the state of Kansas, implying an increase of an estimated \$34.7 million to the  
15 GDP of the State of Kansas, and roughly 328 jobs. These jobs are classified as  
16 “Final Demand Employment,” in the RIMS II model. The Bureau of Economic  
17 Analysis, who estimates the multipliers used in the RIMS II model, defines Final  
18 Demand Employment to contemplate all jobs associated with direct and peripheral  
19 activities resulting from the construction of the project.

20 This analysis is consistent with the analysis performed by Johannes  
21 Pfeifenberger, principal, and Delphine Hou, associate, of The Brattle Group, which  
22 found that every \$1 billion in U.S. transmission investment directly and indirectly

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<sup>3</sup> U.S. Department of Commerce, Bureau of Economic Analysis, Regional Input-Output Modeling System (RIMS II): Estimation, Evaluation, and Application of a Disaggregated Regional Impact Model

1 supports approximately 13,000 full-time-equivalent employee (FTE) years and \$2.4  
2 billion in total economic activity.<sup>4</sup>

3 **Q. Would you please describe the methodology used to calculate the economic**  
4 **development benefits estimates?**

5 A. Yes. A multiplier effect attempts to capture three effects: the direct, indirect and  
6 induced effects.<sup>5</sup> These effects categorize the overall effect that a project will have  
7 on other industries within a region. These effects occur as a result of purchases of  
8 land, labor and capital as well as local consumption spending of individuals in a  
9 particular area.

10 The direct effect is comprised of the initial demand resulting from a new  
11 project, taking into account the immediate effects such as the order for fabricated  
12 construction materials. The indirect effect is the impact on the project's suppliers,  
13 and includes effects such as the purchase of raw materials and labor to meet the  
14 demands of the project. If the increase in expenditures by suppliers results in  
15 industries purchasing more of their inputs locally, the indirect effect will be more  
16 substantial. Since both the project and its suppliers hire an estimated 75% local  
17 workers, both the direct and the indirect effects will provide new income for Kansas  
18 residents. As these workers spend part of their income locally, these expenditures  
19 will generate further economic activity and increased employment, leading to the  
20 'multiplier' effect.

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<sup>4</sup> J.P. Pfeifenberger and D. Hou, "Transmission's True Value; Adding Up the Benefits of Infrastructure Investments," Public Utilities Fortnightly, February 2012.

<sup>5</sup> Total effect = direct effect + indirect effect + induced effect

1           The multiplier varies from one industry to another depending on historical  
2 patterns such as what inputs are purchased locally or imported from outside the  
3 region, what percentage of income is spent rather than saved, and what proportion  
4 of spending is to purchase locally produced goods and services.

5           These impact analyses take into account of the final impacts a project may  
6 have within a particular area estimating amount of increased output, jobs, as well as  
7 income.

8 **Q. Please describe implementation.**

9 A. To analyze the impact of the project within the model framework, we used data on  
10 the planned expenditures of the project, as well as an estimated allocation of funds  
11 taken from a similar project in the past.<sup>6</sup>

12 **Q. Please describe the results and conclusions of ITC's analysis.**

13 A. The project is a 30-mile 345 kV transmission line that will extend from Elm Creek  
14 Station, near Concordia, Kansas, to the Summit Substation, near Salina, Kansas. Of  
15 the roughly \$46.8 million that will be spent on the project, approximately \$13  
16 million will be spent within the state of Kansas, primarily on project labor and  
17 primary input materials. The investment in the project will result in an increase to  
18 the State's total output or Gross State Product (GSP) of at least \$34.7 million.  
19 Furthermore, this investment could result in roughly 328 jobs in the State of  
20 Kansas.

21           This analysis has not attempted to incorporate increases in economic  
22 development that may result from grid expansion. An improvement to

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<sup>6</sup> This allocation of funds, namely the proportional distribution of expenditure by investment type was derived from the 345 kV construction completed for the ITC's share of the KETA project.

1 infrastructure has shown a high correlation with economic growth, and could make  
2 the State of Kansas more attractive to further development such as wind generation  
3 which could yield further economic benefits to the state of Kansas in the long run.  
4 Rather, this report has attempted to derive the overall economic impact during the  
5 construction period. After the construction phase of project has reached  
6 completion, the additional infrastructure will continue its pay-back in the form of  
7 increased system reliability and lower costs of delivered energy due to expanded  
8 generation market access.

9 **Q. Are there other economic development benefits of the Elm Creek-Summit line?**

10 A. Yes. Even though ITC has not attempted to quantify the benefits of transmission  
11 expansion and upgrades in the above-described analysis, it is ITC Great Plains'  
12 position that in the long term, a robust transmission infrastructure supports  
13 economic growth and development in the same way that investments in highways  
14 and other infrastructure do. Business decisions on whether to locate in a particular  
15 region or utility service area and to expand existing operations can be made only  
16 when there is reasonable assurance of access to an adequate supply of electricity at  
17 competitive prices. In fact, according to Pfeifenberger and Hou, "the economic  
18 development aspect of providing a robust transmission grid often can be the most  
19 important reason for the infrastructure investment -- particularly in regions with  
20 significant potential for economic growth, where the lack or delay of supporting  
21 infrastructure would dampen growth."<sup>7</sup>

22 While these economic development benefits are not factored into the SPP  
23 benefit-cost analysis that looks solely at transmission costs and benefits from the

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<sup>7</sup> Id.

1 electricity consumers' perspective, they are important public policy benefits that the  
2 Commission should consider when making its decision to approve transmission line  
3 siting.<sup>8</sup>

#### 4 VII. CONCLUSION

5 **Q. Do you have any concluding comments?**

6 A. Yes. The Commission should grant ITC Great Plains and Mid-Kansas a siting  
7 permit to build their portion of the Elm Creek-Summit Line. ITC Great Plains' and  
8 Mid-Kansas' analysis demonstrates that:

- 9 1. The Elm Creek-Summit Line as a whole is needed to improve electric  
10 system reliability locally and regionally. In addition, this project will lower  
11 costs and support generator deliverability;
- 12 2. The line will provide substantial economic benefits to Kansas customers and  
13 the SPP region, and will support economic development in Kansas;
- 14 3. SPP supports construction of the line; and
- 15 4. The siting process ITC Great Plains used and the route it proposes is  
16 reasonable and appropriate.

17 **Q. Does this conclude your testimony?**

18 A. Yes.

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<sup>8</sup> Id.

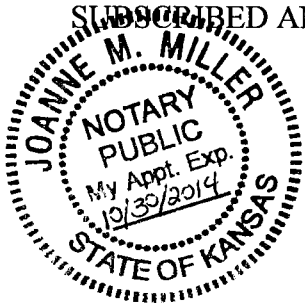
VERIFICATION

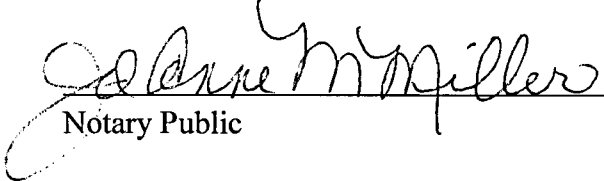
STATE OF KANSAS            )  
  ) ss.  
COUNTY OF SHAWNEE    )

I, Kristine M. Schmidt, of lawful age, being duly sworn upon my oath state that I am the President of ITC Great Plains, LLC, that I have read the above and foregoing Direct Testimony and, upon information and belief, state that the matters therein appearing are true and correct.

  
\_\_\_\_\_  
Kristine M. Schmidt

SUBSCRIBED AND SWORN to before me on this 2 day of May, 2013.



  
\_\_\_\_\_  
Notary Public

My commission expires: 10/30/2014

**KRISTINE M. SCHMIDT DIRECT TESTIMONY**

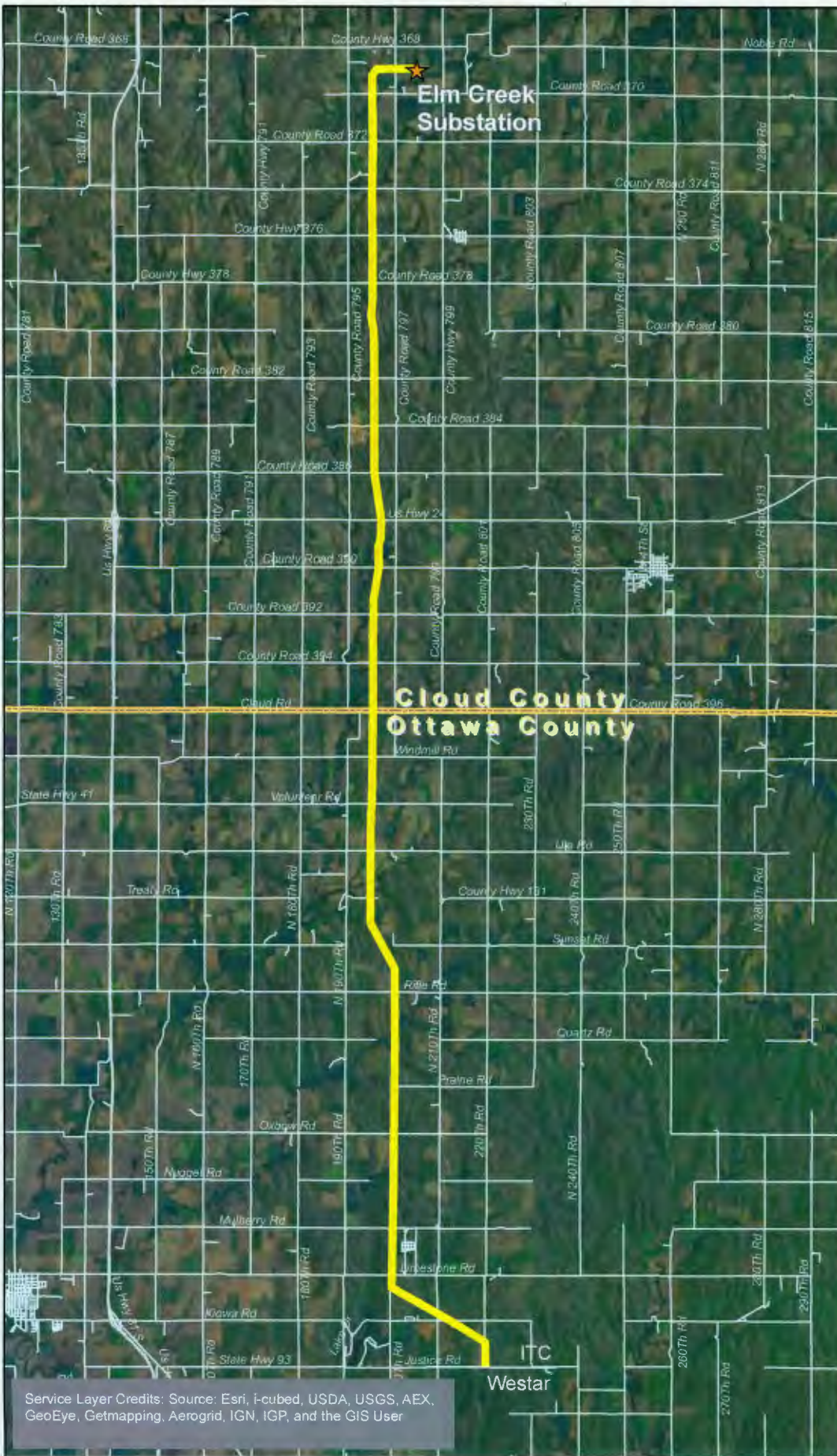
**EXHIBIT 1**

**Elm Creek to Summit  
345kV Transmission Line  
Proposed Route  
ITC Great Plains**

April 26, 2013

**Legend**

- ★ Substation
- Proposed Route
- Local Streets
- County Boundary



Service Layer Credits: Source: Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User

