# BEFORE THE KANSAS CORPORATION COMMISSION OF THE STATE OF KANSAS

In the Matter of the Application of Kansas Power Pool ) for a Certificate of Convenience and Authority to ) Transact the Business of an Electric Public Utility in ) the State of Kansas for Transmission Rights Only in ) Cross Service Territory of Southern Pioneer Electric ) Company and Ninnescah Rural Electric Company. )

Docket No. 18-KPPE-343-COC

# PREFILED DIRECT TESTIMONY OF

# BRIAN D. BEECHER, P.E. MANAGER – ENGINEERING & OPERATIONS SOUTHERN PIONEER ELECTRIC COMPANY

#### ON BEHALF OF

## SOUTHERN PIONEER ELECTRIC COMPANY

# JULY 9, 2018

1

# I. INTRODUCTION AND BACKGROUND

### 2 Q. Please state your name and business address.

A. My name is Brian D. Beecher. My business address for legal service is 1850 W.
Oklahoma, Ulysses Kansas 67880 and for mail receipt, PO Box 430, Ulysses Kansas
67880-0430.

## 6 Q. What is your profession?

A. I am the Manager of Engineering & Operations for Southern Pioneer Electric Company
("Southern Pioneer").

# 9 Q. Please describe your responsibilities with Southern Pioneer.

A. As the Manager of Engineering and Operations, I oversee the day-to-day operation of the
 Medicine Lodge service area. I supervise the customer service office as well as manage
 the line operations group. I budget, plan, complete basic engineering functions, and
 oversee construction and maintenance in the area as well as the daily operations. I am
 ultimately responsible for the safety of our employees.

# 15 Q. What is your educational background?

A. I received a bachelor of Science degree in Electrical Engineering from Kansas State
 University in 1990. I am a registered professional engineer (P.E.) in the state of Colorado,

18 PE #30205, and also in the State of Kansas, PE #19223.

# 19 Q. What is your professional background?

A. From 1990-1992 I was employed with Westinghouse/ABB where I spent two years
 working on electric Power Transformer design. Next, I worked with Black & Veatch for
 five years where I provided consulting and design services that included the design
 assignments in various substations and systems in power plants (See <u>Exhibit BDB-1</u>

1		attached hereto that describes my work experience). In 1997, I started work for Aquila,
2		Inc. as a field engineer in Southwest Kansas where I worked completing planning studies,
3		budgeting, and protective relaying coordination studies. I also worked hand in hand with
4		the line personnel to ensure switching, safety, and other assigned tasks were completed in
5		an appropriate manner. In 2005, I was promoted to Operations Manager over the Harper
6		and Medicine Lodge districts. In 2007, the Aquila electric system was purchased by Mid-
7		Kansas group of Electric Cooperatives and I was made the Engineering and Operations
8		Manager for Southern Pioneer.
9	Q.	Have you previously prepared or presented testimony before the Commission?
10	A.	No, I have not.
11	Q.	What is the purpose of your testimony in this proceeding?
12	A.	The purpose of my testimony is to provide an overview of Kansas Power Pool's ("KPP")
13		proposed project, referred to as the "Kingman Direct Connection," as compared to the
14		upgrades to the existing Southern Pioneer 115/34.5 kV SemCrude Substation, referred to
15		as the "SemCrude Substation Upgrade," that make the KPP project unnecessary and
16		duplicative. I will also discuss the managerial and technical capabilities of Southern
17		Pioneer as relates to the operation of its system, including the proposed SemCrude
18		Substation Upgrade to provide full service to the City of Kingman. Finally, I will offer
19		comment with regard to KPP's managerial and technical capabilities to operate its
20		proposed Kingman Direct Connection.
21		II. OVERVIEW OF THE PROJECTS

Q. Please provide a brief overview of KPP's proposed Kingman Direct Connection
project.

A. My understanding of the project is that KPP will build a new 115/34.5 kV substation one
 mile to the west of Southern Pioneer's existing 115/34.5 kV SemCrude Substation, then
 construct a radial 34.5 kV line to a point where it would interconnect with the City of
 Kingman's existing 34.5 kV line.

5 6

# Q. From a planning and operations perspective, why is KPP's Kingman Direct Connection project unnecessary and duplicative?

7 A. From a broad perspective, the SemCrude Substation already exists and has a tap on the Ninnescah 115 kV Transmission Line ("Ninnescah Transmission Line"). This existing 8 115 kV tap is capable of carrying all the load of the City of Kingman and Southern 9 10 Pioneer. Therefore, any equipment, substation bus, switches, and tap structures on the 115 kV side of the Kingman Direct Connection substation will duplicate the capability of the 11 current SemCrude Substation 115 kV tap. Further, the footprint/land required for the 12 Kingman Direct Connection substation is duplicative of the existing SemCrude 13 Substation, as are ground grid, fencing, access road, and site preparation work. 14 15 Additionally, the SemCrude Substation's control house already has space for the new panels that will be required by a new 34.5 kV breaker bay for the SemCrude Upgrade, 16 17 which means the entire Kingman Direct Connection control building is duplicative. Even 18 the Kingman Direct Connection's concrete pads in the 34.5 kV bays are duplicative because the SemCrude Substation oil containment and transformer pad are already capable 19 of handling a larger footprint transformer. In other words, the footprint for the SemCrude 20 Substation will not change with the Southern Pioneer SemCrude Substation Upgrade, but 21 an entirely new and additional footprint will be necessary for the KPP Kingman Direct 22 23 Connection substation.

KPP's proposed substation is duplicative from an operations perspective also. 1 2 Southern Pioneer/Pioneer has a mobile substation large enough to cover load in the event of a transformer or bus failure, reducing the risks involved with a single point failure. 3 4 Southern has qualified personnel, including as a substation technician in Medicine Lodge who can program relays, troubleshoot equipment malfunctions, and oversee testing. We 5 have personnel who have been trained and who have operated the 34.5 kV system for 6 7 many years. Under the KPP Kingman Direct Connection project, KPP will have to hire or contract with personnel who can perform these same activities on the proposed Kingman 8 9 Direct Connection substation.

# 10 Q. How do the capital costs of the Southern Pioneer and KPP projects compare?

A. Because KPP will have to build an entirely new substation and construct approximately 11 1.5 miles more of 34.5 kV line than will Southern Pioneer, KPP's Kingman Direct 12 Connection project is substantially more costly than Southern Pioneer's SemCrude 13 Substation Upgrade project. I have requested and received an updated capital cost 14 15 estimate for the SemCrude Substation Upgrade project from our engineering firm, Atwell (previously Peak Power), as well as received cost inputs for Remote Terminal Unit 16 17 ("RTU"), relaying and metering from Sunflower Electric Power Corporation engineering 18 group, and inputs from Southern Pioneer's staking department. A copy of Atwell's substation cost estimate for the substation upgrades is attached hereto as **Exhibit-BDB 2**. 19 Our updated total cost estimate concludes that the SemCrude Substation Upgrade project 20 can be built for approximately \$1,776,046. 21

KPP indicates in the Direct Testimony of Larry Holloway that the KPP can build the
 Kingman Direct Connect for approximately \$3,021,016. However, Southern Pioneer

1	believes that KPP has not included all necessary items in his estimate. Therefore, Southe
2	Pioneer engaged Power Systems Engineering (PSE) to conduct an independent co
3	review of both projects to validate these respective cost estimates. This independent co
4	estimate is presented in the Direct Testimony of Erik Sonju, P.E. – President of PSE.
5	Q. What was the result of PSE's independent EPC estimate of the SemCrude Substation
6	Upgrade project?
7	A. In summary, PSE has confirmed the accuracy of Southern Pioneer's cost estimate for the
8	SemCrude Upgrade Project, as Mr. Sonju's independent estimate came in at \$1,754,84
9	This estimate is fully discussed in Mr. Sonju's Direct Testimony.
10	Q. What was the result of PSE's independent EPC estimate for KPP's Kingman Dire
11	Connect Project?
12	A. In summary, Mr. Sonju's independent cost estimate for KPP's project came in
13	\$4,079,814, which is over \$2M more than the proposed SemCrude Substation Upgrad
14	project, and \$1M more than KPP's own estimate for its project. Again, this independe
15	estimate is fully discussed in Mr. Sonju's Direct Testimony.
16	Q. How does Southern Pioneer propose to allocate the costs to construct the SemCruc
17	Substation Upgrade project among Southern Pioneer and KPP?
18	A. Southern Pioneer is under an obligation in the Settlement Agreement signed by Southe
19	Pioneer, Mid-Kansas, Commission Staff and all wholesale 34.5 kV customers (includin
20	KPP) in Docket No. 11-GIME-597-GIE (11-597 Docket) to allocate the costs of the
21	SemCrude Substation Upgrade project pursuant to "Or" pricing policy. Under this co
22	allocation policy, KPP is allocated the costs of those facilities only directly benefiting
23	KPP, and is also assigned any costs for network facilities of the project that is n

# supported by local access delivery service revenue anticipated to be received from service to the Kingman load over a ten-year period of time.

Exhibit BDB-3, attached hereto, details the total costs for the SemCrude Substation Upgrade project as estimated by Southern Pioneer, and includes the allocation of these total respective costs for the project between KPP and Southern Pioneer pursuant to the "Or" pricing methodology required by the 11-597 Docket Settlement Agreement. Application of this cost allocation methodology results in KPP being assigned \$1,357, 248 and Southern Pioneer \$418,797.

Additionally, Exhibit BDB-3 also shows the total independent cost estimate of the
project conducted by PSE, and application of the same "Or" pricing cost allocation
methodology utilizing PSE's independent cost estimate. It results in KPP being assigned
\$1,366,042 and Southern Pioneer \$388,797.

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# III. MANAGERIAL AND TECHINCAL CAPABILITIES

# 14 A. Q. How many total Substations does Southern Pioneer own and operate?

- 15 A. Thirty-four (34).
- 16 **Q. Of these, how many are 115/34.5 kV?**
- 17 A. Eleven (11).

# 18 Q. How many miles of distribution line does Southern Pioneer own and operate?

19 A. Per the latest Form 7, Southern Pioneer owns and operates 818 miles of distribution line.

20 Q. How many miles of sub-transmission and transmission lines does Southern Pioneer

- 21 own, operate and maintain?
- A. Per the latest Form 7, Southern Pioneer owns and operates 303 miles of sub-transmission
- and transmission lines.

# Q. Of the eleven (11) 115/34.5 kV substations, how many serve wholesale local access delivery service parties such as KPP, Kansas Electric Power Cooperative (KEPCo), and Kansas Municipal Energy Agency (KMEA)?

4 A. Seven (7).

# 5 Q. Does Southern Pioneer stock material for all of its facilities?

A. Southern Pioneer stocks the majority of the long lead time items in Medicine Lodge as
well as in Liberal. We also keep in stock some of the more common items that need
replacement, such as bus insulators, arrestors, PT's, etc. Southern Pioneer also has an
integrated supply agreement in place with its integrated supplier, Anixter, who stands
ready to provide Southern Pioneer with the necessary material in a timely manner.

# Q. Does Southern Pioneer have the managerial and technical capabilities to develop, construct and operate the proposed upgrades to it system?

A. Yes. Southern Pioneer already has an operations group in place that oversees the 13 operations of the Southern Pioneer distribution, sub-transmission and transmission system 14 15 which spans the geographical territory of Barber, Pratt, Kiowa, Kingman, Reno, Comanche, Clark, Haskell, Mead, and Seward Counties. The operations group is divided 16 17 into two groups, one group in Medicine Lodge which consists of 15 employees, and is 18 headed by me, and the Liberal group which has 15 employees. I have a Supervisor, Joseph Leibham, who has thirty-four years of experience with Southern Pioneer and its 19 predecessors, who works directly under me and oversees the Medicine Lodge and 20 surrounding areas. Mr. Leibham has worked as a serviceman, lineman, and line foreman, 21 and as such has a comprehensive understanding of the Southern Pioneer system. Mr. 22

Leibham oversees all switching<sup>1</sup> and day-to-day activities of the line personnel. 1 2 Additionally, Southern Pioneer has a lineman who lives in the town of Cunningham, which is the immediate area where the proposed KPP project or SemCrude upgrades will 3 4 be located. This particular lineman has twenty-seven years' experience as a lineman and he is responsible for completing most of the switching that takes place in the area. 5 6 Southern Pioneer also has another highly experienced lineman with over thirty-two years' 7 experience who works nearby out of the Medicine Lodge office. Our Medicine Lodge staff also includes eight additional linemen, seven of whom are Journeyman. All of our 8 longtime employees have experience switching the transmission lines owned by Mid-9 10 Kansas that were previously a part of the Aquila system, as well as experience with the daily switching and operation of the Southern Pioneer 34.5kV and distribution circuits. 11 12 What this means is the linemen have extensive experience in the operations of the system; 13 they know and understand the Southern Pioneer and Mid-Kansas systems very well.

### 14 Q. What type of safety training do the line personnel undergo?

15 A. Safety training and lineman training begins with a four-year apprenticeship program. Southern Pioneer uses the "Merchants Program" for linemen training. It is a four-year 16 17 program consisting of bookwork, hours tracking completing different lineman tasks, and 18 taking tests to prove competency. After the program is complete, the lineman receives a 19 Journeyman certificate and is considered a Journeyman lineman. Southern Pioneer also has a safety manual that is discussed and taught in our safety meetings. Additionally, 20 Kansas Electric Cooperatives, Inc. ("KEC") conducts specific training seminars, such as 21 transformers and metering training that our personnel attend. One such training event is 22

<sup>&</sup>lt;sup>1</sup> Switching is the reconfiguration of the system that happens due to work or events that cause outages, often done during storms.

the Hot Line school for linemen that KEC sponsors at Pratt Community College. Every
 year Southern Pioneer sends a group of employees to that event. In fact, Southern
 Pioneer's foreman, Tavis McDonald, has been asked to teach five consecutive years at Hot
 Line school.

5 Q. What is Southern Pioneer's safety record?

A. Southern Pioneer safety program is led by two safety employees who work for both
Southern Pioneer and Pioneer. They plan our monthly safety meetings, organize the
meetings KEC presents, lead the safety teams at all the locations, and organize the crew
and facility inspections. The statistics are shown in the comparative safety performance
report for 2017 which is attached hereto and incorporated herein as <u>Exhibit BDB-4</u>. The
numbers shown are for 2016.

Southern Pioneer is part of the OSHA Sharps program, as described in the letter and
 certificate attached as Exhibit BDB-5.

Additionally, Southern Pioneer took part in the Rural Electric Safety Achievement
 Program ("RESAP") as set out in the letter attached as Exhibit BDB-6.<sup>2</sup>

Q. What is the availability of Southern Pioneer's line personnel to operate the Southern
 Pioneer system and respond to outage events?

A. Southern Pioneer has employees on call 24 hours a day, seven days a week. We have
 employees spread across our service area, and we strive to respond to outage situations in
 minimal time. We understand the critical nature of the service we provide and while all of
 our customers are important to us, our wholesale local access delivery customers, in
 particular, have direct access to the Supervisor and me through our cell phones. Southern

 $<sup>^{2}</sup>$  The inspector noted that, of the inspections he had performed over the pat twenty years, the inspection at Southern Pioneer was one of the top three.

Pioneer and the wholesale customers also have access to Sunflower/Mid-Kansas system 1 control which is manned 24 hours a day, 365 days a year. Most times when a wholesale 2 customer loses power, we know because of automatic notifications we have set up through 3 4 Southern Pioneer's automated metering infrastructure (AMI) system. I'll explain with an example. The meter that feeds the City of Kingman is not part of our AMI system; 5 however, we have a substation meter at Cunningham that is part of our AMI 6 7 communications. If the 34.5 kV source that feeds the area is lost, we lose that meter, as well as all the other meters from that source. At that time, we know we have issues with 8 the transmission in the area. Typically, Southern Pioneer knows within a minute of any 9 10 loss of service. This is immediate access to outage information that contractors for hire may not have. 11

# Q. How does the availability of line personnel translate into the provisioning of safe and reliable electric service?

A. Having personnel who are well-trained and logistically well-located in the system, with a 14 15 high degree of familiarity with the system, and an around the clock operations center, translates in a highly safe and very reliable electric service. This is evident from the 16 17 statistics provided by outside rating agencies. Recently, Southern Pioneer obtained an 18 ACSI (American Customer Satisfaction Index) score of 86. This index is an important indicator because it compares Southern Pioneer to other utilities. The chart attached as 19 Exhibit BDB-7 compares Southern against the largest Investor Owned Utilities ("IOUs"), 20 as well as the largest municipal utilities. As indicated in the chart, IOUs scored on 21 average 75, and the municipals scored on average 74 when it comes to customer 22

satisfaction. As can be seen from the chart, Southern Pioneer outperforms as compared to
 other utilities.

Another important measurement is Southern Pioneer's SAIDI outage indices. As documented on Southern Pioneer's Form 7, Southern Pioneer five-year average SAIDI indices equates to 220.2 minutes of outage time per customer per year.<sup>3</sup> Of this, 99.44 minutes were classified as being caused by major events, 10.09 minutes were caused by the power supplier, 15.68 minutes were planned events (primarily maintenance of the system), and the remaining 94.99 minutes were from various other causes. The indices include all customers. We do not calculate indices specific to wholesale customers.

# 10 Q. What type of compliance obligations are applicable to Southern Pioneer?

A. There are several types of compliance. If referring to North American Electric Reliability 11 12 Corporation ("NERC") compliance, Southern Pioneer, along with the other Sunflower and 13 Mid-Kansas Member-Owners, has delegated its obligations for compliance with NERC Standards by contract to Sunflower and Mid-Kansas. Sunflower and Mid-Kansas have a 14 15 robust and successful NERC Compliance program that has been in existence since the inception of the NERC Reliability Standards in 2007. If Sunflower and Mid-Kansas 16 17 would not provide the service, then we would fulfill the responsibilities. But since 18 Sunflower is willing and staffed to do so as our G&T it makes sense from an efficiency and cost perspective to have them perform the services on an integrated basis on behalf of 19 Southern Pioneer and all the Sunflower and Mid-Kansas Member-Owners. 20

# Q. Have you had an experience with third party contractors operating, monitoring and performing the services? If so, how do you feel they compare to the abilities of

<sup>3</sup> Assuming there are 525,600 minutes in a year, the outage minutes per customer expressed as a percentage is .0004 percent, or less than one-half of a percent.

# **1** Southern Pioneer?

A. My primary comparison I could draw is my experience with the oil and gas companies 2 3 that operate private distribution line. Typically, those companies (like Sandridge) who 4 engage third party contractors to operate and maintain their lines would not respond to outages or potential safety concerns until the next day. Further, we have had several 5 experiences with wind farms in the Pioneer Electric Cooperative service territory. The 6 7 third party contractors that conduct the O&M services for the high voltage transmission lines owned by the wind farms cannot respond to safety, outage and reliability events for 8 sometimes up to several days. These events can impact service to Pioneer Electric's 9 10 members as the wind farms' transmission lines traverse Pioneer's distribution lines in several areas. Recently, there was a fatality event due to a wind farm's transmission line 11 12 falling across a heavily traveled county road in Haskell County, Kansas. While the wind 13 farm's line was de-energized upon falling down on Pioneer's distribution line that crosses 14 the transmission line, the wind farm's contractor did not reach the site to ground the line 15 until more than 18 hours after the event, and in the meantime, an accident occurred the following day when a truck ran into the de-energized line as it hung across the county road 16 approximately ten feet up in the air, killing the driver of the truck upon impact.<sup>4</sup> 17 18 Operators who lack technical skills and operational ability pose significant reliability and safety concerns that must be taken into consideration. 19

20

#### IV. OVERVIEW OF KPP MANAGERIAL AND TECHINCAL CAPABILITIES

21 Q. How many employees does KPP have?

<sup>&</sup>lt;sup>4</sup> There have been other such incidents involving transmission lines and/or third-party contractors.

A. My review of KPP's website indicates that KPP has seven total staff members, all of 1 which appear to be administrative personnel.<sup>5</sup> In response to Southern Pioneer Data 2 Request No. 12, KPP states that James Ging, Director of Engineering Services, is the KPP 3 4 Staff who would be qualified to perform certain O&M, maintenance, compliance and safety training for the Kingman Direct Connection.<sup>6</sup> 5

#### Q. Do you know, then, how KPP proposes to operate and maintain the proposed 6 7 **Kingman Direct Connect project?**

A. Pursuant to KPP's response to Southern Pioneer Data Request No. 9, attached hereto as 8 Exhibit BDB-9, KPP indicates that it intends to contract for the operation and 9 10 maintenance of KPP's 115/34.5 kV substation, and the City of Kingman will operate and maintain the new 34.5 kV line. Based upon my experience working with the City of 11 12 Kingman with the existing operations of the line, the City of Kingman sends their employees to do the work on their lines. Unless the employees came from a fully 13 operational utility with years of experience, they could not have the level of experience 14 15 that our personnel have. Nor do their employees have experience with 34.5 kV and typically do not interact with other utilities, such as the other cooperatives that coexist in 16 17 the area. To my knowledge, they have no operational center that operates around the clock 18 and would not have the familiarity of the system that we have with the Southern Pioneer and Mid-Kansas systems. Generally, the City of Kingman's power plant is staffed 24 19 hours a day and they usually contact Southern Pioneer's operations for assistance with 20 their 34.5 kV facilities. Even for contracted services, they could not duplicate the services 21 provided by Southern Pioneer without additional expenditures, nor would a contractor 22

 <sup>&</sup>lt;sup>5</sup> www.kpp.agency/about-kpp/staff-bios-photos.
 <sup>6</sup> This data request is attached as Exhibit BDB-8.

such as Shelly Electric, located in Wichita,<sup>7</sup> be able to respond to service and safety needs
in as timely a fashion as Southern Pioneer could. It would be hard to outperform Southern
Pioneer from a response time, safety, compliance and reliability standpoint. Further,
because KPP would be duplicating services already performed by Southern Pioneer, the
overall O&M costs of both parties combined would be much higher than a single entity
with already existing boots on the ground performing the tasks.

# Q. What safety and reliability concerns are implicated by the proposed Kingman Direct 8 Connect project?

A. My highest and first concern is always with safety. The 34.5 kV line that Kingman 9 10 currently owns has under-build (a second circuit on the same poles) and crosses three electric utilities in the area. The three utilities are Wheatland, Ark Valley, and Southern 11 12 Pioneer. Today Southern Pioneer controls the breaker that feeds the City of Kingman 13 facilities. That breaker's protective relay has opened the breaker many times since 2006. It has been a constant battle to have the City of Kingman patrol their own line. Kingman's 14 15 employees are always asking Southern Pioneer line personnel to close the protective relay before the line has been properly patrolled by Kingman personnel. It is Southern 16 17 Pioneer's policy to always patrol a 34.5 kV circuit that has opened because of a fault. The 18 reason being is the 34.5 kV line has exposure to traffic and the other utilities so doing 19 anything other than patrolling the line is a very dangerous practice and indicates a lack of 20 understanding of the system and proper respect for the dangers innate in electricity. For 21 example, a line may be opened because it was contacted by a vehicle and re-energizing the 22 line would potentially electrocute anybody in or near the vehicle.

<sup>&</sup>lt;sup>7</sup> KPP has indicated they have had discussions with Shelly Electric to contract for operations and maintenance of the KPP substation. *See* DR Response No. 9.

# 1 V. ENCUMBRANCE OF THE LANDSCAPE AND PERMITTING REQUIREMENTS

# 2 Q. Do you believe KPP's Kingman Direct Connect will result in unnecessary 3 encumbrance of the landscape?

A. Yes, I do. The KPP project will require the acquisition and encumbrance of additional and 4 5 duplicate real estate for the construction of the new 115/34.5 kV substation. Southern 6 Pioneer's proposed SemCrude Upgrade project will not require any additional real estate 7 for its substation as the substation was built with the City of Kingman and future additional load in mind. Further, our proposed SemCrude Substation Upgrade project 8 9 route will only require approximately 3.5 miles of 34.5 kV line and associated right-ofway, whereas KPP's Kingman Direct Connect project will not only require the additional 10 real estate for new substation, but will also require all 5 miles of associated right-of-way 11 for the 34.5 kV KPP proposes, as well as line and poles.<sup>8</sup> With the exception of the 12 approximate 3.5 miles of right-of-way and line and poles that Southern Pioneer will need 13 14 to procure, all of the items necessary for the Kingman Direct Connection result in 15 additional cost that are not necessary with the SemCrude Substation Upgrade.

# Q. Has KPP secured the necessary real estate, right-of-way and permitting to construct the Kingman Direct Connect?

A. No, they have not, as indicated by KPP in their response to Southern Pioneer Data Request
No. 33 (a) and (b), attached hereto as <u>Exhibit BDB-10</u>. KPP may have issues with where
they have decided to locate their facilities. For example, to the north of the site there are
the two SemCrude pipelines which have private easements. Additionally, Northern
Natural Gas has underground gas storage as well as gas infrastructure west of the Northern

<sup>&</sup>lt;sup>8</sup> Holloway Direct Testimony, pp. 28-29.

Natural plant. When initially locating the SemCrude line and substation, Southern Pioneer
 had to overcome these same types of problems; as such, these challenges no longer exist
 for the current SemCrude site.

4 Because the SemCrude Substation Upgrade project is simply upgrading the capacity of the transformer at its existing SemCrude Substation, Southern Pioneer already has the 5 6 necessary approvals and land rights for the upgrade to the substation. As noted 7 previously, Southern Pioneer would need only to acquire the right-of-way for approximately 3.5 miles of 34.5 kV line. Southern Pioneer, as the existing retail service 8 provider in the area, has a very good relationship with its customers and landowners and 9 10 because of the route it has selected, does not foresee any issues with acquiring the rightof-way. 11

Finally, it does not appear as if KPP has considered compliance issues regarding the Whooping Crane as an endangered species since the projects will traverse wetlands habitat. Southern Pioneer is working with The Watershed Institute to provide an assessment of the wetland habitats in Southern Pioneers service territory within the whooping crane migratory corridor.

# 17 Q. Does this conclude your Testimony?

18 A. Yes, it does.

# PREFILED DIRECT TESTIMONY

# DOCKET NO. 18-KPPE-343-COC

# **VERIFICATION OF BRIAN D. BEECHER**

STATE OF KANSAS ) SS: COUNTY OF BARBER

Brian D. Beecher, being first duly sworn, deposes and says that he is the Brian D. Beecher referred to in the foregoing document titled "Prefiled Direct Testimony of Brian D. Beecher" before the State Corporation Commission of the State of Kansas, that he is a manager of Southern Pioneer Electric Company, and that the statements therein were prepared by him or under his direction and are true and correct to the best of his information, knowledge and belief.

Brian D. Beecher

SUBSCRIBED AND SWORN to before me this 9 day of JULY 2018.



3 D. Bedurell

Notary Public

# Brian D. Beecher, P.E. Work Experience

- Participated in a substation relay replacement project for San Diego Gas and Electric at Santa Isabel Substation. Involvement included modifying existing schematics and producing new wiring diagrams for the control panels. I also produced new relay functional diagrams and created a Bill of Material for the modifications
- Participate in substation 230 kV Breaker replacement and 230 kV Substation expansion project for Western Area Power Administration at Mead Substation. Created new schematics for the transmission line relaying, the communication system, the transformers, the annunciators, the synchronizing and the Bus differential. All existing panels were replaced by new panels. Wrote the Design Operating Criteria for the substation. Also created new three line schematics.
- Participated in a series of small substation projects for TU electric. Completed physical arrangement and electrical/control design modification replacing circuit switchers in existing substations.
- Participated in Relay Replacement designs and Hoover Substation, Liberty Substation, Basic Substation, and Decatur Substations for Western Area Power Administration. Remote end line relaying for the Mead Substation project.
- Responsible for AC and DC schematic quality check and switchboard panel and outdoor electrical wiring at Flaming Gorge Substation for Western Area Power Administration.
- Participated in the Design of Shadow Ridge Substation for San Diego Gas & Electric. Responsibilities included AC and DC schematic design, relay functionals, and switchgear specification development.
- Participated in site development issues, initial substation layout and underground bus duct design of substation which was later never built.
- Conducted a study on substation reliability for San Diego Gas & Electric. Study considered solutions for keeping wildlife out of Substations.
- Designed two new substations and underground duct bank for Sacrament Regional County Sanitation District at the Sacramento waste water treatment facility. Included in the design was and EDSA study, relaying 1-lines, development of a complete set of construction specifications, site development, design of two new switchgear buildings, and cable selection and routing.

- Participated in the design of a series of substations for Portland General Electric. My responsibilities were limited to substation physical arrangement and grounding calculations.
- Assigned as a schematic design engineer for B&V's turbine island scope of work as part of the General Electric Nuclear Energy's First-of A Kind Engineering (FOAKE) Advanced Boiling Water Reactor (ABWR).
- Assigned follow-up design work on the FOAKE project turbine island electrical systems. Duties included MCC and power center design, vital AC design, and I&C power supply design.
- Assigned to Lungmen project nuclear island electrical systems design. Again, subcontracted to GE, ABWR which was to be built in Taiwan. Responsible for several nuclear island systems including Emergency Diesel Generators, Medium Voltage studies, and batteries. Also had a supervisory role over five other engineers.



**EXHIBIT BDB-2** P.O. Box 340, Golden, Colorado 80402

(303) 462-1100, Fax (303) 462-2600

Southern Pioneer Electric Company

For adding a 34.5kV Line Terminal

SemCrude Transmission Substation - Installed Cost Estimate

Date: Proposal:

6/1/2018 E1400043

Material				erial	Contra	Contract Labor	
Description	QTY	UNIT	Unit Cost	Ext. Cost	Unit Cost listed in MH	Ext. Cost	
Feeder 52-F3	1	ea			\$114.00		
35kV, 2000A Breaker	1	ea	\$33,000.00	\$33,000.00	16	\$1,824.00	
Steel Structures	4889	pounds	\$1.95	\$9,533.55	0.007	\$4,098.13	
Foundations (6)	12.4	су	\$100.00	\$1,240.00	\$1,200.00	\$14,880.00	
Switch, Gang, 1200A, 35kV	1	ea	\$4,782.00	\$4,782.00	12	\$1,368.00	
PTs, 35kV	3	ea	\$4,900.00	\$14,700.00	3	\$1,026.00	
Grounding, Misc.	1	lot	\$2,600.00	\$2,600.00	24	\$2,736.00	
Jumpers, Misc. Terminals	1	lot	\$2,500.00	\$2,500.00	24	\$2,736.00	
Conduit, 6" PVC	330	f†	\$2.00	\$660.00	48	\$5,472.00	
Cable, 35kV	990	f†	\$24.00	\$23,760.00	56	\$6,384.00	
SA's	3	ea	\$450.00	\$1,350.00	2	\$228.00	
Conduit, 3" PVC	470	f†	\$0.50	\$235.00	72	\$8,208.00	
Cable, Control	2000	f†	\$4.00	\$8,000.00	56	\$6,384.00	
Static Mast / Shielding	1	ea			\$114.00		
Steel Pole, Direct Buried	1	ea	\$3,500.00	\$3,500.00	12	\$1,368.00	
3/8" EHS and hardware	1	lot	\$2,500.00	\$2,500.00	8	\$912.00	
Grounding	1	lot	\$250.00	\$250.00	4	\$456.00	
Power Transformer - 115/34.5kV	1	ea			\$114.00		
Power Transformer (FOB Site)	0	ea	\$620,000.00	\$0.00	0	\$0.00	
Crane Services (2x - offload and set on pad)	0	ea	\$0.00	\$0.00	\$36,000.00	\$0.00	
J-box and Control Cable modifications	1	lot	\$500.00	\$500.00	16	\$1,824.00	
Relaying Additions	1	ea			\$114.00		
SEL 351 Relay	1	ea	\$4,500.00	\$4,500.00	1	\$114.00	
SEL 351S Relay	1	ea	\$5,000.00	\$5,000.00	1	\$114.00	
FT-19 Test Switches	3	ea	\$750.00	\$2,250.00	2	\$684.00	
Control Switches	1	ea	\$750.00	\$750.00	1	\$114.00	
SIS Wiring	1	lot	\$500.00	\$500.00	50	\$5,700.00	
ž			1				
Other	1	lot					
RTU / relay settings and testing	1	ea	by others	by others	by others	by others	
3rd Party Testing and Commissioning	1	ea	by others	by others	by others	by others	
Substation Engineering (Itemized seperately)	1	lot	\$0.00	\$0.00	\$46,000.00	\$46,000.00	
Contingency(@10.0%)			1	\$12,211.06		\$11,263.01	
Sales Tax (@7.0%)				\$9,402.51			
				\$143,724.12		\$123,893.15	

\$267,617.26



# PROJECT ESTIMATE

# City of Kingman Load Increase

2015 Cost	Estimate		6/2018 Co	st Estimate	PSE 6/202	L8 Cost Estimate
Cost		Direct Assign	ı			
\$	750,000.00		\$	620,000.00	\$	650,000.00
\$	223,190.11	Kingman	\$	267,617.26	\$	260,000.00
\$	15,000.00	Kingman	\$	20,000.00	\$	20,000.00
\$	35,000.00		\$	46,000.00	\$	60,000.00
\$	3,000.00	Kingman	\$	8,500.00	\$	20,000.00
\$	60,000.00	SPECO	\$	60,000.00	\$	30,000.00
\$	12,500.00		\$	17,500.00	\$	30,000.00
\$	673,638.14		\$	701,428.97	\$	634,840.00
\$	35,000.00		\$	35,000.00	\$	50,000.00
\$	1,807,328.25	-	\$	1,776,046.23	\$	1,754,840.00
	2015 Cost <b>Cost</b> \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2015 Cost Estimate Cost \$ 750,000.00 \$ 223,190.11 \$ 15,000.00 \$ 35,000.00 \$ 3,000.00 \$ 60,000.00 \$ 60,000.00 \$ 12,500.00 \$ 673,638.14 \$ 35,000.00 \$ 1,807,328.25	2015 Cost Estimate           Cost         Direct Assign           \$         750,000.00           \$         223,190.11           \$         15,000.00           \$         15,000.00           \$         35,000.00           \$         3,000.00           \$         60,000.00           \$         673,638.14           \$         35,000.00           \$         1,807,328.25	2015 Cost Estimate         6/2018 Co           Cost         Direct Assign           \$         750,000.00         \$           \$         223,190.11         Kingman         \$           \$         15,000.00         Kingman         \$           \$         35,000.00         \$         \$           \$         35,000.00         Kingman         \$           \$         60,000.00         SPECO         \$           \$         673,638.14         \$         \$           \$         35,000.00         \$         \$	2015 Cost Estimate         6/2018 Cost Estimate           Cost         Direct Assign           \$         750,000.00         \$         620,000.00           \$         223,190.11         Kingman         \$         267,617.26           \$         15,000.00         Kingman         \$         20,000.00           \$         35,000.00         \$         46,000.00           \$         35,000.00         \$         46,000.00           \$         30,000.00         \$         46,000.00           \$         30,000.00         \$         46,000.00           \$         30,000.00         \$         8,500.00           \$         60,000.00         \$         17,500.00           \$         673,638.14         \$         701,428.97           \$         35,000.00         \$         35,000.00           \$         1,807,328.25         \$         1,776,046.23	2015 Cost Estimate         6/2018 Cost Estimate         PSE 6/201           Cost         Direct Assign         PSE 6/201           \$         750,000.00         \$         620,000.00         \$           \$         750,000.00         \$         620,000.00         \$           \$         223,190.11         Kingman         \$         267,617.26         \$           \$         15,000.00         Kingman         \$         20,000.00         \$           \$         35,000.00         \$         46,000.00         \$           \$         3,000.00         Kingman         \$         8,500.00         \$           \$         3,000.00         Kingman         \$         8,500.00         \$           \$         60,000.00         SPECO         \$         60,000.00         \$           \$         673,638.14         \$         701,428.97         \$           \$         35,000.00         \$         35,000.00         \$           \$         1,807,328.25         \$         1,776,046.23         \$

OR Pricing Allocation Based on 2018 Cost Estimate & 2017 Load	<b>OR Pricing Allocation</b>	n Based on 2018 PSE	Cost Esti	mate & 2017 Load	
Kingman	\$ 1,357,248.64	Kingman		\$	1,366,042.41
SPECO	\$ 418,797.59	SPECO		\$	388,797.59
TOTAL	\$ 1,776,046.23		TOTAL	\$	1,754,840.00

# **EXHIBIT BDB-3**

Southern Pioneer - Mid-Kansas Electric Co. LLC 34.5 kV Line Extension Template KPP - City of Kingman load addition

Required Customer Contribution

#### Calculation of OR Pricing

\$

Inputs: Borrowing Rate	5.39% Southern Pioneer supply borrowing rate	2017 data				
Borrowing Rate Multiplier	1.79 Southern Pioneer TIER equivalent to 1.75 DSC	Monthly NCP Values			s	SPECo - LAC
Return portion of carrying charge rate	9.65%	Row Labels	Max of Sum of Kingman & Semcrude	So. Pion. LAC Peak Date & Time	Generation Coincident with peak	ŝ 5.54
O&M recovery rate	6.13% Southern Pioneer supply O&M Rate	January	6694	10517 1900	-	-
NPV Discount rate	15.78%	February	6828.5	20217 1100	-	-
Years of Service	10.00	March	7160.5	32017 1600	-	-
Member	Southern Pioneer	April	7288.25	41917 1600	-	-
Local Access Rate	\$ 5.54 (per kw-mo)	May	8893.5	53117 1500	-	-
Load addition	13,287 (kW)	June	11456.5	62817 1600	2,999	16,615
Estimated Network Upgrade (non-direct assigned) Cost	\$ 1,424,840	July	11422	72517 1600	4,978	27,583
		August	9936	81917 1600	3,597	19,928
		September	11123.75	91417 1600	1,714	9,497
Calculation:		October	7365.75	100617 1600	-	-
New Load CP	13,287	November	6539	111617 800	-	-
Local Access Rate	\$ 5.54	December	7165.5	122717 1900	-	-
Annual Local Access Revenue Increase - Calculated	\$ 73,623 2017 LAC Revenue - Kingman Generation				13,287	\$ 73,623
	Coincident with Southern Pioneer 34.5					
NPV of Annual Local Access Revenue Increase	\$ 358,798					
Estimated Network Upgrade (non-direct assigned) Cost	\$ 1,424,840					
NPV of Annual Local Access Revenue Increase	\$ (358,798)					

#### **OR Pricing Summary (PSE Costs)**

	Total Cost		Kingman	SPECo
SPECO PORTION WITH OR PRICING	\$	358,797.59		\$ 358,797.59
SPECO DIRECT ASSIGNED	\$	30,000.00		\$ 30,000.00
KINGMAN PORTION WITH OR PRICING	\$	1,066,042.41	\$ 1,066,042.41	
KINGMAN DIRECT ASSIGNED	\$	300,000.00	\$ 300,000.00	
TOTAL PROJECT COST	\$	1,754,840.00	\$ 1,366,042.41	\$ 388,797.59

1,066,042

# **EXHIBIT BDB-3**

Southern Pioneer - Mid-Kansas Electric Co. LLC 34.5 kV Line Extension Template KPP - City of Kingman load addition

Required Customer Contribution

#### Calculation of OR Pricing

\$

Inputs:							
Borrowing Rate	5.39%	Southern Pioneer supply borrowing rate	2017 data				
Borrowing Rate Multiplier	1.79	Southern Pioneer TIER equivalent to 1.75 DSC	Monthly NCP Values				SPECo - LAC
Return portion of carrying charge rate	9.65%		Row Labels	Max of Sum of Kingman & Semcrude	So. Pion. LAC Peak Date & Time	Generation Coincident with peak	\$ 5.54
O&M recovery rate	6.13%	Southern Pioneer supply O&M Rate	January	6694	10517 1900	-	-
NPV Discount rate	15.78%		February	6828.5	20217 1100	-	-
Years of Service	10.00		March	7160.5	32017 1600	-	-
Member	Southern Pioneer		April	7288.25	41917 1600	-	-
Local Access Rate	\$ 5.541	(per kw-mo)	May	8893.5	53117 1500	-	-
Load addition	13,287	(kW)	June	11456.5	62817 1600	2,999	16,615
Estimated Network Upgrade (non-direct assigned) Cost	\$ 1,419,929		July	11422	72517 1600	4,978	27,583
			August	9936	81917 1600	3,597	19,928
			September	11123.75	91417 1600	1,714	9,497
Calculation:			October	7365.75	100617 1600	-	-
New Load CP	13,287		November	6539	111617 800	-	-
Local Access Rate	\$ 5.54		December	7165.5	122717 1900	-	-
Annual Local Access Revenue Increase - Calculated	\$ 73,623	2017 LAC Revenue - Kingman Generation				13,287	\$ 73,623
		Coincident with Southern Pioneer 34.5					
NPV of Annual Local Access Revenue Increase	\$ 358,798						
Estimated Network Upgrade (non-direct assigned) Cost	\$ 1,419,929						
NPV of Annual Local Access Revenue Increase	\$ (358,798)						

#### **OR Pricing Summary**

	Total Cost		Kingman	SPECo
SPECO PORTION WITH OR PRICING	\$	358,797.59		\$ 358,797.59
SPECO DIRECT ASSIGNED	\$	60,000.00		\$ 60,000.00
KINGMAN PORTION WITH OR PRICING	\$	1,061,131.38	\$ 1,061,131.38	
KINGMAN DIRECT ASSIGNED	\$	296,117.26	\$ 296,117.26	
TOTAL PROJECT COST	\$	1,776,046.23	\$ 1,357,248.64	\$ 418,797.59

1,061,131



#### P.O. Box 340, Golden, Colorado 80402 (303) 462-1100, Fax (303) 462-2600

Southern Pioneer Electric Company

SemCrude Transmission Substation - Installed Cost Estimate Date: For adding a 34.5kV Line Terminal Proposal:

6/1/2018 E1400043

THE REPORT OF A DESCRIPTION OF A DESCRIP		Material			Contract Labor	
Description		UNIT	Unit Cost	Ext. Cost	Unit Cost listed in MH	Ext. Cost
Feeder 52-F3	1	ca			\$114.00	
35kV, 2000A Breaker	1	ea	\$33,000.00	\$33,000.00	16	\$1,824.00
Steel Structures	4889	pounds	\$1.95	\$9,633.66	0.007	\$4,098.13
Foundations (6)	12.4	cy	\$100.00	\$1,240.00	\$1,200.00	\$14,880.00
Switch, Gang, 1200A, 35kV	1	ea	\$4,782.00	\$4,782.00	12	\$1,368.00
PTs, 35kV	3	ea	\$4,900.00	\$14,700.00	3	\$1,026.00
Grounding, Misc.	1	lot	\$2,600.00	\$2,600.00	24	\$2,736.00
Jumpers, Misc. Terminals	1	lot	\$2,500.00	\$2,500.00	24	\$2,736.00
Conduit, 6" PVC	330	ft	\$2.00	\$660.00	<mark>4</mark> 8	\$5,472.00
Cable, 35kV	990	ft	\$24.00	\$23,760.00	56	\$6,384.00
5A's	3	ea	\$450.00	\$1,350.00	2	\$228.00
Conduit, 3" PVC	470	ft	\$0.50	\$235.00	72	\$8,208.00
Cable, Control	2000	ft	\$4.00	\$8,000.00	56	\$6,384.00
Static Mast / Shielding	1	ca			\$114.00	
Steel Pole. Direct Buried	1	en	\$3,500.00	\$3,500,00	12	\$1,368.00
3/8" EHS and hardware	1	lot	\$2,500.00	\$2,500.00	8	\$912.00
Grounding	1	lot	\$250.00	\$250.00	4	\$456.00
Power Transformer - 115/34.5kV	1	ca			\$114.00	
Power Transformer (FOB Site)	0	ea	\$620,000.00	\$0.00	0	\$0.00
Crane Services (2x - offload and set on pad)	0	ea	\$0.00	\$0.00	\$36,000.00	\$0.00
J-box and Control Cable modifications	1	lot	\$500.00	\$500.00	16	\$1,824.00
Relaving Additions	1	60			\$114.00	
SEI 351 Relay	1	60	\$4,500,00	\$4 500.00	1	\$114.00
SEL 3515 Relay	1	00	\$5,000,00	\$5,000,00	1	\$114.00
FT-19 Test Switches	3	en	\$750.00	\$2,250.00	2	\$684.00
Control Switches	1	<u>en</u>	\$750.00	\$750.00	1	\$114.00
SIS Wiring	1	lot	\$500.00	\$500.00	50	\$5,700.00
Other	1	lot				
RIU / relay settings and testing	1	ea	by others	by others	by others	by others
3rd Party Testing and Commissioning	1	ea	by others	by others	by others	by others
Substation Engineering (Itemized seperately)	1	lot	\$0.00	\$0.00	\$46,000.00	\$46,000.00
Contingency(@10.0%)	)			\$12,211.06		\$11,263.01
Sales Tax (@7.0%)	)			\$9,402.51		
				\$143,724.12		\$123,893.15

\$267,617.26

# COMPARATIVE SAFETY PERFORMANCE REPORT 2017

# **CO-OP INFORMATION**

Cooperative Name: Southern Pioneer Electric, KS Cooperative Type: Distribution Cooperative

# LEGEND

**DART** - The number of OSHA recordable cases resulting in days away, restricted duty or transferred work per 100 employees. **LWCR** - The number of OSHA recordable cases resulting in days away from work per 100 employees.

**VAR** - The number of vehicular accidents per million miles driven in co-op owned or leased vehicles.

Metric	Year	Value	3yr Average	State 3yr Average	Region 3yr Average	Nation 3yr Average	Comparable Size 3yr Average	Top Tier 3yr Average
DART	2016	0.00		2.61	2.29	2.24	2.70	0.12
VAR	2016	4.75		2.97	2.89	6.18	7.16	0.08
LWCR	2016	0.00		1.84	1.57	1.50	1.82	0.00



**EXHIBIT BDB-4** 



**EXHIBIT BDB-4** 



\* The online Annual Safety Performances measures are updated periodically as co-ops continue to enter their data in the system. Co-ops may have to wait until the beginning of May for enough data to exist to make meaningful comparisons. If the state comparison safety data is blank it means there are less than four co-ops in the state that have entered data at this point in time.

**EXHIBIT BDB-4** 

Occupational Safety and Health Administration Two Pershing Square Building 2300 Main Street, Suite 1010 Kansas City, Missouri 64108 Phone: (816) 283-8745 Fax: (816) 283-0547



January 30, 2018

Mr. Danny Law, Safety and Compliance Director Southern Pioneer Electric Company (Medicine Lodge) 1PO Box 347 Medicine Lodge, KS 67104

Dear Mr. Law:

We have been advised by Brian Welch, Project Manager of the Kansas On-Site Consultation Program, that you have met all the requirements for participation in the Safety and Health Achievement Recognition (SHARP) program. In addition, all elements of an effective safety and health program are in place.

I congratulate you and the employees of Southern Pioneer Electric Company (Medicine Lodge) for your efforts to implement and maintain an excellent safety and health program. I am very pleased to be able to provide you with a Certificate of Recognition under the SHARP Exemption Program which will defer you from programmed inspection activity for the period January 30, 2018 through January 30, 2019. OSHA reserves the right to respond to employee complaints and investigate fatalities and catastrophic accidents.

If we can be of assistance, please feel free to contact this office.

Sincerely,

[for]Kim Stille Regional Administrator

cc: Brian Welch, CSP, Project Manager Kansas Consultation Program



# **EXHIBIT BDB-5**



The United States Department of LaborOccupational Safety and Health AdministrationSouthern PioneerElectric CompanyThis is to certify that(Medicine Lodge)located at Medicine Lodge, Kansas

Company Name

Location of Worksite

Date

meets the requirements of the Consultation Safety and Health Achievement Recognition Program and participation is hereby approved for the term

January 30, 2018 to January 30, 2019



Safety & Health Achievement Recognition Program Consultation: An OSHA Cooperative Program

Loren Sweatt Deputy Assistant Secretary Occupational Safety and Health Administration



Occupational Safety and Health Administration

**EXHIBIT BDB-6** 



P.O. Box 4267, Topeka, Kansas 66604-0267 7332 SW 21st Street, Topeka, Kansas 66615 A Touchstone Energy® Cooperative 785-478-4554 • (Fax) 785-478-4852

October 25, 2017

Steve Epperson Pioneer Electric Cooperative, Inc. PO Box 368 Ulysses, KS 67880

Dear Steve:

I am writing you on behalf of the Rural Electric Safety Achievement Program (RESAP) Observation Team that conducted Southern Pioneer's RESAP Observation on August 29-30, 2017.

The team would like to acknowledge Southern Pioneer employees' extraordinary dedication to ensuring a safe work practices as well as demonstrates pride in their organization, concern for their fellow employees and their members.

On a personal note, I want to share with you that in my 20-plus years in the RESAP program, Southern Pioneer's observation is in the top three of those Kansas systems participating in the program.

Your team is a model system for others to emulate.

Very truly yours,

Tany & Deturles

Larry E. Detwiler, Director Loss Control, Safety & Compliance

# October 2017 ACSI for Southern Pioneer



NRECA MARKET RESEARCH SERVICES

# National ACSI Benchmarks

National Industry Data Based on Online Surveying Using Panels of U.S. Citizens

Q1/Q2 2017 ACSI		QI/Q2 2017 Retention	n %
CenterPoint Energy	82	CenterPoint Energy	81
Atmos Energy	81	Atmos Energy	80
Southern	79	NextEra Energy	77
Touchstone Energy	78	Southern	76
Dominion Resources	77	Touchstone Energy	75
NextEra Energy	77	MidAmerican	75
Largest Cooperatives	77	Dominion Resources	75
All Other IOUs	77	Largest Cooperatives	74
MidAmerican	76	Xcel Energy	73
All Other Cooperatives	76	Largest IOUs	73
Largest IOUs	75	All Other IOUs	73
Xcel Energy	74	Duke Energy	71
Largest Municipal Utilities	74	All Other Cooperatives	71
All Other Municipal Utilities	74	Largest Municipal Utilities	70
Duke Energy	73	All Other Municipal Utilities	69

# 2016 ACSI By Sector

E-Commerce	82.4
Mfg/Nondurable Goods	82. I
Mfg/Durable Goods	81.9
Accommodation & Food Svcs	78.7
Retail Trade	78.3
Finance & Insurance	76.5
Health Care & Social Asst.	76. I
Transportation	75.0
E-Business	74.9
Energy Utilities	71.9
Public Admin/ Government	70.3
Telecomm. & Information	70. I

NRECA MARKET RESEARCH SERVICES

# KANSAS POWER POOL SUPPLEMENTAL RESPONSE TO SOUTHERN PIONEER ELECTRIC COMPANY INFORMATION REQUEST #12

Company Name	Kansas Power Pool
Docket Number	18-KPPE-343-COC
Request Date	May 15, 2018
Response Date	June 14, 2018

# **Please Provide the Following:**

For those individuals identified to perform the operation, maintenance, compliance and safety training in response to Data Request No. 11, please provide their background and experience in performing those functions.

# **Objections:**

Kansas Power Pool objects to this request because it seeks information that is not clearly relevant to the proceedings in this docket. *See* K.A.R. 82-1-234a (a) & May 15, 2018 Discovery Order entered in this docket, ¶ 22.

# **Response:**

Without waiving the objections stated above, KPP states the identity and qualifications of KPP's contractors, engineers, operators, or maintenance providers is not relevant to this proceeding. KPP already has a certificate in Kansas to provide transmission service, granted under the municipal energy act. The only relevant issue in this docket is whether or not the proposed certificate for transmission rights only is in the public interest. It is already presumed under Kansas law that a legally formed municipal energy agency, such as KPP, may provide transmission service.

## **Supplemental Response:**

Tim Goldston, Electrical Superintendent, Journeyman Lineman with 20 years' experience. Breck Knoblauch, Journeyman Lineman, Crew foreman with 4 years of experience. Shane Gault, Apprentice Lineman, 1 year of experience. Josh Fishgrab, Apprentice Lineman, 6 months of experience. KPP staff – James Ging, Director of Engineering services, 21 years of experience in maintaining 69KV transmission system, substations, and distribution systems. Additionally see response to DR 9. It should be noted here that KPP is already a transmission owner under the SPP membership agreement and Southern Pioneer is not.

Submitted By:	Kansas Power Pool
Submitted To:	Southern Pioneer Electric Company

# KANSAS POWER POOL SUPPLEMENTAL RESPONSE TO SOUTHERN PIONEER ELECTRIC COMPANY INFORMATION REQUEST #9

Company Name	Kansas Power Pool
Docket Number	18-KPPE-343-COC
Request Date	May 15, 2018
Response Date	June 14, 2018

# **Please Provide the Following:**

State who in KPP will operate and maintain the proposed 34.5 kV line and 115-34.5 kV substation for the Kingman Direct Connection? If not someone in KPP, please state who will be performing those functions.

# **Objections:**

Kansas Power Pool objects to this request because it seeks information that is not clearly relevant to the proceedings in this docket. *See* K.A.R. 82-1-234a (a) & May 15, 2018 Discovery Order entered in this docket,  $\P$  22.

# **Response:**

Without waiving the objections stated above, KPP will be ultimately responsible for the operation and maintenance of the Kingman Direct Connection facilities. However, the identity and qualifications of KPP's contractors, engineers, operators, or maintenance providers is not relevant to this proceeding. KPP already has a certificate in Kansas to provide transmission service, granted under the municipal energy act. The only relevant issue in this docket is whether or not the proposed certificate for transmission rights only is in the public interest. It is already presumed under Kansas law that a legally formed municipal energy agency, such as KPP, may provide transmission service.

# **Supplemental Response:**

The City of Kingman will operate and maintain the 34.5 KV line from Kingman to the substation and perform any required routine maintenance, as well as any required operations of the substation. KPP will contract for substation routine maintenance and testing with a qualified third party, much as Westar and others do today. In fact, KPP has already had informal discussions with Shelley Electric of Wichita, and they have stated they do exactly the same type of service for Westar Energy substations. KPP is also aware of several other local qualified contractors that do similar work. Furthermore, James Ging, KPP's Director of Engineering Services, was formerly the Director of Electric and Water Utilities for the City of Winfield and has overseen similar contracts for service on their 69 kV substations. It should be noted here that KPP is already a transmission owner under the SPP membership agreement and Southern Pioneer is not. Submitted By:

Kansas Power Pool

Submitted To:

Southern Pioneer Electric Company

# KANSAS POWER POOL SUPPLEMENTAL RESPONSE TO SOUTHERN PIONEER ELECTRIC COMPANY INFORMATION REQUEST #33

Company Name	Kansas Power Pool
Docket Number	18-KPPE-343-COC
Request Date	May 15, 2018
Response Date	June 14, 2018

# **<u>Please Provide the Following:</u>**

- a. Has KPP secured the real estate interest necessary to construct, own, operate and maintain the 115-34.5 kV Substation for the Kingman Direct Connection? If so, please provide the total cost of the acquisition of the real property interest and all data, information and documents to support your answer provided herein.
- b. Has KPP secured all licenses, permits, and approvals necessary to construct, own, operate and maintain the 115-34.5 kV Substation and 34.5 kV line for the Kingman Direct Connection? Please provide all documentation and information to support your answer herein.
- c. Please state how many miles of its proposed 34.5 kV line KPP intends to construct, own, operate and maintain on public right-of-way.
- d. For the portion of 34.5 kV line which KPP intends to construct, own, operate and maintain on private right-of-way, has KPP secured the necessary rights-of-way? If so, please provide the cost of the rights-of-way and all information, data and documents to support your answer herein.
- e. Please indicate the number of circuit miles the proposed 115-34. kV substation will be interconnected, to the existing Ninnescah 115 kV line, from the existing SemCrude 115/34.5 kV substation.
- f. Please indicate the number of circuit miles the proposed 34.5 kV line will be interconnected, to the existing Kingman 34.5 kV line, from the existing Cunningham 34.5 kV substation.

# **Objections:**

Kansas Power Pool objects to this request because it seeks information that is not clearly relevant to the proceedings in this docket and is unduly burdensome. *See* K.A.R. 82-1-234a (a) & May 15, 2018 Discovery Order entered in this docket, ¶ 22. Kansas Power Pool further objects to this

request because it is overly broad, ambiguous, vague, and does not identify with reasonable particularity the information or documents sought. *See* May 15, 2018 Discovery Order entered in this docket,  $\P$  22.

# **Response:**

Without waiving the objections stated above, the identity and qualifications of KPP's contractors, engineers, operators, or maintenance providers is not relevant to this proceeding. KPP already has a certificate in Kansas to provide transmission service, granted under the municipal energy act. The only relevant issue in this docket is whether or not the proposed certificate for transmission rights only is in the public interest. It is already presumed under Kansas law that a legally formed municipal energy agency, such as KPP, may provide transmission service. In response to (e), KPP states the proposed 115/34.5 kV substation will be approximately 1 mile west of the SemCrude substation. See application in this proceeding. In response to (f), the Proposed 34.5 kV line will interconnect with Kingman's 34.5 kV line, not the Cunningham 34.5 kV substation. See application in this proceeding.

# Supplemental Response:

- a) This certificate is the first step in the process of Permits and approvals. Olson and Associates will be responsible for all licenses, Permits, and approvals as necessary. KPP has engaged a land man, J. Fred Hambright and Assoc to obtain any necessary right of way.
- b) See a.
- c) See a.
- d) See a.
- e) It will be approximately 1 mile west of the Semcrude substation, but adjacent to the Ninnescah 115 kV line. The length of 115 kV line to run from the Ninnescah line to the substation will be provided when MKEC provides final design details, but will be short, likely less than 100 yards.
- f) See original response

It should be noted here that KPP is already a transmission owner under the SPP membership agreement and Southern Pioneer is not.

Submitted By:Kansas Power PoolSubmitted To:Southern Pioneer Electric Company

# Verification of Responses

I have read the foregoing Information Requests and objections thereto and find the objections and responses to be true, accurate, full and complete and contain no material misrepresentations or omissions to the best of my knowledge and belief; and I will disclose to Southern Pioneer Electric Company any matter subsequently discovered which affects the accuracy or completeness of the responses to these Information Requests.

N Signed: <u>/s</u> Date: June 14, 2018