

**BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

In the Matter of the Joint Application of)
Sunflower Electric Power Corporation and)
Mid-Kansas Electric Company, Inc. for an)
Order Approving the Merger of Mid-Kansas) Docket No. 19-SEPE-054-MER
Electric Company, Inc. into Sunflower)
Electric Power Corporation.)

PREFILED DIRECT TESTIMONY OF

KYLE E. NELSON

SENIOR VICE PRESIDENT AND CHIEF OPERATING OFFICER

ON BEHALF OF

SUNFLOWER ELECTRIC POWER CORPORATION

and

MID-KANSAS ELECTRIC COMPANY, INC.

AUGUST 3, 2018

1 **Q. Please state your name.**

2 A. My name is Kyle E. Nelson.

3 **Q. By whom are you employed and what is your business address?**

4 A. I am employed by Sunflower Electric Power Corporation ("Sunflower"). My
5 business address is 301 W. 13th Street, Hays, Kansas.

6 **Q. What is your current position at Sunflower and Mid-Kansas Electric
7 Company, Inc. ("Mid-Kansas"), and how long have you held that position?**

8 A. I am Senior Vice President and Chief Operating Officer of both Sunflower and
9 Mid-Kansas. I assumed these positions on May 18, 2008.

10 **Q. Please describe your education, experience, and employment history.**

11 A. I graduated from Oklahoma State University in May 1984. I received a Bachelor
12 of Science degree in Mechanical Engineering. Following college, I was a
13 commissioned officer in the U.S. Navy and successfully completed the Navy's
14 nuclear power program, submarine officer's basic course, quality assurance and
15 quality control training, and numerous weapons and tactical training courses.
16 While serving on the nuclear, attack submarine, USS Aspro (SSN 648), I
17 qualified as Engineering Officer of the Watch, Engineering Duty Officer, Officer of
18 the Deck, and Ship's Duty Officer and held the assignments of Reactor Controls
19 Assistant and Damage Control Assistant. I separated from the Navy in January
20 1989 as a Lieutenant (O-3) and began my career with Sunflower. I began work at
21 Sunflower as a Generation Engineer at Sunflower's coal-fired, Holcomb Station
22 generating unit. I obtained my Professional Engineering license in February 1993
23 (licensed in Kansas; license number 12779). Over the years, I have progressed

1 through technical and managerial positions within the Generation Engineering
2 group before moving to the corporate management team. My entire career has
3 been focused on various forms of power production and delivery.

4 **Q. What is the purpose of your testimony?**

5 A. The purpose of my testimony is to provide support for the merger of Sunflower
6 and Mid-Kansas and to discuss the generation resources of the two companies
7 as well as the benefits of combining the resources into one company upon
8 merger.

9 **Q. Please briefly describe the generation portfolio of Sunflower and the**
10 **transmission system.**

11 A. Sunflower has a diverse generation asset mix that includes the 349 MW, coal-
12 fired, Holcomb Station unit ("HL1"), a 98 MW, gas-steam generating unit ("S2"),
13 two gas-fired, simple-cycle combustion turbines ("S4" and "S5" which are each
14 71 MW), and a 16 MW, gas-fired, simple-cycle combustion turbine ("S3"). All
15 assets described above are owned, operated, and maintained by Sunflower.
16 Additionally, Sunflower holds a power purchase agreement ("PPA") for 50.4 MW
17 on the first phase of the Smoky Hills wind project. Sunflower's transmission
18 system consists of 222 miles of 345 kV extra high voltage ("EHV") transmission
19 line and 984 miles of 115 kV transmission line.

20 **Q. Please briefly describe the generation portfolio of Mid-Kansas and the**
21 **transmission system.**

22 A. Mid-Kansas has generation resources which are all fueled by natural gas. The
23 largest unit is the Fort Dodge Station Unit 4 ("FD4" - previously known as the

1 Judson Large unit) which is a 149 MW, gas-steam generating unit. Mid-Kansas
2 owns Rubart Station facility which is a 110 MW, gas-reciprocating engine
3 generating facility, Great Bend Station Unit 3 ("GB3" – previously known as the
4 Arthur Mullergren unit) which is a 82 MW, gas-steam generating unit, Clifton
5 Station Unit ("CL1") which is a 85 MW, simple-cycle combustion turbine,
6 Cimarron River Station Unit 1 ("CR1") which is a 50 MW, gas-steam generating
7 unit, and the Cimarron Station Unit 2 ("CR2") which is a 15 MW, simple-cycle
8 combustion turbine. All assets described above are owned by Mid-Kansas and
9 operated and maintained by Sunflower under an operating agreement between
10 the two sister companies. Additionally, Mid-Kansas holds multiple PPAs with
11 various entities including 24 MW on the second phase of the Smoky Hills wind
12 project, 104 MW on the Shooting Star wind project, and 156 MW from Westar's
13 Jeffrey Energy Center. Mid-Kansas recently executed a PPA for a 20 MW solar
14 project which will be constructed and enter service in 2019. Mid-Kansas'
15 transmission system consists of 30 miles of 345 kV EHV transmission line, 192
16 miles of 230 kV transmission line, 143 miles of 138 kV transmission line, and 886
17 miles of 115 kV transmission line.

18 **Q. Will the generation resources of either company change in the next two**
19 **years?**

20 A. At the beginning of 2019 (January 2, 2019), Mid-Kansas' PPA with Westar ends.
21 At that time, Mid-Kansas will have no solid-fuel (coal) resource within its
22 generation portfolio. The Mid-Kansas system will be dependent upon natural gas-

1 based generation, market purchases and its contracts for renewable generation
2 resources.

3 **Q. Does management believe that is a prudent generation mix for Mid-**
4 **Kansas?**

5 A. It is not an ideal situation. It is prudent to have a generation mix which can utilize
6 different fuel sources to act as a hedge against price fluctuations within individual
7 fuel markets. Additionally, over-dependence on a single fuel type, and especially
8 natural gas, can introduce fuel delivery risks during periods of significant demand
9 on the nation's natural gas infrastructure. This is especially true during extended
10 cold weather conditions such as polar vortex events which can severely limit fuel
11 deliveries to the Mid-Kansas generating resources or cause emergency fuel
12 pricing which causes production costs on these assets to be prohibitive.

13 **Q. Will the merger of the two companies address the concern of Mid-Kansas**
14 **having a system overly dependent on a single fuel type?**

15 A. By combining the generation resources of Mid-Kansas and Sunflower, the
16 merged company will have approximately 350 MW of coal-based generation and
17 717 MW of natural gas-based generation. This is an appropriately diversified
18 generation portfolio able to withstand fluctuations in fuel pricing and potential
19 disruptions in fuel delivery.

20 **Q. If the two companies are merged, would you anticipate any changes in the**
21 **current generation fleet?**

22 A. No. Merging the two companies would not change how the existing facilities are
23 managed or operated.

1 **Q. From an operational perspective, will the merger provide any additional**
2 **benefits?**

3 A. Yes. The merger will simplify tracking system costs that currently must be
4 accounted for separately for each company. This causes my staff complexities in
5 budgeting, cost tracking, and forecasting that would be simplified by a merger.
6 There are similar advantages within purchasing and inventory processes. These
7 various processes add complexities to onboarding and training new employees
8 which could be eliminated or simplified by a merger.

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

10 A. Yes.

VERIFICATION

STATE OF KANSAS)
) ss:
COUNTY OF Ellis)

Kyle E. Nelson, being first duly sworn, deposes and says that he is the Kyle E. Nelson referred to in the foregoing document entitled "PREFILED DIRECT TESTIMONY OF KYLE E. NELSON" before the State Corporation Commission of the State of Kansas 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.

Kyle E. Nelson

SUBSCRIBED AND SWORN to before me this 3rd day of August, 2018.



Notary Public

My Appointment Expires: