BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

In the Matter of the Joint Application of Westar Energy, Inc. and Kansas Gas and Electric Company for Approval of their Annual Energy Cost Correction Adjustment Factor	)))))	Docket No. 17-WSEE-425-ACA

JOINT APPLICATION

COME NOW Westar Energy, Inc. (Westar North) and Kansas Gas and Electric Company (Westar South) (collectively referred to as "Westar") and file this Joint Application for approval of their Annual Correction Adjustment (ACA) factors under their Retail Energy Cost Adjustment (RECA) clauses. In support of this Joint Application, Westar states:

1. Westar is a corporation duly incorporated under the laws of the State of Kansas and is engaged, among other matters, in the retail electric public utility business, as defined by K.S.A. 66-104, in legally designated areas within the state of Kansas. Westar holds certificates of convenience and authority issued by this Commission authorizing it to engage in such utility business.

2. The testimony of Rebecca Fowler and James Meitner is attached to this Joint Application. Ms. Fowler explains the calculations and assumptions underlying the requested ACA factor. Mr. Meitner addresses the assumptions and methodologies relied upon in making the 2017 energy cost forecast, including Westar's planning for fuel supply and generation resources and the supply side resources Westar currently has available to meet the needs of its customers.

3. In Docket No. 09-WSEE-925-RTS, the Commission approved a Stipulation and Agreement that result in the consolidation of the majority of Westar North's and Westar South's rates, including the RECAs and all other riders and surcharges. Thus, the ACA proposed in this

Application was calculated on a consolidated basis and will be applied to all customers in Westar's combined service territory.

4. There are several exhibits attached to Ms. Fowler's testimony and incorporated herein by reference. Exhibit A summarizes the actual energy costs incurred and all components of the RECA incurred by Westar during the ACA period beginning January 1, 2016, through December 31, 2016. Exhibit A also shows the over/under recovery of energy costs and the calculation of the ACA factors for the period January 1, 2016, through December 31, 2016, to be reflected in the Westar RECA commencing with the first billing cycle in April 2017. Because there was an under-recovery of costs, Westar's ACA is 0.1554 cents/kWh.

5. Exhibit B has the same information contained in Exhibit A by month for the 2016 ACA period. Exhibit C contains the forecasted RECA factor for each month of calendar year 2017. This forecast combines the results of the over/under recovery of energy costs, and the non-binding estimate of 2017 fuel and energy costs to arrive at monthly estimated RECA factors for Westar on a consolidated basis.

6. Some information contained in the exhibits to Ms. Fowler's testimony has not been publicly disclosed and, if disclosed, could place Westar at a significant competitive disadvantage in negotiating future fuel contracts. Therefore, a redacted version of Ms. Fowler's exhibits is also enclosed. Accordingly, Westar requests Exhibits A through C that are marked confidential be designated and treated as confidential in accordance with applicable Commission and statutory standards and practices.

7. Westar submits that the energy costs recovered through the RECA mechanism for the period January 1, 2016, through December 31, 2016, were reasonable and complied in all

respects with applicable standards established by the Commission in Docket No. 106,850-U (75-GIMC-009-GIG) and Docket No. 05-WSEE-981-RTS.

WHEREFORE, Westar requests that an ACA factor of 0.1554 cents/kWh for the period April 2017 through March 2018 be approved by the Commission.

Respectfully submitted,

Cathryn J. Dinges, #20848
Senior Corporate Counsel
818 S. Kansas Avenue
Topeka, KS 66612
(785) 575-8344; Telephone
(785) 575-8136; Fax

ATTORNEY FOR
WESTAR ENERGY, INC. AND
KANSAS GAS AND ELECTRIC COMPANY

VERIFICATION

STATE OF KANSAS)

)
) ss:
COUNTY OF SHAWNEE)

Cathryn J. Dinges, being duly sworn upon her oath deposes and says that she is one of the attorneys for Westar Energy, Inc. and Kansas Gas and Electric Company; that she is familiar with the foregoing **Joint Application**; and that the statements therein are true and correct to the best of her knowledge and belief.

Cathryn J. Dinges

SUBSCRIBED AND SWORN to before me this 20th day of March, 2017.

Notary Public

My Appointment Expires: 8/28/2020

Donna G. Quinn
NOTARY PUBLIC–STATE OF KANSAS
MY APPT EXP: 8/28/2020

BEFORE THE STATE CORPORATION COMMISSION

OF THE STATE OF KANSAS

DIRECT TESTIMONY

OF

REBECCA A. FOWLER

WESTAR ENERGY, INC.

DOCKET NO. 17-WSEE-____-ACA

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. Rebecca A. Fowler, 818 South Kansas Avenue, Topeka, Kansas 66612.

Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

A. Westar Energy, Inc. (Westar). I am a Senior Regulatory Analyst for Retail Rates.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE.

A. I graduated from Pittsburg State University with a Bachelor of Business Administration degree with a major in accounting. My utility experience began in 1990 when I was employed by Westar as an internal auditor. Subsequently, I held positions as a staff accountant, and as the lead accountant for financial reporting. I left the company in 1997 and resumed employment with the company in 2011 as an internal auditor. I assumed my current position as a regulatory analyst in July 2013. I am a Certified

Public Accountant, a Certified Management Accountant and a Certified Internal Auditor. I am also a member of the American Institute of Public Accountants and the Institute of Internal Auditors.

Q. PLEASE PROVIDE A GENERAL BACKGROUND OF THE FILING AND WHY IT IS BEING MADE AT THIS TIME.

A. On December 28, 2005, the Commission issued an order in Westar's rate proceeding, Docket No. 05-WSEE-981-RTS (981 Docket). The Commission approved implementation of a fuel clause for Westar's Kansas retail customers in the 981 Docket. The Retail Energy Cost Adjustment (RECA) tariff requires Westar to "true-up" the projected energy costs to actual energy costs annually.

Q. HAVE THERE BEEN MODIFICATIONS TO THE RECA FOLLOWING ITS IMPLEMENTATION IN THE 981 DOCKET?

A. Yes. First, in Docket No. 08-WSEE-1041-RTS (1041 Docket), Westar and others proposed changes to the periodic RECA calculations. The Commission approved the changes by adopting the Stipulation and Agreement that was executed by all of the parties. The changes to the RECA include: a) quarterly RECA billing factor calculations rather than monthly calculations; b) a comprehensive definition of fuel expense; c) a modification to the calculation of asset-based off system margins; and d) the inclusion of revenue received from our Renewable Energy Program Rider and the sale of Renewable Energy Credits offset to purchased power.

Next, in Docket No. 09-WSEE-925-RTS, the Commission approved a Stipulation and Agreement consolidating Westar North and Westar South rates. This consolidation also affected the calculation of RECA and other Riders and Surcharges as fully described in the Stipulation and Agreement filed in that docket. In summary, the RECA was calculated as a single system wide rate and applied to all requirements customers in Westar's service territory, beginning with the February 2010 billing month. Additionally, the RECA was amended by incorporating a portion of wholesale non-fuel revenue in the Annual Cost Adjustment (ACA) calculation and recognizing that certain wholesale customers may share in off system sales margins.

In Docket No. 10-WSEE-541-TAR, the RECA tariff language was changed but the changes had no effect on the RECA calculation.

In Docket No. 12-WSEE-112-RTS, the Wholesale Revenue (WR) incorporated in the RECA was adjusted to reflect the change in base rates in the 112 Docket.

In Docket No. 14-WSEE-208-TAR, the Commission approved changes to the RECA tariff including: a) changes to the RECA Factor calculation eliminating the Asset Based Margin Adjustment (ABMA) component and changing the Fuel Adjustment (FA) component to remove the projected cost to achieve asset-based sales ($ABSC_p$); b) changes to the Projected Annual Correction Adjustment Factor ($ACAF_p$) to remove the calculated actual cost to achieve asset-based sales during

the previous ACA year ($ABSC_A$); c) changes to the tariff in order to ensure that the definition of purchased power in the tariff would encompass anticipated expenses and revenues from the Southwest Power Pool (SPP) Integrated Marketplace as a result of Westar's participation in the operation of the Marketplace.

In Docket No. 15-WSEE-115-RTS, the Wholesale Revenue (WR) incorporated in the RECA was adjusted to reflect the change in base rates in the 115 Docket.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. My testimony supports Westar's request for an order approving its ACA factor. I will explain the calculations and assumptions underlying the requested ACA factor. James Meitner will describe Westar's supply side resources, plant performance, and fuel procurement in his testimony.

Q. **WHAT INFORMATION IS PROVIDED REGULARLY TO STAFF DURING THE ACA YEAR?**

A. Westar provides six items regularly to the Commission staff. They are: a) an annual non-binding forecast of RECA factors; b) actual gas purchases for the month prior to the current month on a monthly basis; c) actual power purchases and power sales for the month prior to the current month on a monthly basis; d) a brief variance analysis of the current quarterly projected fuel expense compared to the non-binding forecast on a

quarterly basis; and e) the current RECA billing factor. Additionally, the Electric Generating Statistics known, as the "GADS 5-Year Stats Book," is provided annually as a part of this filing as soon as the data is available.

Q. ARE THERE ANY EXHIBITS FILED WITH WESTAR'S ACA APPLICATION PREPARED BY YOU OR PREPARED UNDER YOUR DIRECT SUPERVISION?

A. Yes. There are three exhibits.

Q. PLEASE DESCRIBE THE EXHIBITS.

A. Exhibit A summarizes components of the RECA calculation incurred by Westar during the ACA period beginning January 1, 2016 through December 31, 2016 used to derive the 2016 Annual Correction Adjustment for Westar. Exhibit B illustrates the same information as Exhibit A but shows the individual monthly components for the ACA period calculations. Exhibit C is Westar's non-binding forecast estimate for 2017. According to the RECA tariff, the proposed ACA will become effective April 1, 2017. The data reflects the combination of the Westar North and Westar South calculations in accordance with the Order in the 925 Docket.

Q. DID WESTAR HAVE AN (OVER)/UNDER RECOVERY BALANCE AT THE END OF DECEMBER 2016?

A. Yes. The Under Recovery balance for the year ended December 2016 is $32,016,151. In summary, Westar incurred $ 438,602,763 of fuel expense and purchased power less certain offsets to provide electric service to

requirements customers. Westar recovered $410,418,134 of fuel expense during the same time period. The total 2016 fuel cost under-recovered balance plus the remaining under-recovered balance from the previous ACA year results in an ACA under-recovered balance for the year of $32,016,151 or an ACA factor of 0.1554 cents/kWh.

Q. PLEASE DESCRIBE THE FORECAST OF RECA FACTORS FOR THE UPCOMING CALENDAR YEAR OF 2017.

A. Exhibit C displays the forecasts of the RECA factor for each month and the four quarters of calendar year 2017. This forecast combines the results of the (over)/under recovery of energy costs and the non-binding estimate of 2017 fuel and energy costs to arrive at monthly estimated 2017 RECA factors. Exhibit C shows these factors ranging from a high of 2.4577 cents/kWh in November to a low of 1.8950 cents/kWh in February. Many factors can affect the estimated RECA charges.

Q. PLEASE GENERALLY DESCRIBE WESTAR'S ELECTRIC SYSTEM OPERATING CHARACTERISTICS.

A. Westar is a summer peaking utility. Table 1 below displays the actual Westar retail peak demands by month for the year 2016 along with the MWh sales made each month for retail customers only.

TABLE 1

Month	Peak-Mw	Percent of Peak Month	MWh Sales
January	2,851	62.3%	1,665,470
February	2,720	59.4%	1,481,614

March	2,418	52.8%	1,345,512
April	2,765	60.4%	1,310,025
May	3,156	69.0%	1,365,644
June	4,505	98.5%	1,711,282
July	4,576	100.0%	2,087,326
August	4,534	99.1%	2,059,957
September	4,090	89.4%	1,889,425
October	3,268	71.4%	1,540,620
November	2,746	60.0%	1,437,206
December	3,060	66.9%	1,603,987

As indicated, demands for the summer peak, (June through September) were within 10.6 percent of the system peak that occurred in July. Conversely, the peak demands in the eight-winter months were generally much lower than the peaks in the summer months. This affects fuel procurement and power plant operation. Westar must be prepared to meet high levels of demand for energy during the summer season. James Meitner describes Westar's supply side resources, plant performance, and fuel procurement in greater detail.

Q. ARE THE ACA ENERGY FACTORS DERIVED IN YOUR EXHIBITS REASONABLE FOR WESTAR'S KANSAS ELECTRIC CUSTOMERS?

A. Yes.

Q. THANK YOU.

BEFORE THE STATE CORPORATION COMMISSION

OF THE STATE OF KANSAS

DIRECT TESTIMONY

OF

JAMES P. MEITNER

WESTAR ENERGY, INC.

DOCKET NO. 17-WSEE-_____-ACA

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. James P. Meitner, 818 South Kansas Avenue, Topeka, Kansas 66612.

Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

A. Westar Energy, Inc. (Westar). I am the Director of Fuels & Day Ahead Planning.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE.

A. I graduated from Washburn University in 2004 with a BBA in Finance and Economics. I graduated from Baker University in 2009 with a Masters in Business Administration. I began my utility career with Westar Energy, Inc. in 2004. I have held several positions at Westar Energy, Inc., in generation and marketing including Trading, TCR Manager, and Manager of Real-Time Operations.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I will discuss the supply side resource (fuel supply and generation) planning process used by Westar. I will also compare the cost of resources for 2015 and 2016 and discuss how the SPP Integrated Market has impacted Westar's cost of serving our customers.

RESOURCE PLANNING

Q. PLEASE DISCUSS WESTAR'S PLANNING PROCESS FOR ACQUIRING THE FUEL AND PURCHASED POWER USED TO SUPPLY ELECTRICITY TO ITS CUSTOMERS.

A. Westar's fuel acquisition planning is performed using a three-step resource planning process. The steps in this process are the development of our:

- Long-term Supply Side Plan (LSP),
- An annual and five-year business plan, and
- Updates to the annual and five-year business plans as conditions change.

Q. PLEASE DESCRIBE THE FIRST STEP OF THE RESOURCE PLANNING PROCESS.

A. The first step is to develop a long-term strategy to meet the load requirements of our customers at the lowest reasonable cost consistent with reliable service. This planning process is used to meet the load requirements of our "native load," which is defined as our retail and wholesale requirements customers. Our resource planning process develops a list of future resources to serve Westar's total projected customer demand and energy usage at a reasonable cost. The resource

plan selected by Westar includes base load, intermediate, peaking, and intermittent resources. These resources use a mix of fuels including uranium, coal, natural gas, and renewable energy resources.

Q. HOW DOES THE SECOND STEP OF THE PLANNING PROCESS WORK?

A. In addition to long-range planning, Westar produces annual financial and operational plans, which are used to develop a five-year business forecast. This planning process includes load forecasting, detailed generation unit modeling, O&M and capital budget planning, and revenue forecasting. The generation unit modeling developed in this phase of the planning process is used as the primary source of information for the development of the fuel procurement plan.

Q. ARE THE ANNUAL AND FIVE-YEAR BUSINESS PLANS ADJUSTED TO REFLECT CHANGES IN THE BUSINESS ENVIRONMENT?

A. Yes. The annual and five-year business plans are refined as needed to take into account changes that have occurred since the plans were initially developed. Westar takes into account changes in such things as number of customers, state of the economy, fuel prices, purchased power prices, rail transportation status, and fuel availability or constraints. Westar adjusts its fuel procurement plans as refinements are made to the near-term forecasts.

Q. HAS THE IMPLEMENTATION OF THE SPP INTEGRATED MARKET CHANGED HOW YOU DETERMINE YOUR GENERATION AND FUEL REQUIREMENTS?

A. The long-range forecasting has not been impacted significantly. Our modeling process attempts to simulate the SPP integrated market by modeling the cost of our generating units against forecasted SPP market prices on an hour by hour basis when determining the requirement for Westar's generation. This process allows Westar to estimate our fuel requirements to meet expected SPP generation requirements based on the forecasted SPP market prices. This provides a sound estimate for our fuel requirements.

Q. IS THE SAME TRUE FOR WESTAR'S CAPACITY REQUIREMENT FORECASTS UNDER THE SPP INTEGRATED MARKET?

A. SPP Criteria requires Westar to maintain generation resources adequate to meet customers' forecast load requirements plus a 12% reserve margin. Westar still balances the capital cost of various resources and their relative fuel costs to determine the appropriate blend of generation sources and fuel types that will result in the least cost solution for our customers.

Q. HAS THE SPP INTEGRATED MARKET CHANGED HOW WESTAR OPERATES AND MANAGES ITS GENERATION FLEET ON A DAY TO DAY BASIS?

A. Yes, the SPP Integrated Market, much like MISO, ERCOT and PJM markets, requires Westar offer our units into the daily market to be available

to help meet total RTO demand and in turn, Westar purchases the generation requirements from the RTO necessary to meet our customers' load requirements. Based on the regional needs of generation, the SPP Integrated Market may require Westar to operate facilities we might not normally run to meet our customers' load obligation or require Westar to reduce generation at facilities we might otherwise operate at higher capacities had they been dispatched by Westar alone. These SPP operating and dispatching requirements are derived from a least cost generation modeling solution based on loads by area, available generation, transmission constraints, fuel prices, environmental constraints, wind generation availability and other power plant operating criteria.

COMPARISON OF COSTS FOR 2016 and 2015

Q. HOW DID THE COST OF GENERATION FOR 2016 COMPARE WITH THE COST OF GENERATION DURING 2015?

A. The system average generation cost per MWh of Westar-owned generation and State Line in 2016 was $18.15 per MWh compared to an average generation cost per MWh for 2015 of $18.09, a change of only less than 1%.

Q. WHY DID THE AVERAGE COST OF GENERATION REMAIN RELATIVELY CONSISTENT FROM 2015 TO 2016?

A.

A. The Henry Hub Natural Gas Spot Price for 2015 ranged from a monthly high of $2.99 per MMBtu to a monthly low of $1.86 per MMBtu. During 2016 the Henry Hub price for natural gas ranged from a monthly high of $3.56 per MMBtu to a monthly low of $1.69 per MMBtu. This is a notably lower level of pricing volatility compared to previous years.

Q. PLEASE DESCRIBE HOW THE SPP INTEGRATED MARKET PROVIDES VALUE TO YOUR CUSTOMERS?

A. The SPP Integrated Market provides Westar and other SPP member companies significant opportunities for either enhanced revenues or economic purchases from services such as Energy and Ancillary Services. A benefit of the SPP Integrated Market is the enhanced ability of the SPP to dispatch energy and ancillary services from the most economical resources of all SPP members on an hourly basis.

Q. HOW DOES THE SPP INTEGRATED MARKET CAPTURE THESE MARKET OPPORTUNITIES?

A. The SPP Integrated Market uses a sophisticated algorithm to determine on an hourly basis the most economical mix of generation required to meet the combined SPP load requirement. This algorithm considers many factors beyond the fuel cost of individual generation units. The algorithm calculates the all-in unit costs that include start-up costs, minimum run time, unit heat rates at various output levels, environmental constraints, transmission constraints, and many other factors. This calculation allows the SPP to determine the optimum blend of generation resources to meet SPP

members' load, regardless of the unit owner and to best utilize the transmission system to meet the load requirements of all member utilities. The results achieved by the SPP's modeling and dispatching capabilities utilizing all of the regions generating resources would not have been possible prior to the SPP Integrated Market.

Q. ARE THESE REVENUE STREAMS AND COST SAVINGS PASSED ON TO WESTAR'S CUSTOMERS

A. Yes. Our customers receive the benefits of the SPP dispatch savings and generating revenue offsets through the RECA .

Q. DO YOU HAVE ANY OTHER COMMENTS RELATED TO THE EFFICIENCY OF THE SPP DAY AHEAD MARKET?

A. Yes. An important point to consider is all SPP member utilities and generating companies are required to fully participate in the sale of generation and the purchase of load. Prior to the SPP Integrated Market, generation resources and utilities were not required to buy from or sell electricity to other SPP members. Under the SPP Integrated Market all SPP member companies are now required to offer and sell electricity from their generating units into the SPP Integrated Market, ensuring the most economical blend of resources are available to the SPP member utilities. Again, this would not be possible without the SPP Integrated Market.

EXISTING SUPPLY SIDE RESOURCES

Q. PLEASE DESCRIBE THE MAKEUP OF WESTAR'S SUPPLY-SIDE RESOURCES.

A. Table 1 below shows Westar's supply-side resources for supplying all our retail customers and wholesale obligations as of December 2016.

Table 1 - Westar's Generating Resources as of December 31, 2016

2016 Unit	Capacity Net MW	Actual Net Generation MWh	Energy Cost 2016 ($000) (1)	Average Cost/MWh	Fuel Type
Wolf Creek (2)	550	3,875,637	$ 26,779	$6.91	Nuclear
Jeffrey (2)	1,975	9,158,094	$ 180,324	$19.69	Coal
LaCygne (2)	692	3,999,812	$ 80,816	$20.20	Coal
Lawrence	474	2,461,626	$ 48,605	$19.75	Coal/Gas
Tecumseh	65	283,392	$ 6,613	$23.34	Coal/Gas
Emporia	645	333,957	$ 15,109	$45.24	Gas
Gordon Evans	815	334,831	$ 14,879	$44.44	Gas/Oil
Hutchinson	235	8,042	$ 901	$112.04	Gas/Oil
Murray Gill	190	75,912	$ 3,491	$45.99	Gas
Spring Creek	273	25,662	$ 1,037	$40.41	Gas
State Line PPA (3)	196	945,870	$ 19,407	$20.52	Gas
Wind Energy Owned (4)	149	421,710	$ -	$0.00	Wind
Total Generation	**6,259**	**21,924,545**	**$ 397,961**	**$18.15**	
Total	**6,259**	**21,924,545**	**$ 397,961**	**$18.15**	
2016 w/o purchase power		21,924,545	$ 397,961	$ 18.15	
2015 w/o purchase power		23,152,792	$ 418,840	$ 18.09	
Delta 2015-2016 w/o purchase power		(1,228,247)	$ (20,879)	$ 0.06	
				0.3%	

(1) Energy costs shown here are recorded in accounts 501/518/547
(2) Values listed are for Westar's share only
(3) State Line costs are recorded in account 555 on Westar Energy, Inc.'s books
(4) Wind Energy Capacity Net MW values are nameplate ratings
Westar Owned: 99 MW Central Plains and 50 MW Flat Ridge
Westar Wind PPAs and other renewables are not included in generation totals

As derived from Table 1, the nuclear powered unit (Wolf Creek) provided 17.68 percent of Westar's overall generation requirements during the 2016 calendar year with the associated energy cost comprising 6.73% of the

overall fuel cost. The coal fired units (Jeffrey, La Cygne, Lawrence and Tecumseh) provided 72.53% of Westar's overall generation requirements with the associated energy cost comprising 79.49% of the overall fuel cost. Natural gas fired units (Emporia, Gordon Evans, Hutchinson, Murray Gill, Spring Creek and State Line) provided 7.86% of Westar's overall generation requirements with the associated energy cost comprising 13.78% of the overall fuel cost. Wind energy owned by Westar provided 1.92% of Westar's overall generation with no associated fuel costs.

Q. HOW DOES WESTAR'S RESOURCE MAKEUP FOR 2016 COMPARE TO PREVIOUS YEARS?

A. Westar had a similar mix of resources in 2016 as it did in 2015.

Q. PLEASE DESCRIBE WESTAR'S SUPPLY-SIDE RESOURCES IN GREATER DETAIL.

A. Westar groups our resources into four main categories; base load, intermediate, peaking and intermittent (renewable). Westar's base load facilities are Wolf Creek and coal-fired generation. Historically, these units operated day in and day out, except for periods of maintenance. Although, these facilities still operate with the highest capacity factors, their percentage of supply has been eroded by other sources, namely renewable resources. Intermediate facilities typically operate fewer than 24 hours per day and will not be required during all months of the year. These intermediate facilities may run continuously for several days or weeks during peak periods. Peaking facilities typically operate under very high

demand conditions or during emergency situations. These peaking facilities will run only as required to meet the situations above and would not be expected to run continuously for any extended period of time. Intermittent (renewable) resources generate whenever the fuel source (e.g., wind) is available.

Q. PLEASE DESCRIBE WESTAR'S BASE LOAD FACILITIES.

A. Westar owns either all or a significant portion of five facilities that would be classified as base load facilities. These facilities are Wolf Creek, Jeffrey, La Cygne, Lawrence, and Tecumseh Energy Centers. I will describe each in detail.

Wolf Creek. Westar has a 47% ownership interest (550 MW) in the 1,171 MW single unit nuclear-fueled generation station. Wolf Creek is managed and operated by the Wolf Creek Nuclear Operating Company (WCNOC). Westar and the other owners have various employees who act as board and committee members for WCNOC. Wolf Creek was placed into commercial operation in 1985. Wolf Creek typically operates on an 18-month refueling cycle with the next refueling outage scheduled for Spring 2018. Wolf Creek is the lowest incremental dispatch cost unit in Westar's dispatchable fleet. Westar's 47% share of Wolf Creek's 2016 net output was 3,875,637 MWh.

Jeffrey Energy Center. Westar has an 84% ownership interest (1,803 MW) and is the operator of the 2,146 MW three-unit coal fueled Jeffrey Energy Center. Westar also controls an additional 8% (172 MW) of

the plant under a lease. That capacity is sold to the Mid-Kansas Electric Company, LLC through January 3, 2019. The three Jeffrey units were placed into commercial operation in 1978, 1980, and 1983. These units were designed to burn low sulfur coal from mines in the Powder River Basin (PRB). Westar's 92% share of Jeffrey Energy Center's 2016 net output was 9,158,094 MWh.

La Cygne Station. Westar owns or controls 50% (692 MW) of the 1,384 MW two-unit coal fired La Cygne facility. Kansas City Power & Light Company (KCPL) owns the other 50% of La Cygne and is the operator of the facility. Westar's share of La Cygne's 2016 net output was 3,999,812 MWh.

Lawrence Energy Center. Westar owns and operates both coal units located at the 474 MW Lawrence facility. These coal units were placed in commercial operation in 1960 and 1971. These units have the ability to burn a variety of types and blends of western coal depending on fuel availability, fuel cost, and transportation availability. The combined Lawrence units produced a net output of 2,461,626 MWh in 2016.

Tecumseh Energy Center. Westar owns and operates the single coal unit at the 65 MW Tecumseh facility. The coal unit was placed in commercial operation in 1957. Tecumseh Energy Center has the ability to burn a variety of types and blends of western coal depending on fuel availability, fuel costs, and transportation availability. The Tecumseh coal unit produced a net output of 283,392 MWh in 2016.

Q. PLEASE DESCRIBE WESTAR'S INTERMEDIATE AND PEAKING FACILITIES.

A. Westar owns seven facilities that are considered intermediate and/or peaking units and has purchase power agreements for both intermediate and peaking units. The facilities owned by Westar are Emporia, Gordon Evans, Hutchinson, Murray Gill and Spring Creek Energy Centers. I will describe each in detail. We also have purchase power agreements for an intermediate facility at the State Line Combined Cycle Facility, operated by The Empire District Electric Company, and several peaking facilities with various municipalities.

Emporia Energy Center. Westar owns and operates four natural gas fired aero-derivative combustion turbines and three natural gas fired peaking combustion turbines at the 645 MW Emporia Energy Center. Units 1 through 5 were placed in service in 2008 and units 6 & 7 were placed in service in 2009. The aero-derivative combustion turbines are designed to provide quick response to changes in system conditions. The remaining combustion turbine units are designed for longer duration run times such as during the summer and during winter peak hours and will provide value throughout the year. These units produced a net output of 333,957 MWh during 2016.

Gordon Evans Energy Center. Westar owns and operates two intermediate natural gas fired steam units and three peaking natural gas turbines at the 815 MW Gordon Evans facility. The intermediate natural gas

steam units have capacity ratings of 153 MW and 370 MW and were placed in service in 1961 and 1967 respectively. The natural gas fired combustion turbine units have capacity ratings of 73 MW, 71 MW, and 148 MW and were placed in service in 2000 and 2001. During emergency situations the combustion turbines have the ability to operate on #2 diesel fuel. These intermediate units produced 227,396 MWh in 2016. The peaking units produced 107,435 MWh in 2016.

Hutchinson Energy Center. Westar owns and operates three natural gas fired peaking combustion turbines, and one #2 diesel fuel only fired combustion turbine at the 235 MW facility Hutchinson facility. The combustion turbine peaking units have a capacity rating of 56 MW, 52 MW, 57 MW, and 70 MW and were placed in service in 1974, 1974, 1974, and 1975 respectively.

During emergency situations the combustion turbines have the ability to operate on #2 diesel fuel. The units produced 8,042 MWh in 2016.

Murray Gill Energy Center. Westar owns and operates two intermediate natural gas fired steam units at the 190 MW Murray Gill facility. The intermediate natural gas fired steam units have capacity ratings of 104 MW, and 86 MW and were placed in service in 1956 and 1959 respectively. These units produced 75,912 MWh in 2016.

Spring Creek Energy Center. Westar owns and operates four natural gas fired peaking combustion turbines at the 273 MW Spring Creek facility. These units were placed in service in 2001 and were purchased by Westar

in 2007. These units operate primarily during on-peak hours for high peak load days. They produced 25,662 MWh during 2016.

State Line Combined Cycle Facility. Westar's subsidiary, Westar Generating, Inc. (WGI), owns 196 MW or 40% of the intermediate combined cycle unit at the 492 MW State Line facility. WGI sells the entire output of its share of State Line to Westar under a cost-based FERC-approved rate. The State Line facility is a 2x1 facility consisting of two natural gas fired combustion turbines and one steam turbine. The facility has the ability to operate in 1x1 mode or 2x1 mode. Westar purchased 945,870 MWh from State Line in 2016.

Other Resources. Westar also contracts for the output of various other resources through purchase power agreements. These agreements are with various municipal resources or other production facilities.

Q. PLEASE DESCRIBE WESTAR'S RENEWABLE AND INTERMITTENT FACILITIES.

A. Westar owns Central Plains Wind Farm and 50% of Flat Ridge Wind farm. Both facilities began commercial operation early in 2009. These two owned locations generated 421,710 MWh during 2016. Westar also has entered into Purchase Power Agreements for 50 MW of the output for the other half of the Flat Ridge Wind Farm, 96 MW of the output from Meridian Way Wind Farm, 167.9 MW of the output from Ironwood Wind Farm, 201 MW of the output from Post Rock Wind Farm, 200 MW of the output from Kay County Wind Farm, 200 MW of the output from Cedar Bluff Wind Farm, 217 MW of

the output from Ninnescah Wind Farm, 103 MW of the output from Kingman 2 Wind Farm, and 6 MW from the Rolling Meadows Land Fill Gas facility. The combined output of these facilities purchased by Westar was 3,879,051 MWh in 2016.

COMMODITY STRATEGY

Q. HOW ARE LONG-TERM COMMODITY REQUIREMENTS DETERMINED?

A. Westar utilizes PLEXOS, a chronological dispatch model developed by Energy Exemplar, LLC to develop a least-cost dispatch solution for serving our customers' forecasted needs. Westar inputs various parameters into PLEXOS such as a weather normalized load forecast, fuel prices, power price forecasts, wind power forecasts, generating plant efficiencies and outages, and many other characteristics that allows the model to create a forecasted solution for the study period. This model is flexible enough to run study periods of a few days to several years We use this output to create our commodity transaction strategy and spread price risk across three general time periods. We define these time periods as long-term, mid-term and short-term, with the actual days, weeks, months or years depending on the commodity transacted.

Q. IS THE COMMODITY TRANSACTION STRATEGY THE SAME FOR ALL COMMODITIES ASSOCIATED WITH THE MODEL OUTPUT?

A. No. We take into consideration the variability of each commodity, which results in different strategies for each commodity. Wholesale electric energy and natural gas are fairly homogenous commodities. However, our exposure to these products differs greatly and requires different strategies for each. Coal is not a fungible product, with minor variations in sodium, ash content, metals and other parameters potentially having an adverse impact on plant operations. There is not one parameter that is the key, but rather how the various characteristics of the coal interact during the combustion process. This interaction can and typically does vary with each unit boiler.

Q. HOW DO YOU DEVELOP YOUR STRATEGY FOR WHOLESALE ENERGY TRANSACTIONS IN EXCESS OF YOUR SPP REQUIREMENTS?

A. The time frame for incremental wholesale energy transactions consists of beyond the prompt (or next) calendar quarter, prompt month through prompt quarter and the current month for the long, mid and short-term periods, respectively. We determine how much can be sold during each period and transact roughly one-third of the available quantities during each of the short, mid, and long term time frames. As market conditions move, load forecasts are revised, and as input commodity prices change, the resulting model output quantities will also change, making this a very dynamic process.

Q. PLEASE DESCRIBE HOW WESTAR ACQUIRES ITS NATURAL GAS REQUIREMENTS.

A. Westar's natural gas fired generation resources are located on the Southern Star Central Gas Pipeline (SSCGP), Kansas Gas Service intra-state pipeline (KGS), and ONEOK Gas Transportation, L.L.C., pipeline (OGT). Westar currently has about 153,500 MMBtu/day firm production zone capacity and 86,500 MMBtu/day market zone capacity on SSCGP. We do not have firm transport on KGS or OGT. If Westar had to run all of its natural gas fired capacity at once, its Maximum Daily Quantity (MDQ) would be about 594,000 MMBtu/Day. In the event of a natural gas shortage or other emergency event some of Westar's simple cycle gas turbines have the ability to operate on #2 diesel. Westar procures physical natural gas on both a long-term (monthly) basis and short-term basis (daily). Typically these physical purchases are from suppliers such as Sequent Energy Management, Tenaska Gas Storage, Macquarie Energy, KOCH Energy Services, or Atmos Energy Marketing.

Q. HOW DOES WESTAR PROCURE THE NATURAL GAS NECESSARY TO MEET YOUR CUSTOMERS NEEDS?

A. Westar has, over the past several years, purchased physical natural gas for a portion of our summer peak demand. Purchasing is done in the months preceding the summer for deliveries in July and August. We generally purchase approximately one third of our forecasted burns for the expected base needs for the summer months.

Q. HOW DO YOU DEVELOP YOUR STRATEGY FOR COAL TRANSACTIONS?

A. We use a much longer time horizon for coal supply than we use for energy, gas, or other such homogenous commodities. The long, short, and mid-term periods are greater than five years, two to five years and less than two years, respectively.

Q. PLEASE DESCRIBE THE CONTRACTUAL ARRANGEMENTS THAT PROVIDE COAL FOR YOUR FACILITIES.

A. Jeffrey Energy Center receives coal under a long-term agreement. This agreement has two components, the Tier I and the Tier II coal pricing and quantity provisions. The price of both Tier I and II are adjusted quarterly based on several government indices in accordance with the formulas described in the contract. The base price for Tier I was established in 1993 when the contract was renegotiated. The base price for Tier II is adjusted every five years in accordance with the prevailing market price of coal and in accordance with the terms and procedures established in the contract. The Tier II coal base price effective for years 2013 through 2017 was determined in October 2012. Approximately four and a half million tons was delivered under the Tier I component of the contract during 2016. Tons in excess of this amount are provided under the Tier II component.

Lawrence and Tecumseh Energy Center coal is provided under a mid-term length contract that provides 100% of the coal requirement through 2017. Coal contracts for these facilities are entered into based on

either an RFP process with the contract awarded to the lowest bidder meeting the coal quality and quantity requirements for the two plants or under negotiations resulting in a price which is lower than the market price at the time of negotiations. All three Westar operated coal facilities burn low sulfur PRB coal produced in Wyoming.

La Cygne is operated by KCPL and all of the coal requirements are procured by KCPL's fuel department. La Cygne I burns approximately 85-90% PRB low sulfur coal and 10-15% local coal. La Cygne II burns 100% PRB low sulfur coal.

Q. PLEASE DESCRIBE THE FREIGHT CONTRACTS GOVERNING THE DELIVERY OF COAL INTO WESTAR'S COAL FIRED FACILITIES.

A. Coal for Jeffrey Energy Center originates at the Eagle Butte Mine in Wyoming. From the mine, the coal is hauled by the BNSF Railway Company (BNSF) to Northport, Nebraska. There the coal is transferred to the Union Pacific Railway Company (UP) for final delivery to Jeffrey Energy Center. The current rail contracts with BNSF and UP to serve JEC were made effective January 1, 2014 and will expire December 31, 2020. The contract prices are subject to monthly adjustments for diesel fuel based on a mileage calculation and are also adjusted quarterly based on the All Inclusive Index – Less Fuel (all-LF). This index is a composite of rail-related expenses including labor, depreciation, material and supplies and other expenses. It is calculated by the American Association of Railroads (AAR) and is approved by the Surface Transportation Board.

Coal for Lawrence Energy Center and Tecumseh Energy Center originates at the Black Thunder Mine in Wyoming on the BNSF and is delivered by the BNSF to the Lawrence Energy Center and Tecumseh Energy Center. The current rail contract with BNSF to serve LEC and TEC was made effective January 1, 2014 and will expire December 31, 2020**.** The contract prices are subject to monthly adjustments for diesel fuel based on a mileage calculation and are also adjusted quarterly based on the All Inclusive Index – Less Fuel (all-LF). This index is a composite of rail-related expenses including labor, depreciation, material and supplies and other expenses. It is calculated by the American Association of Railroads (AAR) and is approved by the Surface Transportation Board.

Q. DO THE COAL FIRED FACILITIES MANAGED BY WESTAR HAVE COMPETITIVE OPTIONS FOR COAL DELIVERY?

A. No. Coal for the Jeffrey Energy Center originates only on the BNSF and the Jeffrey Energy Center is served only by the UP so there is currently no other option for the rail delivery of coal into Jeffrey Energy Center. Lawrence Energy Center and Tecumseh Energy Center are served only by the BNSF. Retrofitting existing generating facilities to provide access to both railroads and thereby provide competitive access would be very expensive with uncertain results.

Q. WHY DID WESTAR INCUR A LIQUIDATED DAMAGES CHARGE ON THE RAIL CONTRACT WITH BNSF FOR JEFFERY ENERGY CENTER IN 2016?

A. There were several factors, occurring at the same time, which caused Westar to deliver less coal to the Jeffery Energy Center than was contractually obligated in 2016. Westar forecasts fuel needs in October of the preceding year to comply with nomination requirements on the coal contracts. For 2016, a 7.7 million ton delivery need was forecasted and subsequently nominated to BNSF. During the first half of 2016, natural gas prices fell significantly and wind generation production increased causing coal fired facilities to be dispatched at a lower level in the SPP Integrated Market. This reduction in dispatch at Jeffery caused issues with absorbing the surplus coal on the coal pile at Jeffery. Westar was forced to reduce train sets during this period of time and failed to meet the 7.7 million tons nomination over the course of 2016.

Q. PLEASE DESCRIBE WESTAR'S FLEET OF RAILCARS USED TO DELIVER COAL.

A. During 2016, Westar had the ability to operate as many as fourteen train sets to serve our coal fired facilities. As many as nine train sets are available to serve Jeffrey Energy Center. Lawrence and Tecumseh Energy Centers are typically served by as many as five train sets.

Q. DOES WESTAR LEASE ALL OF ITS TRAIN SETS?

A. No. Westar both owns and leases railcars. For those leased railcars, there are several different leases of varying term durations. This diversity enables us to adjust our fleet to match the delivery requirements given the economic conditions, coal burn requirements and railroad performance.

Q. DID WESTAR MAKE ANY CHANGES TO ITS FLEET OF RAILCARS DURING 2016?

A. No. Westar has made no changes in the number of railcar sets we have available to operate for our coal facilities during 2016.

Q. THANK YOU.

WESTAR ENERGY, INC.
RETAIL ENERGY COST ADJUSTMENT REPORT
Energy Cost Adjustment Calculation

Docket No. 17-WSEE-____-ACA
Exhbit A

ANNUAL CORRECTION ADJUSTMENT

Annual Correction Factor for the ACA Year Ending **Dec-16**

	(a)	(b)	(c)	(d)	(e)	(f)
	Annual Correction Adjustment Factor			**Cost**	**kWh**	**¢/kWh**
1	Actual Fuel Costs		F_A =			

	Fuel	**Actual Costs**
2	Coal	
3	Oil	
4	Gas	
5	Nuclear Fuel	
6	Other Fuel Costs in Acct 501 and 547	
7	Subtotal Fuel Costs	
8	Uncollected Fuel for Previous Month	
9	Uncollected Fuel for Current Month	
10	Subtotal Uncollected Fuel	
11	**Total Fuel Costs**	

12	Actual Purchased Power Energy Costs	P_A =			
13	Actual Emission Cost/Revenue	E_A =			
14	Actual Cost to Achieve to Non - Requirements Customers	$NRCA_A$ =			
15	GFR Non-Fuel Delta	WR_A =			
16	Actual Fuel Revenues Collected for ACA Year	FAR_A =			
17	Actual ACA balance from the previous ACA year (Over)/Under Recovery	$ACAB_A$ =			
18	**Total (F_A+P_A+E_A-$NRCA_A$-FARA+/-WR)+ACAB**		$ 32,016,151		
19	kWhs delivered to all Requirement Customers during the billing year			**SA =** 20,607,694,325	**kWh**
20	Projected Annual Correction Adjustment Factor				

$$ACAF_P = \frac{(F_A+P_A+E_A-NRCA_A-FAR_A+/-WR)+ACAB}{.01 \times S_A} =$$

0.1554 **¢/kWh**

WESTAR ENERGY, INC.
2016 Actual RECA Monthly Update

Docket No. 17-WSEE-____-ACA
Exhibit B
Page 1 of 1

Line #		January 2016	February 2016	March 2016	April 2016	May 2016	June 2016	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016	YTD 2016
1	F_A Component of the RECA Tariff - Fuel Costs													
2														
3	Coal													
4	Oil													
5	Gas													
6	Nuclear													
7	Other Fuel Costs													
8	Subtotal for Fuel Costs													
9														
10	Uncollected for Previous Month													
11	Uncollected for Current Month													
12	Subtotal for Uncollected Fuel													
13														
14	**Total Fuel Costs F_A Component (line 8 + line 12)**													
15														
16	P_A Component of the RECA Tariff - Purchased Power Costs													
17														
18	Purchased Power													
19	Equalization													
20	Gain/Loss on Sales of Renewable Energy Credits													
21	Renewable Energy Revenues													
22														
23	**Total Fuel Costs P_A Component (+ line 18 + line 19 + line 20 + line 21)**													
24														
25	E_A Component of the RECA Tariff - Emission Allowances													
26														
27	**Total Emission Cost/(Revenue) - E_A Component**													
28														
29	NRC_A Component of the RECA Tariff - Cost to Achieve Non-Requirements													
30														
31	**Total Cost to Achieve to Non-Requirements Customers - $NRCA_A$ Component**													
32														
33	WR Component Wholesale Non-fuel in Base Rates vs. 2016 Actual													
34														
35	Demand Difference													
36	VOM Difference													
37														
38	**Total Wholesale Non-Fuel Difference - WR Component (line 35 + Line 36)**													
39														
40	**Total Costs (line 14 + line 23 + line 27 - line 31 - line 38)**													
41														
42	FAR_A Component of the RECA Tariff - Acutal Fuel Adjustment Revenues													
43														
44	Wholesale Customer Fuel Revenues (GFR)													
45	Retail Fuel Revenues													
46														
47	**Total F_A Fuel Adjustment Revenues (line 48 + line 49 + line 50)**													
48														
49	**RECA (Over)/Under Recovery for 2016 (line 40 - line 47)**													
50														
51	**Actual ACA Recovery from Prior Year**													
52														
53	S_A Component of the RECA Tariff - Company's Requirements Customers kWhs													
54														
55	**kWhs delivered to Company's Requirements Customers**													
56														
57	**RECA Factor for 2016 before ACA (line 40/line 55) - ¢/kWh**	2.1056	2.2492	2.0262	2.0340	1.8200	2.1730	1.9896	2.1628	2.3260	2.4642	2.2863	1.8426	2.1283

WESTAR ENERGY, INC.
RETAIL ENERGY COST ADJUSTMENT
NON-BINDING FORECAST 2017

Docket No. 17-WSEE-____-ACA
Exhibit C
RECA

	Estimated Energy Cost Forecasted for the Year	**2017**	(c) **WESTAR January**	(e) **WESTAR February**	(f) **WESTAR March**	(g) **WESTAR April**	(h) **WESTAR May**	(i) **WESTAR June**	(j) **WESTAR July**	(k) **WESTAR August**	(l) **WESTAR September**	(m) **WESTAR October**	(n) **WESTAR November**	(o) **WESTAR December**	
	(a)	(b)													
	Fuel Adjustment Factor														
1	Projected Fuel Costs (line 2 + line 3 + line 4 + line 5)	**F_P =**													
	Fuel														
2	Coal														
3	Oil														
4	Gas														
5	Nuclear														
6	Projected Purchased Power Energy Costs	**P_P =**													
7	Projected Emission Allowance Costs/Revenue	**E_P =**													
8	Projected Cost to Achieve Sales Non-Requirements Customers	**$NRCA_P$ =**													
9	Totals (Lines 1+6+7-8-9)	**F_P+P_P,E_P-NRCA_P =**													
10	Projected kWhs to be delivered to all Requirements Customers during billing month	**S_P = kWh**													
11	Projected Energy Cost Factor	**$\frac{F_P+P_P+E_P-NRCA_P}{0.01 \times S_P}$ =**													**¢/kWh**
12	Annual Correction Factor	**$ACAF_P$ =**													**¢/kWh**
13	**Westar RECA Factor - Fuel Adjustment Factor (line 11 + line 12)**	**FA =**													**¢/kWh**

Note: Please note this non-binding estimate is on a monthly basis. A quarterly non-binding estimate is shown on the next tab.

Estimated Energy Cost Forecasted for the Year **2017**

(a) (b) (c) (e) (f) (g)

			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
	Fuel Adjustment Factor						
1	Projected Fuel Costs (line 2 + line 3 + line 4 + line 5)	**F_P =**					
	Fuel						
2	Coal						
3	Oil						
4	Gas						
5	Nuclear						
6	Projected Purchased Power Energy Costs	**P_P =**					
7	Projected Emission Allowance Costs/Revenue	**E_P =**					
8	Projected Cost to Achieve Sales Non-Requirements Customers	**$NRCA_P$ =**					
9	Totals (Lines 1+6+7-8-9)	**$F_P+P_{P+}E_P-NRCA_P$ =**					
10	Projected kWhs to be delivered to all Requirements Customers during billing month	**S_P = kWh**					
11	Projected Energy Cost Factor	**$F_P+P_P+E_P-NRCA_P$ = 0.01 x S_P**					**¢/kWh**
12	Annual Correction Factor	**$ACAF_P$ =**					**¢/kWh**
13	**Westar RECA Factor - Fuel Adjustment Factor (line 11 + line 12)**	**FA =**					**¢/kWh**