#### 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	)	Docket No. 15-WSEE-421-ACA
Annual Energy Cost Correction	)	
Adjustment Factor	)	

#### **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 Jerry D. Kroeker is attached to this Joint Application. Ms. Fowler explains the calculations and assumptions underlying the requested ACA factor. She also describes the calculation of asset-based margins following the procedures agreed upon in the Stipulation and Agreement in Docket No. 08-WSEE-1041-RTS and the Stipulation and Agreement in Docket No. 09-WSEE-925-RTS. Mr. Kroeker addresses the assumptions and methodologies relied upon in making the 2015 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, 2014, through December 31, 2014. Exhibit A also shows the over/under recovery of energy costs and the calculation of the ACA factors for the period January 1, 2014, through December 31, 2014, to be reflected in the Westar RECA commencing with the first billing cycle in April 2015. Because there was an over-recovery of costs, Westar's ACA is (0.1586) cents/kWh.
- 5. Exhibit B has the same information contained in Exhibit A by month for the 2014 ACA period. Exhibit B includes a summary of the asset-based margins credited to customers through the RECA.
- 6. Exhibit C contains the forecasted RECA factor for each month of calendar year 2015. This forecast combines the results of the over/under recovery of energy costs, and the non-binding estimate of 2015 fuel and energy costs to arrive at monthly estimated RECA factor for Westar on a consolidated basis.
- 7. 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.

8. Westar submits that the energy costs recovered through the RECA mechanism for

the period January 1, 2014, through December 31, 2014, 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 (0.1586) cents/kWh for the period

April 2015 through March 2016 be approved by the Commission.

Respectfully submitted,

Cathryn J. Dinges, #20848 Senior Corporate Counsel

818 South Kansas Avenue

Topeka, Kansas 66612

Telephone: (785) 575-8344 Fax: (785) 575-8136

Fax: (/85) 5/5-8136

ATTORNEY FOR

WESTAR ENERGY, INC. AND

#### 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 18th day of March, 2015.

Debbielee A.
Papps
NOTARY PUBLIC -- STATE OF KANSAS
MY APPT EXP: 6 - 21 - 2017

Debousiell, Papps.
Notary Public

My Appointment Expires: June 26,2017

#### OF THE STATE OF KANSAS

\_\_\_\_\_

#### DIRECT TESTIMONY

OF

### JERRY D. KROEKER WESTAR ENERGY, INC.

DOCKET NO. 15-WSEE\_\_\_\_ACA

- 1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 2 A. Jerry D. Kroeker, 818 South Kansas Avenue, Topeka, Kansas 66612.
- 3 Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?
- 4 A. Westar Energy, Inc. (Westar). I am the Executive Director, Fossil Fuels.
- 5 Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
  6 BUSINESS EXPERIENCE.
- A. I graduated from Wichita State University in 1974 with a B.S. degree in economics. I began my electric utility career in 1974 with Kansas Gas and Electric Company. I have held several positions at Kansas Gas and Electric Company and Westar Energy Inc., including positions in accounting, regulatory, risk management, and bulk power marketing, before becoming Director, Coal Fuel Services in 2006 and during 2012, Executive Director, Fossil Fuels.
  - 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 2013 and 2014 and discuss how the new 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 and purchased power 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.
- 16 Q. PLEASE DESCRIBE THE FIRST STEP OF THE RESOURCE PLANNING
   17 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 conducts 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 and purchased power 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 delays, and coal availability. 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?

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

A.

The long-range forecasting has not been impacted significantly, but the dayto-day operations have experienced some change. The SPP integrated market requires that Westar purchase enough energy to serve our entire load from the market and offer to sell our generation output into the market. 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. However, there is some uncertainty with the day-to-day operations. For example, the natural gas trading day closes at 9:00 am, but Westar does not receive their unit commitment obligations from the SPP integrated marketplace until after 4:00 pm. This timing disconnect is an issue for most market participants and one we must actively manage.

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

A. The SPP Criteria for capacity margin has not changed as a result of the integrated marketplace. SPP Criteria requires that Westar maintain generation resources adequate to meet our customers load requirements

plus a 12% capacity margin. This criteria is under review at the SPP and could change in the future. 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.

#### **COMPARISON OF COSTS FOR 2014 AND 2013**

7 Q. HOW DID THE COST OF GENERATION FOR 2014 COMPARE WITH THE COST OF GENERATION DURING 2013?

1

2

3

4

5

6

8

19

- 9 Α. The average cost per MWh of Westar-owned generation and State Line in 10 2014 was \$19.93 per MWh compared to a similar average cost per MWh 11 for 2013 of \$20.12, a decrease of approximately 0.9%.
- 12 Q. PLEASE DESCRIBE THE CALCULATION OF THE \$20.12/MWH 13 **AVERAGE COST OF FUEL FOR 2013.**
- 14 Α. The cost of generation per MWh calculation for Westar-owned generation 15 and State Line during 2013 is as follows: The total energy produced at 16 Westar-owned generation and State Line was 26,258,770 MWh and the 17 total related costs for that generation was \$528,234,000 for a Westar 18 generation system average cost of \$20.12 per MWh.
  - WHY DID THE AVERAGE COST OF GENERATION DECREASE FROM Q. 2013 TO 2014?
- 21 Α. There were two significant events that resulted in the decreased average 22 cost of generation. First, Wolf Creek – our lowest fuel price facility – 23 produced a greater number of MWh's in 2014 than in 2013. Second, the

to \$6.79 per MWh in 2014 for a decrease of approximately 13.6%. There was also a decrease in the total energy produced by our gas generation fleet, which was a direct impact of the SPP integrated market.

### Q. WHAT CAUSED THE PRICE OF NUCLEAR FUEL TO DECREASE BETWEEN 2013 AND 2014?

A. The Department of Energy was ordered by the courts to discontinue collecting the nuclear waste disposal fee of approximately \$0.09 per MMBtu. This fee has been a part of the cost of electricity generated at Wolf Creek Nuclear Generating Station since it began producing electricity in 1983.

## Q. WHY DID YOU PROVIDE THIS COMPARISON RATHER THAN USING THE TOTAL FUEL AND PURCHASED POWER CALCULATION LIKE YOU DID LAST YEAR?

A. Prior to the March 1, 2014 effective date for the SPP integrated market, Westar's combined cost of fuel and purchased power was a meaningful and appropriate comparison between yearly data. With the implementation of the SPP Integrated Market, Westar now sells our generation into the market and purchase 100% of our customers' load requirements from the market. This makes the comparison of purchased power expense prior to the SPP integrated market and purchased power expense subsequent to the SPP integrated market an inappropriate measurement of costs.

# Q. ARE THERE OTHER DIFFERENCES DUE TO THE SPP INTEGRATED MARKET THAT IMPACTED WESTAR'S NET COST OF PURCHASED POWER?

Α.

A. Yes. The SPP Integrated Market provides Westar and other SPP member companies' significant opportunities for enhanced revenue streams from services such as Spinning Reserves, Transmission Congestion Rights, and other Ancillary Services. An additional benefit of the SPP Integrated Market is the enhanced ability of the SPP to dispatch energy from the most economical units of all SPP members on an hourly basis.

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

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 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.

### 1 Q. DO YOU HAVE ANY OTHER COMMENTS RELATED TO THE 2 EFFICIENCY OF THE SPP DAY AHEAD MARKET?

A. Yes. An important point to consider is that 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 or 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, buy, and sell electricity from their generating units into the market, ensuring that the most economical blend of resources are available to the SPP member utilities. Again, this would not be possible without the SPP Integrated Market.

### Q. DID THE BNSF RAIL TRANSPORTATION ISSUES DURING 2014 HAVE AN IMPACT ON WESTAR'S COAL DELIVERIES?

- A. Yes. Westar was under a BNSF set count limitation at Lawrence and Tecumseh Energy Centers from early February through mid-April, approximately two and a half months. Jeffrey Energy Center was also under a BNSF set count limitation from early April through mid-January of 2015, approximately nine months.
- Q. DID WESTAR INITIATE ANY CHANGES TO THEIR SPP GENERATION
  OFFERS THAT WOULD RESULT IN COAL CONSERVATION DUE TO
  THESE BNSF SET COUNT LIMITATIONS?
- A. No. Westar did not limit the offers of our coal plants into the SPP Integrated

  Market due to reduced inventories. Westar neither increased the offer price

1	nor limited the capacity available of our coal units into the market due to
2	reduced coal inventories.

3

4

5

6

7

8

9

10

11

12

13

14

15

19

20

21

22

23

#### Q. WHAT MEASURES DID WESTAR TAKE TO MINIMIZE THE IMPACT OF THE REDUCED COAL DELIVERIES AT YOUR FACILITIES?

- Α. Westar was able to reschedule outage dates at various facilities to minimize the effect of set count limitations on our coal inventories. Westar was also able to postpone certain outages that involved track work at our generating facilities that would have further limited coal deliveries into our facilities. Westar maintained regular communications with the BNSF, keeping them apprised of the inventory situations at our facilities and the performance of the train sets operating in Jeffrey, Lawrence and Tecumseh Energy Centers.
- Q. DID WESTAR TAKE ANY OTHER MEASURES WHEN YOU BECAME AWARE THERE MIGHT BE PERFORMANCE ISSUES ON THE BNSF RAILROAD?
- 16 A. Yes. We recognized early in 2014 that there might be problems with BNSF 17 train availability and we were able to grow the Jeffrey Energy Center's 18 inventory by approximately 560,000 tons during the January through April 2014 time period. This is approximately 17 days of inventory and these extra days of inventory helped minimize any negative impacts from the BNSF train set limitations at Jeffrey Energy Center.
  - Q. IS WESTAR STILL UNDER A BNSF SET COUNT LIMITATION AT ANY OF YOUR COAL FACILITIES?

1 A. No. Westar is currently able to operate all of our available sets to deliver coal to our coal fired facilities.

#### **EXISTING SUPPLY SIDE RESOURCES**

4 Q. PLEASE DESCRIBE THE MAKEUP OF WESTAR'S SUPPLY-SIDE 5 RESOURCES.

3

A. Table 1 below shows Westar's supply-side resources for supplying all our retail customers and wholesale obligations as of December 2014.

Table 1 – Westar's Generating Resources as of December 31, 2014

	Capacity	Actual Net	Energy		
2014	Net	Generation	Cost 2014	Average	Fuel
Unit	MW	MWh	(\$000) <sup>(1)</sup>	Cost / MWh	Туре
Wolf Creek (2)	547	4,022,443	\$ 27,322	\$6.79	Nuclear
Jeffrey (2)	1,983	10,536,525	\$ 211,684	\$20.09	Coal
La Cygne (2)	709	3,956,516	\$ 86,894	\$21.96	Coal
Lawrence	530	3,673,824	\$ 67,097	\$18.26	Coal/Gas
Tecumseh	202	1,328,608	\$ 25,055	\$18.86	Coal/Gas
Emporia	646	271,565	\$ 21,583	\$79.48	Gas
Gordon Evans	806	340,487	\$ 25,444	\$74.73	Gas/Oil
Hutchinson	407	46,797	\$ 4,922	\$105.18	Gas/Oil
Murray Gill	268	89,345	\$ 9,099	\$101.84	Gas
Spring Creek	271	23,383	\$ 2,002	\$85.62	Gas
State Line PPA	201	608,350	\$ 23,662	\$38.90	Gas
Wind Energy Owned (3)	149	425,661		\$0.00	Wind
Total Generation	6,719	25,323,504	\$ 504,764	\$19.93	

- (1) Energy costs shown here are recorded in accounts 501/518/547
- (2) Values listed are for Westar's share only.
- (3) Wind Energy Capacity Net MW values are nameplate ratings:

Westar Owned: 99 MW Central Plains and 50 MW Flat Ridge

Westar PPA: Wind - 50 MW Flat Ridge, 96 MW Meridian Way, 167.9 MW Ironwood,

201 MW Post Rock. Other - Rolling Meadows waste gas 6 MW

PPA wind & renewable energy is recorded in account 5550000.

State Line purchases are reflected on a separate line.

As indicated in Table 1, the nuclear powered unit (Wolf Creek) provided 15.9 percent of Westar's overall generation requirements during the 2014 calendar year with the associated energy cost comprising 5.4 percent of the overall fuel cost. The coal fired units (Jeffrey, La Cygne, Lawrence and Tecumseh) provided 77 percent of Westar's overall generation requirements with the associated energy cost comprising 77.4 percent of the overall fuel cost. Natural gas fired units (Emporia, Gordon Evans, Hutchinson, Murray Gill, Spring Creek and State Line) provided 5.5 percent of Westar's overall generation requirements with the associated energy cost comprising 5.5 percent of the overall fuel cost. Wind energy owned by Westar provided 1.7 percent of Westar's overall generation with no associated fuel costs.

### Q. HOW DOES WESTAR'S RESOURCE MAKEUP FOR 2014 COMPARE TO PREVIOUS YEARS?

A. Westar had a similar mix of resources in 2014 as it did in 2013.

- 16 Q. PLEASE DESCRIBE WESTAR'S SUPPLY-SIDE RESOURCES IN
  17 GREATER DETAIL.
  - A. We group our resources into four main categories; base load, intermediate, peaking and intermittent (renewable). Base load facilities are those that operate day in and day out, except for periods of maintenance. 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 I just described 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 (547 MW) in the 1,164 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 operates on an 18-month refueling cycle and had a refueling outage during the spring of 2014. Wolf Creek is the lowest incremental dispatch cost unit in Westar's dispatchable fleet. Westar's 47% share of Wolf Creek's 2014 output was 4,022,443 MWh.

Jeffrey Energy Center. Westar has an 84% ownership interest (1,810 MW) and is the operator of the 2,155 MW three-unit coal fueled

Jeffrey Energy Center. Westar also controls an additional 8% (173 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 2014 output was 10,536,525 MWh.

La Cygne Station. Westar owns or controls 50 percent (709 MW) of the 1,418 MW two-unit coal fired La Cygne facility. Kansas City Power & Light Company (KCPL) owns the other 50 percent of La Cygne and is the operator of the facility. Westar's share of La Cygne's 2014 output was 3,956,516 MWh.

Lawrence Energy Center. Westar owns and operates all three coal units located at the 530 MW Lawrence facility. These coal units were placed in commercial operation in 1954, 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 3,673,824 MWh in 2014.

Tecumseh Energy Center. Westar owns and operates two coal units at the 202 MW Tecumseh facility. The coal units were placed in commercial operation in 1957 and 1962. They have the ability to burn a variety of types and blends of western coal depending on fuel availability, fuel costs, and

transportation availability. The combined Tecumseh coal units produced 1,328,608 MWh in 2014.

Α.

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

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 646 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 on peak hours and will provide value throughout the year. These units produced 271,565 MWh during 2014.

Gordon Evans Energy Center. Westar owns and operates two intermediate natural gas fired steam units and three peaking natural gas

turbines at the 808 MW Gordon Evans facility. The intermediate natural gas steam units have capacity ratings of 152 MW and 372 MW and were placed in service in 1961 and 1967 respectively. The natural gas fired combustion turbine units have capacity ratings of 68 MW, 66 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 263,039 MWh in 2014. The peaking units produced 77,448 MWh in 2014.

Hutchinson Energy Center. Westar owns and operates one intermediate natural gas fired steam unit, three natural gas fired peaking combustion turbines, and one #2 diesel fuel only fired combustion turbine at the 407 MW Hutchinson facility. The intermediate natural gas fired steam unit with a capacity rating of 171 MW was placed in service in 1965. The combustion turbine peaking units have a capacity rating of 56 MW, 52 MW, 57 MW, and 71 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 intermediate unit produced 33,908 MWh in 2014. The peaking units produced 12,889 MWh in 2014.

Murray Gill Energy Center. Westar owns and operates four intermediate natural gas fired steam units at the 268 MW Murray Gill facility. The intermediate natural gas fired steam units have capacity ratings of 37 MW, 48 MW, 93 MW, and 90 MW and were placed in service in 1952, 1954,

1956, and 1959 respectively. These units produced 89,345 MWh in 2014. The two oldest and smallest Murray Gill Energy Center units were retired effective January 1, 2015.

Spring Creek Energy Center. Westar owns and operates four natural gas fired peaking combustion turbines at the 271 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 23,383 MWh during 2014.

State Line Combined Cycle Facility. Westar's subsidiary, Westar Generating, Inc. (WGI), owns 201 MW or 40% of the intermediate combined cycle unit at the 502 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 608,350 MWh from State Line in 2014.

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 425,661 MWh (1.4% of Westar's total generation MWh) in 2014. Westar has also entered into Purchased Power Agreements for 50 MW of the output of Flat Ridge Wind Farm, for 96 MW of the output of Meridian Way Wind Farm, for 167.9 MW of the output of Ironwood Wind Farm, for 201 MW of the output of Post Rock Wind Farm and for 6 MW from the Rolling Meadows Land Fill Gas facility. The combined output of these facilities purchased by Westar was 1,968,083 MWh (7.8% of Westar's total generation MWh) in 2014.

Α.

#### Q. HAS THE SPP INTEGRATED MARKET HAD ANY OTHER IMPACTS ON HOW WESTAR OPERATES ITS UNITS?

Yes. The SPP dispatch instructions required Westar to initiate more unit starts in 2014 than during 2013. Most of the fuel costs associated with the increased unit starts is recovered as a start-up fee associated with the cold start of a unit and any remaining costs are recovered through the price paid to utilities through the SPP market price paid to generators.

#### **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, uranium prices, coal prices, commodity prices for energy, natural gas, #2 diesel fuel, 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. For study periods that involve several months to years, the model creates a monthly output that shows the projected MWh generation and projected fuel usage for each generation unit and suggested wholesale transactions. 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.

Α.

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

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.

## 1 Q. HOW DO YOU DEVELOP YOUR STRATEGY FOR WHOLESALE 2 ENERGY TRANSACTIONS IN EXCESS OF YOUR SPP 3 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 623,000 MMBtu/Day (594,000 MMBtu/Day without Murray Gill 1 and 2). 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 begins purchasing physical natural gas for our summer peak demand period in the late winter when prices begin dropping for deliveries in July and August and continues purchasing natural gas through May until we have secured a block of natural gas equivalent to our expected base needs for the summer. This provides price diversity for customers.

### 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 midterm periods are greater than five years, two to five years and less than two years, respectively. Prior to entering into a supply contract for a coal source that is unproven in that specific power plant(s), the coal would need to be tested in the boiler(s) to ensure the coal will not have adverse impacts on the power plant's operations.

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

Α.

Jeffrey Energy Center receives coal under a long-term agreement. This agreement has two components, the Tier I and the Tier II coal 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 then current 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 2014. 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 provided 100% of the coal requirement for 2014. 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 that result in a price that 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. PLEASE DESCRIBE WESTAR'S FLEET OF RAILCARS USED TO DELIVER COAL.

A. During 2014, 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. Jeffrey Energy Center train length is 123 car trains, and 135 car train sets serve Lawrence and Tecumseh Energy Centers.

## Q. DID WESTAR MAKE ANY CHANGES TO ITS FLEET OF RAILCARS DURING 2014?

A. No. Westar has made no changes in the number of railcar sets we operate for our coal facilities during 2014. A contract for approximately 306 railcars was renewed with the original Lessor following an RFP process that ensured Westar captured the lowest lease rate for those railcars.

### Q. HOW DOES WESTAR DETERMINE THE APPROPRIATE NUMBER OF RAIL CAR SETS TO RETAIN?

A. Westar closely monitors railroad performance and the movements of our train sets to ensure we have adequate train set capacity in service to deliver the coal requirements of our power plants. Westar determines the appropriate number of train sets necessary to serve our coal facilities based on railroad performance and any changes in railroad cycle times that include weather related interruptions, rail congestion, and demand for other railroad transportation services.

#### 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 with varying durations. This diversity enables us to adjust our fleet to match the delivery requirements given the economic conditions and railroad performance.

#### Q. THANK YOU.

### OF THE STATE OF KANSAS

\_\_\_\_\_

#### DIRECT TESTIMONY

OF

### REBECCA A. FOWLER WESTAR ENERGY, INC.

\_\_\_\_\_

#### DOCKET NO. 15-WSEE-\_\_\_-ACA

- 1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- 2 A. Rebecca A. Fowler, 818 South Kansas Avenue, Topeka, Kansas 66612.
- 3 Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?
- 4 A. Westar Energy, Inc. (Westar). I am a Regulatory Analyst for Retail Rates.
- 5 Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
- 6 **BUSINESS EXPERIENCE**.

14

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

- 1 Internal Auditor. I am also a member of the American Institute of Public
- 2 Accountants and the Institute of Internal Auditors.

#### 3 Q. PLEASE PROVIDE A GENERAL BACKGROUND OF THE FILING AND

- 4 WHY IT IS BEING MADE AT THIS TIME.
- 5 A. On December 28, 2005, the Commission issued an order in Westar's rate
- 6 proceeding, Docket No. 05-WSEE-981-RTS (981 Docket). The
- 7 Commission approved implementation of a fuel clause for Westar's
- 8 Kansas retail customers in the 981 Docket. The Retail Energy Cost
- 9 Adjustment (RECA) tariff requires Westar to "true-up" the projected energy
- 10 costs to actual energy costs annually.

#### 11 Q. HAVE THERE BEEN MODIFICATIONS TO THE RECA FOLLOWING

- 12 **ITS IMPLEMENTATION IN THE 981 DOCKET?**
- 13 A. Yes. First, in Docket No. 08-WSEE-1041-RTS (1041 Docket), Westar and
- 14 others proposed changes to the periodic RECA calculations. The
- 15 Commission approved the changes by adopting the Stipulation and
- Agreement that was executed by all of the parties. The changes to the
- 17 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
- 21 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.

Lastly, 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<sub>p</sub>); b) changes to the Projected Annual Correction Adjustment Factor (ACAF<sub>p</sub>) to remove the calculated actual cost to achieve asset-based sales during

the previous ACA year (ABSC<sub>A</sub>); 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.

### 6 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS 7 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. Jerry Kroeker will describe Westar's supply side resources, plant performance, and fuel procurement in his testimony.

### 12 Q. WHAT INFORMATION IS PROVIDED REGULARLY TO STAFF DURING 13 THE ACA YEAR?

14

15

16

17

18

19

20

21

Α.

Westar provides five 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) a brief variance analysis of the current quarterly projected fuel expense compared to the non-binding forecast on a quarterly basis; and d) the current RECA billing factor. Additionally, the <u>Electric Generating Statistics</u> known, as the "GADS 5-Year Stats Book," is provided annually as a part of this filing as soon as the data is available.

- 1 Q. ARE THERE ANY EXHIBITS FILED WITH WESTAR'S ACA
- 2 APPLICATION PREPARED BY YOU OR PREPARED UNDER YOUR
- 3 **DIRECT SUPERVISION?**
- 4 A. Yes. There are three exhibits.
- 5 Q. PLEASE DESCRIBE THE EXHIBITS.
- 6 Α. Exhibit A summarizes components of the RECA calculation incurred by 7 Westar during the ACA period beginning January 1, 2014 through 8 December 31, 2014 used to derive the 2014 Annual Correction 9 Adjustment for Westar. Exhibit B illustrates the same information as 10 Exhibit A but shows the individual monthly components for the ACA period 11 calculations. Exhibit C is Westar's non-binding forecast estimate for 12 2015. According to the RECA tariff, the proposed ACA will become 13 effective April 1, 2015. The data reflects the combination of the Westar 14 North and Westar South calculations in accordance with the Order in the 15 925 Docket.

## 16 Q. DID WESTAR HAVE AN (OVER)/UNDER RECOVERY BALANCE AT 17 THE END OF DECEMBER 2014?

Yes. The Over Recovery balance for the year ended December 2014 is \$38,183,894. In summary, Westar incurred \$479,249,231 of fuel expense and purchased power less certain offsets to provide electric service to requirements customers. This amount is further reduced by asset based margins from January and February 2014 of \$6,960,849. Westar recovered \$510,472,276 of fuel expense during the same time period.

- The total 2014 fuel cost over-recovered balance plus the remaining balance from the previous ACA year results in an ACA balance for the vear of \$33,555,318 or an ACA factor of (0.1586) cents/kWh.
- 4 Q. DOES EXHIBIT B CONTAIN THE ASSET-BASED MARGINS EARNED
  5 BY WESTAR AND CREDITED TO KANSAS REQUIREMENTS
  6 CUSTOMERS?
- 7 A. Yes. Exhibit B, line 57 displays the actual retail margins earned from asset-based system sales in January and February in the amount of \$6,960,849. Westar Energy's total earned margins for January and February were \$7,457,569. The difference between the two amounts represents the wholesale customers' share of off-system sales margins
- 13 Q. PLEASE DESCRIBE THE FORECAST OF RECA FACTORS FOR THE
  14 UPCOMING CALENDAR YEAR OF 2015.

per FERC Docket ER09-1762-000.

- A. Exhibit C displays the forecasts of the RECA factor for each month and the four quarters of calendar year 2015. This forecast combines the results of the (over)/under recovery of energy costs and the non-binding estimate of 2015 fuel and energy costs to arrive at monthly estimated 2015 RECA factors. Exhibit C shows these factors ranging from a high of 2.6092 cents/kWh in March to a low of 1.8305 cents/kWh in December. Many factors can affect the estimated RECA charges.
- Q. PLEASE GENERALLY DESCRIBE WESTAR'S ELECTRIC SYSTEM
   OPERATING CHARACTERISTICS.

1 A. Westar is a summer peaking utility. Table 1 below displays the actual
2 Westar peak demands by month for the year 2014 along with the MWh
3 sales made each month for retail customers only.

4 TABLE 1

Month	Peak-Mw	Percent of Peak Month	MWh Sales
January	3,151	68.0%	1,755,755
February	3,127	67.5%	1,603,999
March	3,060	66.1%	1,515,264
April	2,514	54.3%	1,376,762
May	3,623	78.2%	1,426,130
June	4,147	89.5%	1,770,926
July	4,545	98.1%	1,911,083
August	4,632	100%	1,903,908
September	4,283	92.5%	1,934,195
October	3,385	73.1%	1,492,277
November	2,885	62.3%	1,453,564
December	2,921	63.1%	1,667,531

As indicated, demands for the summer peak, (June through September) were within 11.5 percent of the system peak that occurred in August. 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

- 1 meet high levels of demand for energy during the summer season. Jerry
- 2 Kroeker describes Westar's supply side resources, plant performance,
- and fuel procurement in greater detail.
- 4 Q. ARE THE ACA ENERGY FACTORS DERIVED IN YOUR EXHIBITS
- 5 REASONABLE FOR WESTAR'S KANSAS ELECTRIC CUSTOMERS?
- 6 A. Yes.
- 7 Q. THANK YOU.

Docket No. 15-WSEE-\_\_\_-ACA Exhbit A Page 1 of 1

#### ANNUAL CORRECTION ADJUSTMENT

Annual Correction Factor for the ACA Year Ending	YE 2014			
(a) (b)  Annual Correction Adjustment Factor  1 Actual Fuel Costs  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	(c) F <sub>A</sub> =	(d) Cost	(e) kWh	(f) <b>¢/kWh</b>
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 <sub>A</sub> =			
13 Actual Emission Cost/Revenue	E <sub>A</sub> =			
14 Actual Cost to Achieve to Non - Requirements Customers	NRCA <sub>A</sub> =			
15 GFR Non-Fuel Delta	WR <sub>A</sub> =			
16 Actual Cost to Achieve Asset-Based Sales	ABSC <sub>A</sub> =			
17 Actual Fuel Revenues Collected for ACA Year	FAR <sub>A</sub> =			
18 Actual ACA (Over) Remaining from the previous ACA year	ACAB <sub>A</sub> =			
19 Total $(F_A+P_{A+}ABMA_A+E_A-NRCA_A-ABSC_A-FAR_A)_+ACAB_A) =$		\$ (26,594,469)		
20 kWhs delivered to all Requirement Customers during the billing year		SA =	21,150,915,758 <b>kWh</b>	
21 Projected Annual Correction Adjustment Factor $ACAF_{P} = \frac{(F_{A}+P_{A}+ABMA_{A}+E_{A}-NRCA_{A}-ABSC)}{.01 x S_{A}}$	$S_A$ -FAR $_A$ +/-WR $_A$ )+ACAB $_A$ =	(0.125	<u>57)</u> ¢/kWh	
22 ABM Earned During the Current Year		\$ (6,960,849)		
23 ABMA <sub>A</sub> Factor	ABMA <sub>A</sub> =	(0.032	<u>¢/</u> kWh	
24 FA-ABMA = (Over)/Under Recovery from 2014 and prior		\$ (33,555,318)		
25 RECA ACA Proposed Factor beginning 4/15	RECA <sub>P</sub> =	(0.158	<u>66)</u> ¢/kWh	

Docket No. 15 - WSEE -\_\_\_-ACA
Exhbit B
Page 1 of 1

Line #	January 2014	February 2014	March 2014	April 2014	May 2014	June 2014	July 2014	August 2014	September 2014	October 2014	November 2014	December 2014	YTD 2014
1 F <sub>A</sub> 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													
10 Uncollected for Previous Month 11 Uncollected for Current Month 12 Subtotal for Uncollected Fuel 13													
14 Total Fuel Costs F <sub>A</sub> Component (line 8 + line 12)													
<ul><li>15</li><li>16 P<sub>A</sub> Component of the RECA Tariff - Purchase Power Costs</li></ul>													
<ul> <li>17</li> <li>18 Purchased Power</li> <li>19 Equalization</li> <li>20 Gain/Loss on Sales of Renewable Energy Credits</li> <li>21 Renewable Energy Revenues</li> </ul>													
22 23 Total Fuel Costs P <sub>A</sub> Component (+ line 18 + line 19 + line 20 +	+ line 21)												
24 25 E <sub>A</sub> Component of the RECA Tariff - Emission Allowances													
26 27 Emission Allowances													
28 29 NRC <sub>A</sub> Component of the RECA Tariff - Cost to Achieve Non-Requ	uirements												
30 31 Cost to Achieve Non-Requirements													
32 33 ABSC <sub>A</sub> Component of the RECA Tariff - Cost to Achieve Asset-Ba	ased Sales												
34 35 Cost to Achieve Asset-Based Sales 36													
37 WR Component Wholesale Non-fuel in 2007 Base Rates vs. Actu 38	ual												
39 Demand Difference 40 VOM Difference													
41 42 Total Wholesale Non-Fuel Difference (line 39 + Line 40)													
43 44 Total F <sub>A</sub> Fuel Adjustment Costs (line 14 + line 23 + line 27 - li	ine 31 - line 35 - line 42)												
45 46 FAR <sub>A</sub> Component of the RECA Tariff - Acutal Fuel Adjustment Re	evenues												
47 48 Wholesale Customer Fuel Revenues (FAC) 49 Wholesale Customer Fuel Revenues (GFR) 50 Retail Fuel Revenues													
51 52 Total F <sub>A</sub> Fuel Adjustment Revenues (line 48 + line 49 + line 50	0)												
53 54 Net FA Component of the RECA Tariff (line 44 - line 52)													
55 56 ABM <sub>A</sub> Component of the RECA Tariff - Asset-Based Margins													
57 58 Asset-Based Margins for Retail													
59 60 RECA (Over)/Under Recovery (line 54 + line 58)													
61 62 ACAB <sub>A</sub> - Actual ACA Recovery from Prior Year													
63 64 S <sub>A</sub> Component of the RECA Tariff - Company's Requirements Cu	ustomers kWhs												
65 66 kWhs delivered to Company's Requirements Customers													
67 68 Energy Cost Factor 69 ABMA Factor 70 RECA Factor	2.13 (0.16 1.97	(0.22	70) 0.00	0.000	0.0000	2.1227 0.0000 2.1227	2.1065 0.0000 2.1065	2.3307 0.0000 2.3307		2.1053 0.0000 2.1053	1.9264 0.0000 1.9264	2.2808 0.0000 2.2808	2.2659 (0.0329) 2.2330

Docket No. 15 -WSEE- \_\_\_\_-ACA Exhbit C RECA Page 1 of 2

mated Energy Cost Forecasted for the Year (a)  Adjustment Factor	<b>2015</b> (b)	(c) WESTAR January	(e) WESTAR February	(f) WESTAR March	(g) WESTAR April	(h) <b>WESTAR</b> <b>May</b>	(i) WESTAR June	(j) WESTAR July	(k) WESTAR August	(I) WESTAR September	(m) WESTAR October	(n) WESTAR November	\ [
ojected Fuel Costs (line 2 + line 3 + line 4 + line 5)	F <sub>P</sub> =												
uel pal il as uclear													
ojected Purchased Power Energy Costs	P <sub>P</sub> =												
rojected Emission Allowance Costs/Revenue	E <sub>P</sub> =												
ojected Cost to Achieve Sales Non-Requirements Cus	tomei NRCA <sub>P</sub> =												
otals (Lines 1+6+7-8-9)	$F_P + P_{P+}E_P - NRCA_P =$												
Projected kWhs to be delivered to all Requirements  Customers during billing month	$S_P = kWh$												
Projected Energy Cost Factor	$\frac{F_P + P_P + E_P - NRCA_P =}{0.01 \times S_P}$												
Annual Correction Factor	ACAF <sub>P</sub> =												
Fuel Adjustment Factor (line 12 + line 13)	FA =												
WESTAR RECA Factor (line 14 + line 15)	RECA =												

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

Docket No. 15 - WSEE -\_\_\_-ACA Exhbit C RECA Page 2 of 2

Estimated Energy Cost Forecasted for the Year (a)	<b>2015</b> (b)	(c)	(e)	(f)	(g)
Fuel Adjustment Factor		First Quarter	Second Quarter	Third Quarter	Fourth Quarter
1 Projected Fuel Costs (line 2 + line 3 + line 4 + line 5)	F <sub>P</sub> =				
Fuel 2 Coal 3 Oil 4 Gas 5 Nuclear					
6 Projected Purchased Power Energy Costs	P <sub>P</sub> =				
7 Projected Emission Allowance Costs/Revenue	E <sub>P</sub> =				
8 Projected Cost to Achieve Sales Non-Requirements Custo	omers NRCA <sub>P</sub> =				
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	$\frac{F_P + P_P + E_P - NRCA_P =}{0.01 \times S_P}$				¢/k
12 Annual Correction Factor	ACAF <sub>P</sub> =				¢/k
13 Fuel Adjustment Factor (line 12 + line 13)	FA =				¢/k
14 WESTAR RECA Factor (line 14 + line 15)	RECA =				¢/k