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) Do	ocket No. 16-WSEE421-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 Grant Wilkerson is attached to this Joint Application. Ms. Fowler explains the calculations and assumptions underlying the requested ACA factor. Mr. Wilkerson addresses the assumptions and methodologies relied upon in making the 2016 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, 2015, through December 31, 2015. Exhibit A also shows the over/under recovery of energy costs and the calculation of the ACA factors for the period January 1, 2015, through December 31, 2015, to be reflected in the Westar RECA commencing with the first billing cycle in April 2016. Because there was an over-recovery of costs, Westar's ACA is (.0597) cents/kWh.
- 5. Exhibit B has the same information contained in Exhibit A by month for the 2015 ACA period. Exhibit C contains the forecasted RECA factor for each month of calendar year 2016. This forecast combines the results of the over/under recovery of energy costs, and the non-binding estimate of 2016 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, 2015, through December 31, 2015, 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 (.0597) cents/kWh for the period April 2016 through March 2017 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 Wth day of March, 2016.

Notary Public

My Appointment Expires: 8/28/2015

Donna G. Quinn
NOTARY PUBLIC - STATE OF KANSAS
MY APPT EXP \$ 28 20 6

OF THE STATE OF KANSAS

DIRECT TESTIMONY

OF

REBECCA A. FOWLER WESTAR ENERGY, INC.

DOCKET NO. 16-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 Senior Regulatory Analyst for Retail
- 5 Rates.
- 6 Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
- 7 **BUSINESS EXPERIENCE.**
- 8 A. I graduated from Pittsburg State University with a Bachelor of Business
- 9 Administration degree with a major in accounting. My utility experience
- began in 1990 when I was employed by Westar as an internal auditor.
- 11 Subsequently, I held positions as a staff accountant, and as the lead
- 12 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.
- 4 Q. PLEASE PROVIDE A GENERAL BACKGROUND OF THE FILING AND
 5 WHY IT IS BEING MADE AT THIS TIME.
- 6 Α. On December 28, 2005, the Commission issued an order in Westar's rate 7 proceeding. Docket No. 05-WSEE-981-RTS (981 Docket). 8 Commission approved implementation of a fuel clause for Westar's 9 Kansas retail customers in the 981 Docket. The Retail Energy Cost 10 Adjustment (RECA) tariff requires Westar to "true-up" the projected energy 11 costs to actual energy costs annually.
- 12 Q. HAVE THERE BEEN MODIFICATIONS TO THE RECA FOLLOWING
 13 ITS IMPLEMENTATION IN THE 981 DOCKET?
- 14 Α. Yes. First, in Docket No. 08-WSEE-1041-RTS (1041 Docket), Westar and 15 others proposed changes to the periodic RECA calculations. The 16 Commission approved the changes by adopting the Stipulation and 17 Agreement that was executed by all of the parties. The changes to the 18 RECA include: a) quarterly RECA billing factor calculations rather than 19 monthly calculations; b) a comprehensive definition of fuel expense; c) a 20 modification to the calculation of asset-based off system margins; and d) 21 the inclusion of revenue received from our Renewable Energy Program 22 Rider and the sale of Renewable Energy Credits offset to purchased 23 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.

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10 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS 11 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. Grant Wilkerson 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?

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 Electric Generating Statistics

- 1 known, as the "GADS 5-Year Stats Book," is provided annually as a part
- 2 of this filing as soon as the data is available.
- 3 Q. ARE THERE ANY EXHIBITS FILED WITH WESTAR'S ACA
- 4 APPLICATION PREPARED BY YOU OR PREPARED UNDER YOUR
- 5 **DIRECT SUPERVISION?**
- 6 A. Yes. There are three exhibits.
- 7 Q. PLEASE DESCRIBE THE EXHIBITS.
- 8 A. Exhibit A summarizes components of the RECA calculation incurred by
- 9 Westar during the ACA period beginning January 1, 2015 through
- 10 December 31, 2015 used to derive the 2015 Annual Correction
- 11 Adjustment for Westar. Exhibit B illustrates the same information as
- 12 Exhibit A but shows the individual monthly components for the ACA period
- 13 calculations. Exhibit C is Westar's non-binding forecast estimate for
- 14 2016. According to the RECA tariff, the proposed ACA will become
- effective April 1, 2016. The data reflects the combination of the Westar
- 16 North and Westar South calculations in accordance with the Order in the
- 17 925 Docket.
- 18 Q. DID WESTAR HAVE AN (OVER)/UNDER RECOVERY BALANCE AT
- 19 THE END OF DECEMBER 2014?
- 20 A. Yes. The Over Recovery balance for the year ended December 2015 is
- 21 \$675,145. In summary, Westar incurred \$ 420,788,780 of fuel expense
- 22 and purchased power less certain offsets to provide electric service to
- 23 requirements customers. Westar recovered \$421,463,925 of fuel

expense during the same time period. The total 2015 fuel cost overrecovered balance plus the remaining over-recovered balance from the previous ACA year results in an ACA over-recovered balance for the year of \$12,252,003 or an ACA factor of (0.0597) cents/kWh.

Q. PLEASE DESCRIBE THE FORECAST OF RECA FACTORS FOR THE UPCOMING CALENDAR YEAR OF 2016.

A. Exhibit C displays the forecasts of the RECA factor for each month and the four quarters of calendar year 2016. This forecast combines the results of the (over)/under recovery of energy costs and the non-binding estimate of 2016 fuel and energy costs to arrive at monthly estimated 2016 RECA factors. Exhibit C shows these factors ranging from a high of 2.3745 cents/kWh in October to a low of 1.8437 cents/kWh in January. Many factors can affect the estimated RECA charges.

14 Q. PLEASE GENERALLY DESCRIBE WESTAR'S ELECTRIC SYSTEM 15 OPERATING CHARACTERISTICS.

A. Westar is a summer peaking utility. Table 1 below displays the actual Westar peak demands by month for the year 2015 along with the MWh sales made each month for retail customers only.

19 **TABLE 1**

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Month	Peak-Mw	Percent of Peak Month	MWh Sales
January	3,114	68.3%	1,697,866
February	2,937	64.4%	1,506,436
March	2,815	61.7%	1,491,301

April	2,665	58.4%	1,329,890
May	2,963	65.0%	1,381,556
June	4,309	94.4%	1,649,449
July	4,560	100.0%	2,002,156
August	4,221	92.6%	2,019,974
September	4,096	89.8%	1,875,312
October	3,093	67.8%	1,524,183
November	3,197	70.1%	1,390,041
December	2,766	60.7%	1,582,309

As indicated, demands for the summer peak, (June through September) were within 10.2 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. Grant Wilkerson 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?

11 A. Yes.

Q. THANK YOU.

OF THE STATE OF KANSAS

DIRECT TESTIMONY

OF

GRANT WILKERSON

WESTAR ENERGY, INC.

DOCKET NO.

- 1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- A. Grant Wilkerson, 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 Director of Marketing Structure and Compliance.
- Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
 BUSINESS EXPERIENCE.
- A. I graduated from Kansas State University in 1988 with a B.S. degree in mechanical engineering. I began my utility career with Kansas Power & Light Gas Service in 1988. I have held several positions in Westar Energy, Inc., including positions in engineering, division operations, and generation and marketing.
- 13 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 2014 and 2015 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?
- 9 A. Westar's fuel acquisition planning is performed using a three-step resource
 10 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

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- Updates to the annual and five-year business plans as conditions
 change.
 - Q. PLEASE DESCRIBE THE FIRST STEP OF THE RESOURCE PLANNING PROCESS.
- 17 A. The first step is to develop a long-term strategy to meet the load
 18 requirements of our customers at the lowest reasonable cost consistent with
 19 reliable service. This planning process is used to meet the load
 20 requirements of our "native load," which is defined as our retail and
 21 wholesale requirements customers. Our resource planning process
 22 develops a list of future resources to serve Westar's total projected
 23 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. 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. 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?

Yes, the SPP Integrated Market, much like MISO, ERCOT and PJM markets, requires that 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 or require Westar to reduce generation at facilities that 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.

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COMPARISON OF COSTS FOR 2015 and 2014

- Q. HOW DID THE COST OF GENERATION FOR 2015 COMPARE WITH THE COST OF GENERATION DURING 2014?
- A. The system average generation cost per MWh of Westar-owned generation and State Line in 2015 was \$18.09 per MWh compared to an average generation cost per MWh for 2014 of \$19.93, a decrease of approximately 9.2%.

Q. WHY DID THE AVERAGE COST OF GENERATION DECREASE FROM 2014 TO 2015?

A. The primary driver of the reduction in average generation cost was the reduced price of natural gas during 2015 vs 2014. The average monthly Henry Hub Natural Gas Spot Price for 2014 was \$4.39 per Million Btu (MMBtu), ranging from a monthly high of \$6.00 per MMBtu to a monthly low of \$3.48 per MMBtu. During 2015 the same average monthly Henry Hub price for natural gas was \$2.63 per MMBtu, ranging from a monthly high of \$2.99 per MMBtu to a monthly low of \$1.93 per MMBtu.

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 member's 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

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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?

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 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 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.

EXISTING SUPPLY SIDE RESOURCES

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

4 A. Table 1 below shows Westar's supply-side resources for supplying all our retail customers and wholesale obligations as of December 2015.

Table 1 – Westar's Generating Resources as of December 31, 2015

	Capacity	Actual Net	Energy		
2015	Net	Generation	Cost 2015	Average	Fuel
Unit	MW	MWh	(\$000) (1)	Cost/MWh	Туре
Wolf Creek (2)	549	4,056,184	\$ 27,274	\$6.72	Nuclear
Jeffrey (2)	1,983	10,479,988	\$ 204,810	\$19.54	Coal
LaCygne (2)	696	3,475,044	\$ 71,882	\$20.69	Coal
Lawrence	474	2,382,764	\$ 46,704	\$19.60	Coal/Gas
Tecumseh	72	1,014,583	\$ 19,791	\$19.51	Coal/Gas
Emporia	648	251,239	\$ 13,728	\$54.64	Gas
Gordon Evans	814	283,695	\$ 14,618	\$51.53	Gas/Oil
Hutchinson	236	30,561	\$ 2,223	\$72.74	Gas/Oil
Murray Gill	194	35,273	\$ 2,093	\$59.34	Gas
Spring Creek	271	10,624	\$ 483	\$45.46	Gas
State Line PPA (3)	193	690,492	\$ 15,234	\$22.06	Gas
Wind Energy Owned (4)	149	442,345	\$ -	\$0.00	Wind
Total Generation	6,277	23,152,792	\$ 418,840	\$18.09	N.A.

⁽¹⁾ Energy costs shown here are recorded in accounts 501/518/547

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

Westar Wind PPAs and other renewable PPAs are not included in generation totals.

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As derived from Table 1, the nuclear powered unit (Wolf Creek) provided

17.5 percent of Westar's overall generation requirements during the 2015

⁽²⁾ Values listed are for Westar's share only.

⁽³⁾ State Line costs are recorded in account 547

⁽⁴⁾ Wind Energy Capacity Net MW values are nameplate ratings

calendar year with the associated energy cost comprising 6.5 percent of the overall fuel cost. The coal fired units (Jeffrey, La Cygne, Lawrence and Tecumseh) provided 75.0 percent of Westar's overall generation requirements with the associated energy cost comprising 81.9 percent of the overall fuel cost. Natural gas fired units (Emporia, Gordon Evans, Hutchinson, Murray Gill, Spring Creek and State Line) provided 5.6 percent of Westar's overall generation requirements with the associated energy cost comprising 11.6 percent of the overall fuel cost. Wind energy owned by Westar provided 1.9 percent of Westar's overall generation with no associated fuel costs.

Q. HOW DOES WESTAR'S RESOURCE MAKEUP FOR 2015 COMPARE TO PREVIOUS YEARS?

A. Westar had a similar mix of resources in 2015 as it did in 2014.

Q. PLEASE DESCRIBE WESTAR'S SUPPLY-SIDE RESOURCES IN 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 (549 MW) in the 1,168 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 Fall 2016. Wolf Creek is the lowest incremental dispatch cost unit in Westar's dispatchable fleet. Westar's 47% share of Wolf Creek's 2015 output was 4,056,184 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 2015 output was 10,479,988 MWh.

La Cygne Station. Westar owns or controls 50 percent (696 MW) of the 1,392 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 2015 output was 3,475,044 MWh.

Lawrence Energy Center. Westar owns and operates both coal units located at the 474 MW (530 MW, 3 Unit facility prior to Unit 3 retirement effective 11/20/2015) 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 2,382,764 MWh in 2015.

Tecumseh Energy Center. Westar owns and operates the single coal unit at the 72 MW (202 MW, 2 unit facility prior to Unit 8 retirement effective 11/19/2015) 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 1,014,583 MWh in 2015.

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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 648 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 251,239, MWh during 2015.

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

turbines at the 814 MW Gordon Evans facility. The intermediate natural gas steam units have capacity ratings of 152 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 210,889 MWh in 2015. The peaking units produced 72,806 MWh in 2015.

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 236 MW facility (412 MW prior to the retirement of the Unit 4 intermediate steam unit effective 11/21/2015) Hutchinson facility. The retired intermediate natural gas fired steam unit with a capacity rating of 176 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 24,080 MWh in 2015 and the peaking units produced 6,481 MWh in 2015.

Murray Gill Energy Center. Westar owns and operates two intermediate natural gas fired steam units at the 194 MW Murray Gill facility. The intermediate natural gas fired steam units have capacity ratings of 104 MW, and 90 MW and were placed in service in 1956 and 1959 respectively.

These units produced 35,273 MWh in 2015. The two oldest and smallest Murray Gill Energy Center units (37MW and 48 MW originally placed in service 1952 and 1954 respectively) were retired effective January 1, 2015 with no generation during 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 10,624 MWh during 2015.

State Line Combined Cycle Facility. Westar's subsidiary, Westar

State Line Combined Cycle Facility. Westar's subsidiary, Westar Generating, Inc. (WGI), owns 193 MW or 40% of the intermediate combined cycle unit at the 483 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 690,492 MWh from State Line in 2015.

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 442,345 MWh during 2015. Westar also has entered into Purchase Power Agreements for 50 MW of the output for the other half of the Flat Ridge Wind Farm, for 96 MW of the output of Meridian Way Wind Farm, for 167.9 MW of the output from Ironwood Wind Farm, for 201 MW output of Post Rock Wind Farm, for 200 MW of the Kay County Wind Farm, for 200 MW of the Cedar Bluff Wind Farm, and for 6 MW from the Rolling Meadows Land Fill Gas facility. The combined output of these facilities purchased by Westar was 2,059,733 MWhs in 2015.

Q. PLEASE SUMMARIZE THE GENERATING UNITS WESTAR RETIRED DURING 2015?

A. During the calendar year 2015 Westar retired Lawrence Energy Center Unit 3, a 1954 vintage 48 MW coal fired facility, Tecumseh Energy Center Unit 8, a vintage 1962 130 MW coal fired facility and Hutchinson Energy Center Unit 4, a vintage 1965 176 MW natural gas fired steam unit. Westar also retired the two oldest and smallest Murray Gill Energy Center units (37 MW and 48 MW originally placed in service 1952 and 1954 respectively) effective January 1, 2015.

Q. WHY DID WESTAR CHOOSE TO RETIRE THESE UNITS AT THIS TIME?

A. These units had reached an advanced age and with the upcoming environmental regulations and maintenance requirements associated with these units it was no longer economical to maintain them in the safe and

- reliable operating conditions necessary to meet Westar's and the SPP's expectations.
- Q. WILL THESE RETIREMENTS HAVE ANY EFFECT ON WESTAR'S
 ABILITY TO MEET THE SPP RESERVE
- 5 A. No. Westar has adequate generation reserves to meet our SPP Capacity
 6 Margin requirement of 12%.

COMMODITY STRATEGY

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- Q. HOW ARE LONG-TERM COMMODITY REQUIREMENTS
 DETERMINED?
- 10 Α. Westar utilizes PLEXOS, a chronological dispatch model developed by 11 Energy Exemplar, LLC to develop a least-cost dispatch solution for serving 12 our customers' forecasted needs. Westar inputs various parameters into 13 PLEXOS such as a weather normalized load forecast, fuel prices, wind 14 power forecasts, generating plant efficiencies and outages, and many other 15 characteristics that allows the model to create a forecasted solution for the 16 study period. This model is flexible enough to run study periods of a few 17 days to several years. We use this output to create our commodity 18 transaction strategy and spread price risk across three general time periods. 19 We define these time periods as long-term, mid-term and short-term, with 20 the actual days, weeks, months or years depending on the commodity 21 transacted.
 - Q. IS THE COMMODITY TRANSACTION STRATEGY THE SAME FOR ALL COMMODITIES ASSOCIATED WITH THE MODEL OUTPUT?

Α. No. We take into consideration the variability of each commodity, which 2 results in different strategies for each commodity. Wholesale electric energy 3 and natural gas are fairly homogenous commodities. However, our 4 exposure to these products differs greatly and requires different strategies 5 for each. Coal is not a fungible product, with minor variations in sodium, 6 ash content, metals and other parameters potentially having an adverse 7 impact on plant operations. There is not one parameter that is the key, but 8 rather how the various characteristics of the coal interact during the 9 combustion process. This interaction can and typically does vary with each 10 unit boiler.

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

Α. 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.

1 Q. PLEASE DESCRIBE HOW WESTAR ACQUIRES ITS NATURAL GAS 2 REQUIREMENTS.

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Α.

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 approximately one half

of expected base needs for the summer. This provides price diversity for customers.

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

A.

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.

9 Q. PLEASE DESCRIBE THE CONTRACTUAL ARRANGEMENTS THAT 10 PROVIDE COAL FOR YOUR FACILITIES.

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 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 2015. 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 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.

Α.

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.

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.

- 1 Q. PLEASE DESCRIBE WESTAR'S FLEET OF RAILCARS USED TO
 2 DELIVER COAL.
- A. During 2015, 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.

7 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.
- 12 Q. DID WESTAR MAKE ANY CHANGES TO ITS FLEET OF RAILCARS
 13 DURING 2015?
- A. No. Westar has made no changes in the number of railcar sets we have
 available to operate for our coal facilities during 2015.
- 16 **Q**. THANK YOU.

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

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ANNUAL CORRECTION ADJUSTMENT

Annual Correction Factor for the ACA	Year Ending	Dec-15						
(a) Annual Correction Adjustment Factor	(b)		(c)	(d) Cost		(e) kWh	_	(f) ¢/kWh
1 Actual Fuel Costs		FA	=					
Fuel 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	Actual Costs							
12 Actual Purchased Power Energy Costs		PA	=					
13 Actual Emission Cost/Revenue		E	=					
14 Actual Cost to Achieve to Non - Require	ments Customers	NF	RCA _A =					
15 GFR Non-Fuel Delta		W	R =					
16 Actual Fuel Revenues Collected for ACA	Year	FA	AR _A =					
17 Actual ACA (Over) Remaining from the p	revious ACA year	AC	CAB =					
18 Total (F _A +P _{A+} E _A -NRCA _{A-} FAR _A +/-WR)+A	ACAB) =			\$ (12,252,003)				
19 kWhs delivered to all Requirement Custo	omers during the billing year				S _A =	20,515,041,235	kWh	
20 Projected Annual Correction Adjustme ACAF _P =	ent Factor <u>(F_^+P_^+E_^-NRCA_^-FAR_^+/-WR)+ACAB</u> .01 x S _A	<u>3 =</u>		,	(0.0597)	¢/kWh		

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#	January 2015	February 2015	March 2015	April 2015	May 2015	June 2015	July 2015	August 2015	September 2015	October 2015	November 2015	December 2015	YTD 2015
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 0 Uncollected for Previous Month 1 Uncollected for Current Month 2 Subtotal for Uncollected Fuel 3													
4 Total Fuel Costs - F _A Component (line 8 + line 12)													
5 6 P _A Component of the RECA Tariff - Purchase Power Costs													
7 8 Purchased Power 9 Equalization 0 (Gain)/Loss on Sales of Renewable Energy Credits 1 Renewable Energy Revenues 2													
3 Total Purchased Power Costs - P _A Component (line 18 + line19 + line 20 + line 21)													
5 E _A Component of the RECA Tariff - Emission Allowances													
7 Total Emission Cost/(Revenue) - E _A Component													
9 NRCA _A Component of the RECA Tariff - Cost to Achieve Non-Requirements													
0 1 Total Cost to Achieve to Non-Requirements Customers - NRCA _A Component													
2 3 WR Component - Wholesale Non-Fuel in Base Rates vs. 2015 Actual													
4 5 Demand Difference 6 VOM Difference 7													
7 8 Total Wholesale Non-Fuel Difference - WR Component (line 35 + Line 36) 9													
Total Costs (line 14 + line 23 + line 27 - line 31 - line 38)													
2 FAR _A Component of the RECA Tariff - Actual Fuel Adjustment Revenues													
3 4 Wholesale Customer Fuel Revenues (GFR) 5 Retail Fuel Revenues													
7 Total Fuel Adjustment Revenues - FAR _A (line 44 + line 45)													
8 9 RECA (Over)/Under Recovery for 2015 (line 40 - line 47)													
0 1 Actual ACA Recovery from Prior Year													
2 3 S _A Component of the RECA Tariff - Company's Requirements Customers kWhs													
4 5 Total kWhs delivered to Company's Requirements Customers													
6 7 RECA Factor for 2015 before ACA (line 40/line 55) - ¢/kWh	1.9626	2.0780	2.4118	2.4078	1.7144	2.0847	2.0843	2.0509	1.9352	1.8739	2.0618	1.9760	2.0511

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Exhibit C
RECA
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Estimated Energy Cost Forecasted for the Year (a)	2016 (b)	(c) WESTAR	(e) WESTAR	(f) WESTAR	(g) WESTAR	(h) WESTAR	(i) WESTAR	(j) WESTAR	(k) WESTAR	(I) WESTAR	(m) WESTAR	(n) WESTAR	(o) WESTAR	
Fuel Adjustment Factor		January	February	March	April	May	June	July	August	September	October	November	December	
1 Projected Fuel Costs (line 2 + line 3 + line 4 + line 5)	F _P =													
Fuel 2 Coal														
3 Oil														
4 Gas 5 Nuclear														
3 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)	$F_P + P_{P+}E_P - NRCA_P =$													
10 Projected kWhs to be delivered to all Requirements Customers during billing month	$S_P = kWh$													
11 Projected Energy Cost Factor	$F_p+P_p+E_p-NRCA_p =$												¢l	/kWh
	0.01 x S _P													
12 Annual Correction Factor	ACAF _P =												¢/	/kWh
13 Westar RECA Factor - Fuel Adjustment Factor (line 11 + line 12)	FA =												¢l	/kWh

Estimated Energy Cost Forecasted for the Year (a)	2016 (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 _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)	$F_P + P_{P+} E_P - NRCA_P =$				
10 Projected kWhs to be delivered to all Requirements Customers during billing month	$S_P = kWh$				
11 Projected Energy Cost Factor	$\frac{F_P + P_P + E_P - NRCA_P}{0.01 \times S_P} =$				
12 Annual Correction Factor	ACAF _P =				
14 Westar RECA Factor - Fuel Adjustment Factor (line 11 + line 12)	FA =				