BEFORE THE STATE CORPORATION COMMISSION

OF THE STATE OF KANSAS

DIRECT TESTIMONY

OF

JOHN T. BRIDSON

WESTAR ENERGY

DOCKET NO. 18-WSEE- 328 **- RTS**

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is John T. Bridson. My business address is 818 South Kansas Avenue, Topeka, Kansas 66612.

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

A. I am employed by Westar Energy, Inc. (Westar) as Senior Vice President, Generation and Marketing.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE.

A. I received a B.S. in mechanical engineering from Kansas State University in 1992. I began my career with Westar in January 1993 as a plant engineer at the Jeffrey Energy Center. I held several engineering and management positions at Jeffrey Energy Center before being promoted to Executive

Director, Gas Plants in 2001, where I managed all of Westar's gas fired generating plants. In 2007, I became Executive Director of the Lawrence Energy Center. I became Executive Director, Generation in May 2010, leading the management of all of Westar's generation fleet before being promoted to Vice President, Generation in February 2011. I assumed the role of Senior Vice President, Generation and Marketing in early 2015.

Q. WHAT ARE YOUR RESPONSIBILITIES AS SENIOR VICE PRESIDENT, GENERATION AND MARKETING?

A. I am responsible for the generating plants that Westar owns and operates including coal, gas, and wind generation. I am also responsible for two plants operated by others of which Westar co-owns – specifically, the State Line combined cycle plant and La Cygne Station, a coal-fired plant. Our subsidiary, Kansas Gas and Electric Company, and Kansas City Power & Light Company (KCP&L) each have a 50% interest in La Cygne. I also serve as one of four Westar employees on the Wolf Creek Nuclear Operating Corporation board of directors, overseeing Westar's 47% interest in Wolf Creek Generating Station, and I serve on Wolf Creek's operations committee. I also oversee our employees who handle our participation in the Southwest Power Pool (SPP) Integrated Market.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I will discuss a competitive renewable energy solicitation that resulted in Westar's acquisition of additional attractively priced wind energy resources in 2015, the Western Plains wind farm, and the basis for the timing of these

resource additions. Our customers have, for nearly a year now, already been receiving the benefits associated with Westar's addition of the Western Plains wind farm through reduced fuel costs, even though the investment Westar has made in the wind farm will not be reflected in rates until the Commission authorizes a rate change as part of this docket. I will explain the process we used to identify this attractive project and how our acquisition of wind generation will benefit customers through lower costs, by reducing risk, and by balancing Westar's renewable portfolio in a way that will ensure customers receive long-term value from those investments. I will also discuss an alternative ratemaking proposal (*i.e.*, levelizing associated costs and benefits) for the Western Plains Wind farm that we believe could provide an even more equitable distribution of the benefits of this low-cost power for our customers over the 20-year expected life of these assets.

Additionally, I will discuss three wholesale sales agreements, the expiration of which are a significant driver of Westar's rate request in this docket. I will explain the benefits that these contracts have provided to retail customers over the many years they have been in place, and why market conditions make it impossible to renew these wholesale agreements at similar prices, with similar levels of benefits for retail customers. I will also discuss methods by which the effects of these expiring wholesale contracts can be reflected in rates, and recommend an approach that I believe has the most merit among those methods. The method I propose is an

amendment to Westar's retail energy cost adjustment (RECA) tariff that would allow the change in revenue to be reflected in rates through the RECA, rather than base rates. The approach I propose would conform these changes with the manner in which all other wholesale contracts are reflected in rates.

II. WESTERN PLAINS WIND FARM

Q. WHY DID WESTAR DECIDE TO INVEST IN THE WESTERN PLAINS WIND FARM?

A. We executed a plan to acquire additional low-cost wind energy beginning in June 2015. With the culmination of that plan, our investment in the Western Plains wind farm began saving our customers millions in energy costs when the plant went into service nearly a year ago in February 2017. Savings from operations of the wind farm will continue many years into the future. Moreover, this economically attractive plan also provides the green energy our customers desire and reduces the risk and the likely cost of complying with potential future carbon regulation by reducing overall emissions levels for our energy portfolio.

A. WESTAR'S CURRENT WIND GENERATION AND RECENT WIND ADDITIONS

Q. PLEASE PROVIDE AN OVERVIEW OF THE WIND GENERATION CURRENTLY ON WESTAR'S SYSTEM.

A. As shown in Table 1 below, Westar currently has almost 1760 megawatts (MW) of wind generation. This is comprised of long-term agreements to

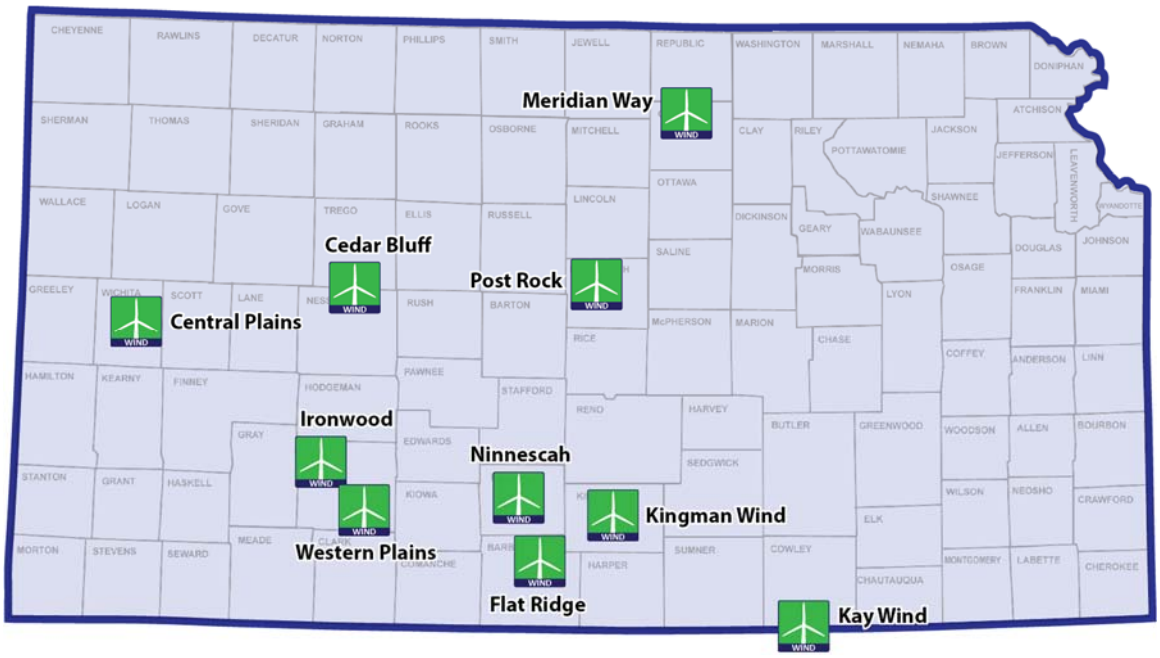
purchase power from nine large scale wind farms, plus ownership of three wind farms.

Table 1

Facility	Owned or PPA	In-Service Date	MW	Location
Central Plains	Owned	March 31, 2009	99	Wichita Co.
Flat Ridge 1	Owned	Feb. 11, 2009	50	Barber Co.
Flat Ridge 1A	PPA	March 16, 2009	50	Barber Co.
Meridian Way	PPA	Dec. 29, 2008	96	Cloud Co.
Ironwood	PPA	Aug. 31, 2012	168	Ford Co.
Post Rock	PPA	Oct. 4, 2012	201	Ellsworth & Lincoln Cos.
Kay Wind	PPA	Nov. 24, 2015	200	Kay Co., OK
Cedar Bluff	PPA	Nov. 20, 2015	199	Ness & Trego Cos.
Ninnescah	PPA	Dec. 9, 2016	208	Pratt Co.
Kingman I	PPA	Dec. 19, 2016	103	Kingman Co.
Kingman II	PPA	Dec. 19, 2016	103	Kingman Co.
Western Plains	Owned	Feb. 28, 2017	281	Ford Co.
TOTAL			1758	

The map in Figure 1 below reflects the geographic diversity of the wind generation currently on Westar's system. By taking advantage of geographic diversity, we reduce the impact of variable wind conditions and/or any potential transmission constraints.

Figure 1



Q. PLEASE DESCRIBE WESTAR'S EXPERIENCE WITH WIND GENERATION OPERATIONS.

A. When our first large scale wind farms began operation, we were only able to utilize our own generating portfolio to balance the intermittency of wind production. This limited how much wind energy we could economically include in our portfolio. However, implementation of the SPP Integrated Marketplace on March 1, 2014, introduced substantially more flexibility to our generation dispatch and increased the amount of wind energy that we can economically deploy.

Q. HOW DID THE SPP INTEGRATED MARKETPLACE ALLOW WESTAR TO ECONOMICALLY DISPATCH MORE RENEWABLE RESOURCES?

A. The Integrated Marketplace reduced the costs associated with integrating renewable resources by dispatching the most economical resources across

the entire fourteen-state SPP region, rather than across a single utility system. The availability of a larger, more diverse generation portfolio provides more flexibility in balancing the variable nature of renewable generation.

We have found the all in cost of wind is very competitive with the variable or incremental cost of fossil generation. Variable or incremental costs include only the fuel and a small amount of operations and maintenance expense associated with running the plant. In fact, at times, the all-in cost of wind energy has been even lower than our total fleet average annual production cost. In other words, adding these wind resources *reduces* our customers' all-in cost. While our existing plants are still quite necessary to provide *capacity*, relying on them less for *energy* not only reduces emissions, but also reduces customers' rates.

We have worked hard to ensure that, if the wind is blowing, we can produce wind energy and move it to load with few transmission constraints. Our initial wind farms experienced modest curtailments in their early years of production due to transmission congestion. But with careful siting and close attention to investments that eliminate transmission constraints, including the Kansas V-Plan, we have largely relieved the congestion issues that originally were limiting factors.

Q. PLEASE DESCRIBE THE WIND RESOURCES MOST RECENTLY ADDED TO WESTAR'S SYSTEM.

A. We signed an agreement in late 2015 with Infinity Wind Power related to ownership of 281 MWs of wind generation at the Western Plains wind farm in Ford County. The revenue requirement associated with this investment is reflected in the present Application. We also signed an agreement around the same time with NextEra Energy for the purchase of the output through a PPA from 206 MW of wind generation at the Kingman Wind Farm in Kingman County. We began reflecting both the costs and offsetting benefits of the PPA for Kingman II through the RECA as that facility was placed in service. However, because we are selling the entire output from the Kingman I facility to wholesale customers it does not affect our retail rates.

Q. WHAT WAS THE CAPITAL INVESTMENT FOR THE WESTERN PLAINS WIND FARM AND HOW WILL THAT AFFECT CUSTOMERS' RATES?

A. We completed construction of the Western Plains wind farm for $417 million, favorable in relation to a $435 million budget projection. The initial total annual revenue requirement related to Western Plains is $31.8 million, including the offsetting benefits of production tax credits. Customers are also experiencing lower fuel costs as a result of the wind generation from Western Plains. As mentioned earlier, while we have already been using the production from this station to reduce customers' fuel costs through the RECA (estimated at approximately $27 million annually), we have not yet begun to reflect the investment in rates. However, we have received a small benefit from the interim tax credits associated with Western Plains.

B. WESTAR'S DECISION TO ADD ADDITIONAL WIND RESOURCES

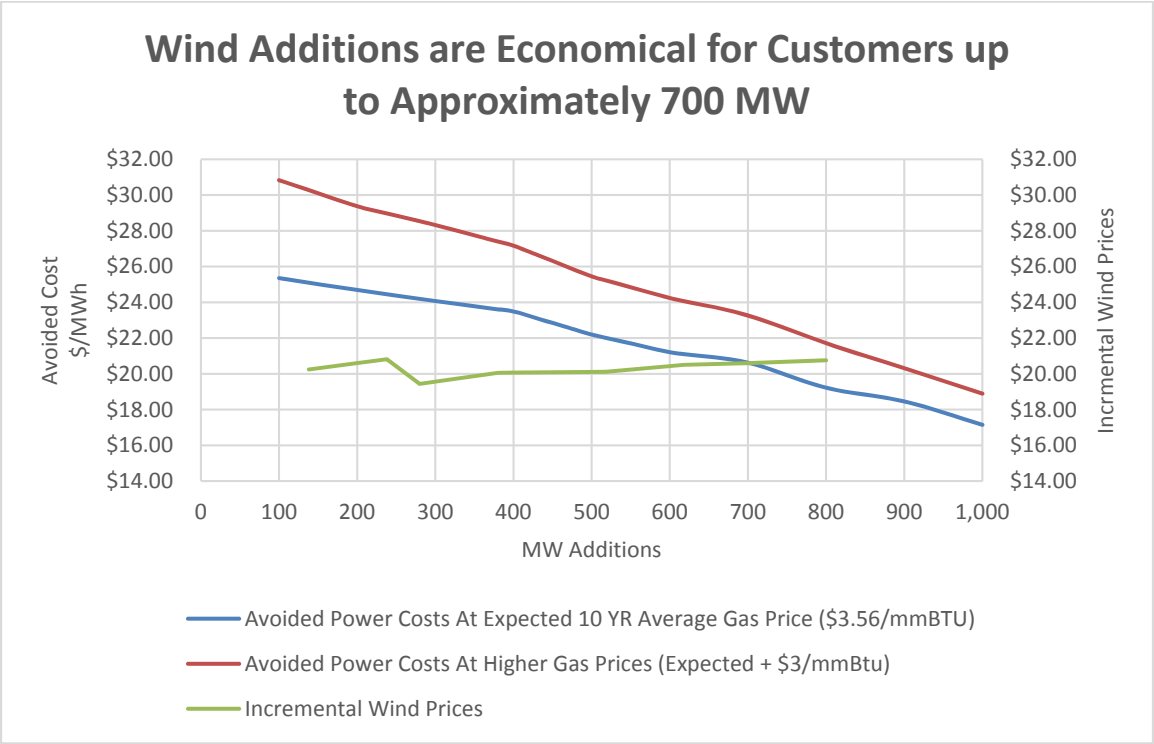
Q. WHAT PROCESS DID WESTAR FOLLOW IN 2015 WHEN IT CONTEMPLATED ACQUIRING ADDITIONAL WIND RESOURCES?

A. Westar began the process by issuing a request for proposals (RFP) in June 2015. We wanted to ensure that we had the best available information to inform our decision-making prior to the pending December 2015 expiration of the production tax credit. Based on the proposals we received and considering the impacts of the PTCs, we determined at current market prices our customers would benefit if Westar acquired additional wind resources. Our review of the responses to the RFP indicated that the proposed additions would reduce our annual production costs because the all-in costs of a new wind farm would be lower than the marginal costs of energy (largely fuel costs) from our other resources. Said another way, customer bills over the next 20 years are expected to be lower because we added additional wind resources.

Our analysis of adding wind generation began by using our PLEXOS energy market hourly production cost model. We applied this tool to our entire portfolio and analyzed different scenarios for additional wind. We calculated the avoided cost of adding discreet 100 MW blocks, over a range of 0 to 1000 MW, of wind. By comparing these avoided costs to pricing received from the RFP, we determined the amount of wind energy we could add, and by how much it would reduce our customers' bills. The analysis

indicated we could add up to 700 MW of additional wind capacity and still provide our customers with lower costs, as shown below in Figure 2.

Figure 2



We also appreciated how adding low-cost wind energy would help address the continuing risks associated with ongoing and uncertain environmental regulations. Additionally, we evaluated advantages and disadvantages of ownership versus power contracts, from both an immediate cost and long-term risk/cost perspective, in the context of asset life and our overall portfolio characteristics.

Q. HOW OFTEN DOES WESTAR ISSUE RFPS TO DETERMINE THE STATUS OF THE MARKET FOR RENEWABLE GENERATION?

A. There is not a set timetable. If market conditions (*e.g.*, supply, demand, commodity costs, tax policy, etc.) are stable, we feel less compelled to test

the market with a new RFP. If market conditions are changing or highly dynamic, an RFP can reveal a great deal. We have issued RFPs based on our judgment of the facts and circumstances at hand. We issued our first RFP for renewables in 2007, which yielded our first 300 MW of wind. Since that time, we have issued RFPs in 2009, 2010, 2013, 2014, 2015, and 2017. The decision to issue the 2015 RFP was based largely on our market knowledge telling us it might be possible to reduce customer costs by adding additional wind resources. The RFP confirmed our intuition by providing indications of very favorable pricing.

Q. WHAT WERE THE RESULTS OF THE 2015 RFP?

A. We issued the RFP on June 11, 2015. We received responses on July 20, 2015. The proposals we received included solar and wind energy projects, as well as one storage project that was incorporated with a wind energy project. The wind energy projects had a much lower cost for customers. We received proposals from 19 different companies for 35 facilities, 17 within the state of Kansas. Twenty-nine of the facilities were wind projects. Six were solar. The wind projects were for the lowest-cost wind resources we had ever seen; with fully distributed costs lower than the marginal costs of production from our then fleet resources. These responses confirmed that wind energy was the least cost renewable resource available in Kansas, and that additional wind would provide a net cost reduction for our customers over the planning horizon.

Based on these results, Westar began and successfully concluded negotiations with the two most economical options for customers – ownership of 281 MW of wind generation at Western Plains wind farm and purchase of 206 MW of wind generation at Kingman wind farm through PPAs.

We also recognized during the process that these attractive projects provided us an opportunity to allow other utilities in Kansas to benefit from our buying power and obtain economical renewable energy for their customers as well, in a way that was otherwise unavailable to them. We worked with some of our Kansas wholesale customers, providing them with the ability to purchase the energy from the Kingman I wind farm.

Q. WHY DID WESTAR ADD ADDITIONAL WIND GENERATION WHEN YOU ALREADY HAD ADEQUATE CAPACITY AND ENERGY RESOURCES CAPABLE OF MEETING CUSTOMER DEMAND?

A. We seek not only to meet demand – both capacity and energy – but to do so in the most economical way we can.

Said differently, the most economic approach is to add-low cost renewable wind energy, continue to rely on existing fleet resources for capacity, and replace some of the costlier energy from those existing resources with new wind energy. The prices we secured for this new investment in wind production are below our 2015 marginal production costs, and are expected to remain below that cost for the upcoming years. We also expect this wind generation to remain competitive in the broader

SPP market. An added benefit is that while reducing customer bills we can also give customers more of their energy from emission free Kansas resources which they desire and create a hedge against potential future environmental rules, whether that be the Clean Power Plan or some other form of environmental regulation. Said differently, the wind additions stand on their own economics, but provide customer what they prefer with the added bonus of a means of addressing future environmental rules, and provide valuable economic development for Kansas. We consider that a win-win-win, no-regrets strategy for Westar, our customers and Kansas.

Q. WHAT ASSUMPTIONS WERE MADE IN CALCULATING CUSTOMER SAVINGS?

A. We assumed gas prices over our forecast period would remain near today's rates, escalated for inflation, with an average of $3.56/MMBtu. With the Western Plains wind farm expected to produce at about a 46% capacity factor, or about 1.1 million MWh of energy annually, our calculations show a levelized customer fuel savings of about $27 million annually with the addition of Western Plains. As I discuss below on page 25, these savings more than offset the annual levelized $23 million revenue requirement associated with the required capital investment of $417 million to build the Western Plains wind farm. Over a twenty-year period, this equates to about $76 million in customer savings.

Q. WHY DID WESTAR DECIDE TO ADD WIND RESOURCES IN 2016 INSTEAD OF WAITING UNTIL A LATER DATE?

A. There were several reasons. First, we were able to secure two of the best remaining wind sites (including both wind resources and transmission access) in Kansas, *for Kansans*. Second, the pricing in the marketplace was the lowest we had ever seen since our first acquisition of Kansas wind farms in 2007. Third, at the time of our decision, new wind generation needed to begin construction prior to December 31, 2015, to be eligible for production tax credits (PTCs), essential to ensuring that the price of the new wind generation would be favorable for customers. While the authority for PTCs was extended at the last minute at the end of 2015, that was not certain, or even expected at the time we made our decision. Moreover, while extended, the PTCs now have a ratchet that reduces the tax credit available over four years, making this economic benefit smaller and smaller over time until it diminishes to nothing. By acting when we did, we secured the full value of the PTCs for our customers and avoided this reduction.

Q. DID YOU CONSIDER HOW THE ADDITION OF WIND GENERATION WOULD AFFECT THE OPERATION OF WESTAR'S GENERATION FLEET?

A. Yes. As a simple check to confirm that Westar's portfolio could reasonably handle the addition of must-take energy (wind generation), we looked at the hourly gap between Westar's demand and the energy production of our existing renewable portfolio. The average gap in the 2017 forecast was 2100 MWh. Given our baseload portfolio minimum load production of 1700 MWh, we estimated that, on average, the Westar system as an island, could

support another 400 MWh of renewable generation. 600 MW of wind capacity operating at a 45% capacity factor produces an average of 270 MWh of generation. Because this is less than the 400 MWh gap, this confirmed that the addition of 600 MW of wind generation would not significantly disrupt economic commitments of our baseload fleet. Additionally, with the new SPP Integrated Marketplace helping to balance load across the 14-state region, we considered this a very conservative analysis.

Q. IS THIS ANOTHER WAY OF CONFIRMING THAT WESTAR STILL RELIES ON ITS EXISTING FOSSIL RESOURCES, NOTWITHSTANDING THE NEW WIND ADDITIONS?

A. Yes. That is just the other side of the same coin. While these wind additions enable a less costly way of securing the energy necessary to serve our customers, they do not impair the economics of still having to rely on those same plants for capacity, and with that capacity, the concomitant amount of energy that comes with those capacity commitments.

C. DECISION TO OWN A PORTION OF NEW WIND GENERATION

Q. WHY DID WESTAR DECIDE TO OWN A PORTION OF THE NEW WIND RESOURCES AND SECURE THE OTHER PORTION THROUGH A PPA?

A. Westar determined that ownership of the 281 MW at Western Plains wind farm was both economically attractive for customers and would help return some balance to its renewable portfolio. This reduces long-term risk, which is a benefit. Prior to its most recent investment at Western Plains, Westar

owned only 12% of its total wind resources – leaving 88% of existing wind generation purchased through PPAs.

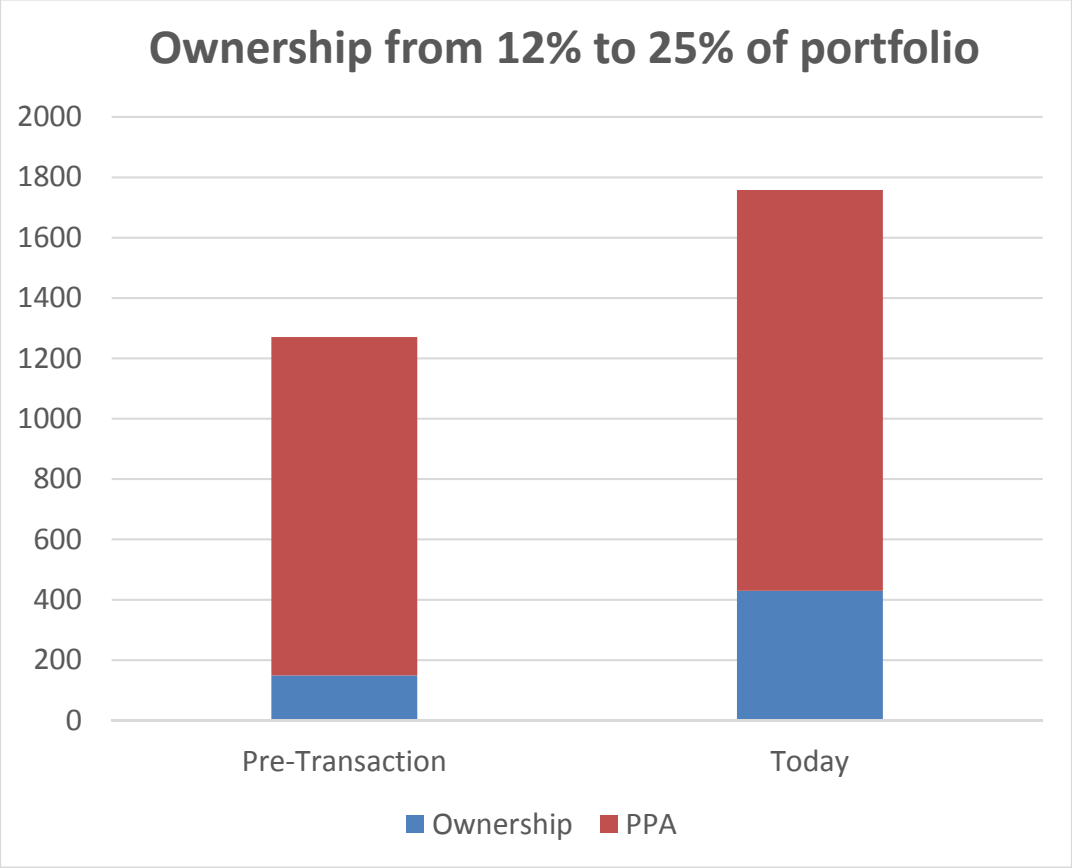
Q. WHY IS THAT IMPORTANT?

A. The wind PPAs are contracted for 20 years. After that 20 years, the developer is free to obtain then current market prices for their facility and its output. This creates an economic risk for Westar's customers with unknown future pricing or whether Westar would be the successful bidder for that energy. Other risks are not being able to obtain wind energy from the most optimal sites or with transmission access. Repowering (installing the latest turbine technology at the same site) options of the facility for the benefit of Westar customers would also be lost.

Q. DOES OWNING WESTERN PLAINS FULLY REBALANCE WESTAR'S RENEWABLE PORTFOLIO BETWEEN OWNERSHIP AND PPAS?

A. No, but it is a step in that direction. With the addition of Western Plains, our ownership share of our renewable portfolio doubles from about 12% to 25%, with the remaining 75% still secured subject to the PPA limitations, as shown in Figure 3.

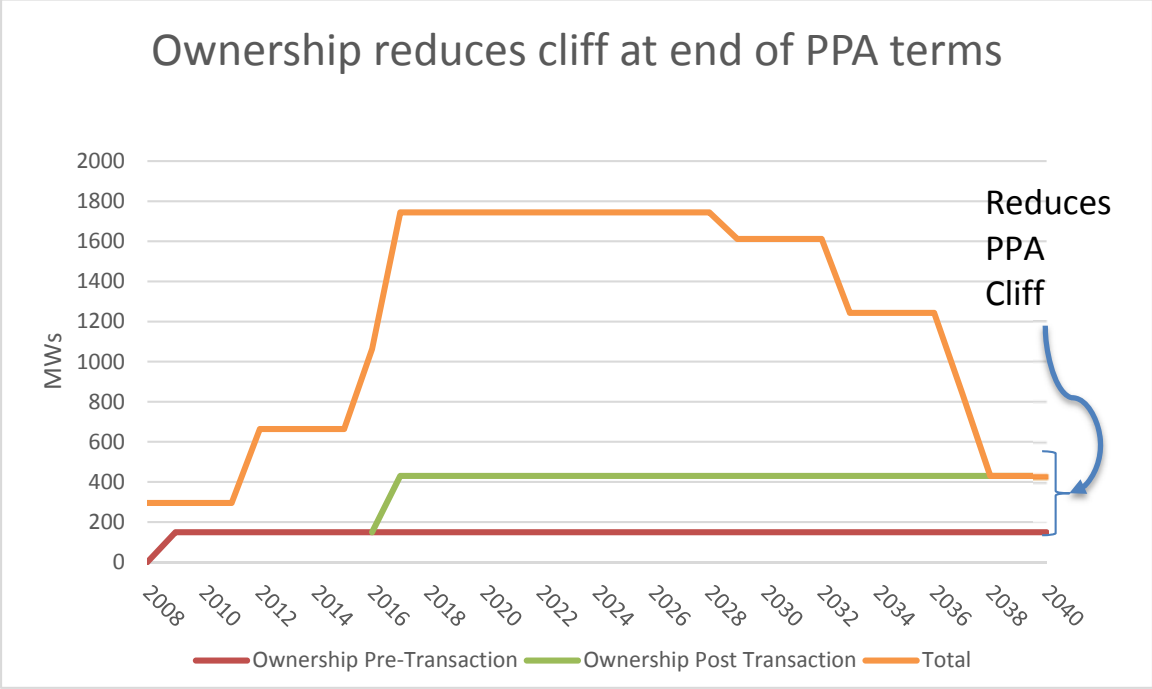
Figure 3



Q. WHY IS IT IMPORTANT FOR CUSTOMERS THAT WESTAR ACHIEVE AND MAINTAIN A BETTER BALANCE BETWEEN OWNERSHIP AND PPAS?

A. Rebalancing reduces the risk exposure for our customers at the termination of the existing PPA contracts. This shift will help to reduce the "cliff" that currently exists at the end of the PPA terms, reflected in Figure 4 below.

Figure 4



For the wind generation that we buy through PPAs, there may be a drastic drop in the cost-effective clean energy available to us and our customers at the end of the PPA terms. Westar – and the State of Kansas – would have to replace that power at the end of the PPA terms at then market rates which could potentially be significantly higher, if for no other reason than the federal PTC will have long ago expired. Without the PTC, the price doubles irrespective of inflation. However, for the wind generation that Westar owns, Westar will continue to have access to that generation for its entire useful life which could exceed the normal PPA life of 20 years. Also, with ownership, Westar will continue to have access to those favorable wind and

transmission sites even after the useful life of the facilities. Ownership provides more flexibility to continue to meet customers' long-term needs.

Q. WHY IS IT SIGNIFICANT THAT WESTAR WILL CONTINUE TO HAVE ACCESS TO THE WIND SITE AND ITS TURBINES FOR A PERIOD AFTER A PURCHASED POWER AGREEMENT OTHERWISE WOULD HAVE EXPIRED?

A. We have a strong history of operating rotating equipment past its planned life. For example, Lawrence Energy Center's Unit 3 had an initial expected life of 30 to 40 years but operated for 61 years prior to retirement in 2015. Tecumseh Energy Center Unit 7 and Murray Gill Energy Center Units 3 and 4 are similarly situated, having run for more than 60, 61, and 58 years respectively. We were also able to obtain approval to extend the license for our Wolf Creek nuclear plant from 40 to 60 years. Had we instead acquired power from these plants under a PPA, we would long ago have been looking at potentially much more expensive replacement costs. These examples demonstrate that ownership has added great value for customers historically. We believe ownership is a strategy that continues to have value in the context of wind resources. Moreover, our ownership of wind generation may allow for repowering, installing the latest turbine technology at the same site, of the turbines which could improve their efficiency and extend the life of the machines, much like we have recently done with the turbine upgrades at Jeffrey Energy Center.

Q. DID YOU CONDUCT AN ECONOMIC EVALUATION COMPARING THE COST OF OWNERSHIP TO THE COST OF PPAS BEFORE MAKING THE DECISION TO OWN WIND GENERATION AT WESTERN PLAINS WIND FARM?

A. Yes. While projected cost is not the only factor to be considered, it is certainly an extremely important one. We compared the cost of ownership for customers to the cost to customers under a 20-year PPA. Our analysis demonstrated that ownership of the 281 MW at the Western Plains Wind Farm was more economical for customers than a PPA would have been. Table 2 below shows the expected levelized cost of ownership over 20 years compared to the cost under a PPA.

Table 2

Western Plains Wind Farm Ownership Less Costly than PPA	
	Cost/MWh
Ownership	$18.89
PPA	$20.38

On an annual basis, our evaluation demonstrated ownership is approximately $1.7 million cheaper than purchased power – a difference of more than 7%. Over the first 20 years, that difference is approximately $34 million.

Q. WHAT KEY ASSUMPTIONS WENT INTO YOUR EVALUATION OF THE COSTS OF OWNERSHIP VERSUS PURCHASED POWER?

A. We made assumptions regarding operations and maintenance costs and capacity factor.

Q. WHAT ASSUMPTIONS DID YOU MAKE ABOUT OPERATIONS AND MAINTENANCE COSTS?

A. Operations and maintenance (O&M) costs were projected in the first two years based on the defined costs in the turbine service and maintenance agreement signed with the turbine supplier, together with projected Westar manpower costs to operate the facility during these two years. Our costs are informed by our nearly 10 years of experience with modern wind turbine operations and maintenance. After the first two years of service, O&M costs were projected based on a staffing level of Westar employees and material costs, again, garnered from our experiences in operating our other wind facilities. Royalty payments to the Kansas landowners are also included in the O&M cost estimates.

Westar also reviewed O&M costs at other utility-owned wind farms for a comparison. This analysis encompassed 29 facilities and looked at full-year expenses from 2004 through 2014. O&M expenses were found to range from $2.30 per MWh to $17.06 per MWh with an average of $7.40 per MWh and a median slightly below that of $6.40 per MWh. Westar's estimate during the first five years of operation of $9.57 per MWh is conservative when compared to actual costs our peers have experienced.[1]

[1] In our analysis, a higher assumed cost for O&M would have made our ownership costs higher and thus more conservative when compared to the PPA price or the cost of energy from other sources.

Q. WHAT ASSUMPTIONS DID YOU MAKE ABOUT CAPACITY FACTOR?

A. We determined our assumed capacity factor based on studies performed by professional wind resource assessment organizations. The capacity factor used for the 281 MW Western Plains facility was 46% based on installing 122 Siemens SWT-2.3-108 turbines with power boost. To confirm the capacity factor projection, we performed an analysis using actual capacity factor results from the existing nearby Ironwood Wind Farm which has similar turbines, making adjustment for longer blades and newer technology on the proposed turbines. This analysis resulted in a projected capacity factor very near the wind resource assessment results.

Q. WHAT HAS THE CAPACITY FACTOR BEEN AT WESTERN PLAINS WIND FARM SINCE ITS COMMERCIAL OPERATION?

A. The capacity factor has been 44.5% since Western Plains reached full commercial operation through October 2017. This capacity factor is very near the 46% estimated in the wind resource assessment over these same months. It is expected the remaining months in the first full year of operation will allow the assumed annual value to be attained.

Q. ARE THERE OTHER POTENTIAL BENEFITS THAT WERE NOT INCLUDED IN YOUR ANALYSIS?

A. Yes. We believe there will be residual value in the land leases and easements that support the farm. This value could manifest itself in operation beyond 20 years of the farm. This operation may continue with the existing turbines or there could be the potential for upgrade of the

turbines to a more efficient design. We also believe it is probable that PPA prices for wind will be higher in the future as the production tax credits will likely no longer be available in 20 years.

Q. DID YOU CONSIDER THE COST TO CONTINUE TO OPERATE AN OWNED WIND FARM AFTER THE FIRST 20 YEARS OF OPERATION?

A. We did assume operations and maintenance costs would continue to increase to keep the wind farm in operational order. But given our long-standing history of operating generating equipment well past its initial design life. While there is always great uncertainty about the state of future technology decades from now, we did not assume that we would need to upgrade the wind turbines at the end of 20 years to keep them running. We leaned toward a period of 25 to 30-years before today's turbine technology would be obsolete.

It is very hard to predict the future and many options may be present at the time an improvement to or replacement of the turbines is warranted. Some of the options that may present themselves include upgrade of the controls, improved blade technology, replacement of rotating equipment, replacement of the entire nacelle, replacement of the entire turbine, or complete replacement of the entire wind farm. With each option noted above, part of the infrastructure would remain and thus the costs for upgrades could vary widely. At the time upgrades are determined to be needed, they will be analyzed to determine the best course of action in the interest of our customers.

Q. WHAT EXPECTED COST DID YOU ASSUME FOR A NEW PPA AFTER THE INITIAL EXPIRATION OF THE 20-YEAR TERM?

A. With a PPA, Westar would have to replace the power under a new agreement after the expiration of the initial term. We expect that in 20 years, the price of a new PPA could be as high as $41/MWh. This was based on the assumption that tax credits would no longer be available and that key components would be subject to modest inflation. However, as we all know, energy costs have shown far greater volatility than simply reflecting any smooth trend of inflation. One thing that is not bridled with that same level of uncertainty is that for assets Westar owns, Westar will likely be able to continue to produce wind energy from those turbines after the initial 20 years, paying only for maintenance of those assets. The estimated value to customers of avoiding the need to enter a new PPA after 20 years is approximately $30 million annually ($27/MWh).

Q. WHAT WAS THE RESULT OF YOUR ECONOMIC EVALUATION OF OWNERSHIP VERSUS PURCHASE POWER?

A. Without considering the value of the land leases or the remaining life of the wind farm at the end of 20 years – or the possibility of transmission constraints so severe they would not just affect prices, but also availability – our calculations showed ownership of Western Plains to be more economic for customers than a PPA. When coupled with the value of the land leases, rebalancing the portfolio, the inherent optionality provided by ownership, and the potential to operate the wind farm past a 20-year life,

we remain confident that ownership of Western Plains will provide long-term benefits to our customers when compared to the purchase of that same generation through a PPA.

D. ALTERNATIVE RATEMAKING PROPOSAL FOR WESTERN PLAINS

Q. ARE THERE OTHER ECONOMIC IMPACTS TO CONSIDER WHEN EVALUATING OWNERSHIP?

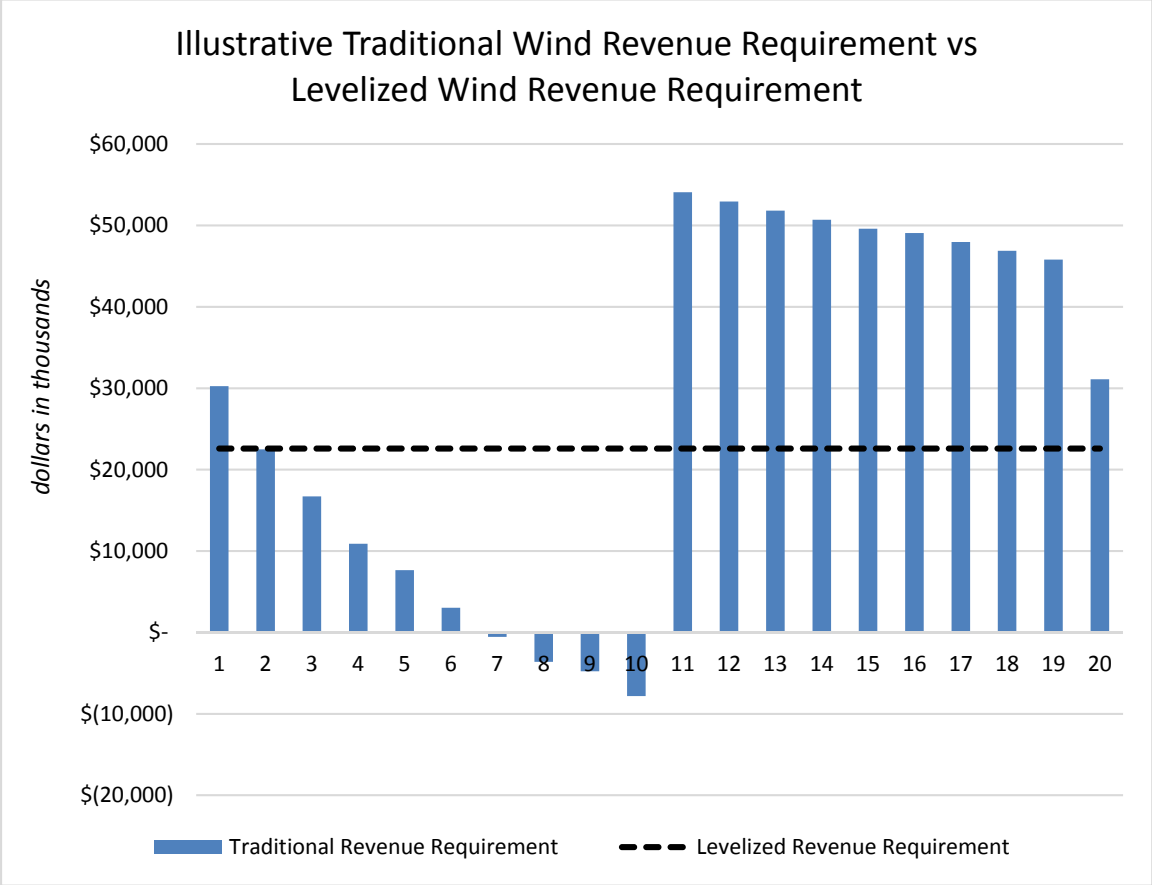
A. Yes. As previously mentioned in this testimony, production tax credits provide tremendous value for wind generation. While tax credits contribute to the economic competitiveness of wind, the schedule at which the value is realized, over the first ten years of operation rather than over the entire life of the plant, creates an inconsistent annual revenue requirement. Under traditional ratemaking the inconsistent revenue requirement potentially creates intergenerational inequities.

Q. IS THERE AN ALTERNATIVE RATEMAKING APPROACH THAT WOULD ALLOW FOR WIND OWNERSHIP TO BE RECOVERED ON A MORE LEVELIZED BASIS AND AVOID POTENTIAL INEQUITY CONCERNS?

A. Yes. As an alternative to the traditional ratemaking treatment for the revenue requirement associated with the Western Plains Wind Farm, Westar proposes alternative ratemaking for consideration in the form of a levelized revenue requirement. The levelized revenue requirement structure would allow customer to pay and Westar to recover the total revenue requirement associated with the ownership of wind through

consistent, levelized prices over the expected life of the plant. The present value of the total revenue requirement would be spread evenly across the total expected production throughout the first 20 years of the plant's operating life. This would create a static annual cost that can be used to set a levelized revenue requirement rather than setting the revenue requirement based on the specific costs incurred in a test year as is done under traditional ratemaking. This levelized approach decreases intergeneration inequities such that a customer in year one or year 20 will receive the same benefit of the wind farm for the same cost. Figure 5 below shows the economic impact of this alternative ratemaking treatment and difference between traditional revenue requirement and levelized revenue requirement.

Figure 5

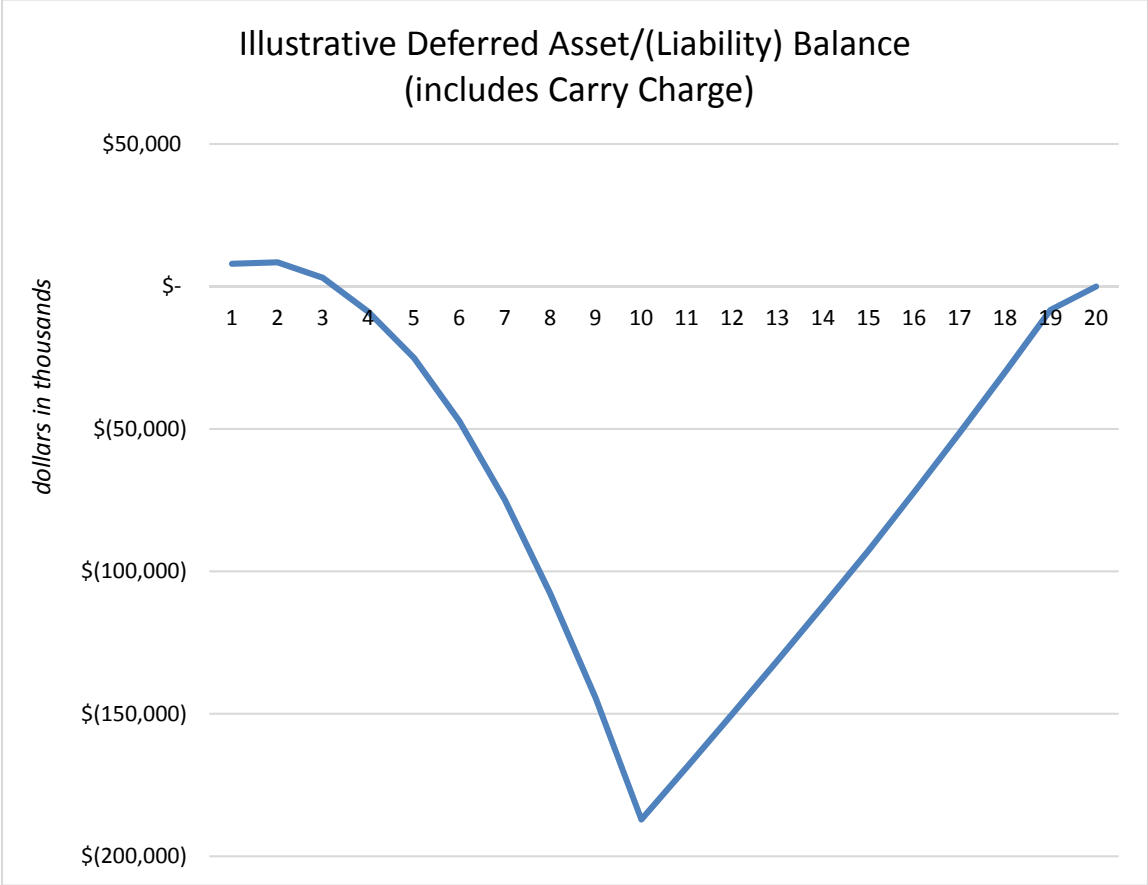


Q. PLEASE PROVIDE DETAILS ON HOW A LEVELIZED REVENUE REQUIREMENT WOULD BE ACCOUNTED FOR.

A. A levelized revenue requirement utilizes an accounting order to smooth the tax credits, as well as any other cost differences, to provide consistent costs to customers, while ensuring Westar does not over or under earn on this investment. The accounting order would allow Westar to record deferred regulatory assets or deferred regulatory liabilities to offset the differences between the levelized revenue requirement and traditional revenue requirement to comply with generally accepted accounting principles.

Figure 6 shows the deferred asset/liability schedule expected over the first 20 years of the wind farm. In the first three years Westar is receiving less revenue than it would under traditional ratemaking. Then, in years 4 -10, Westar is receiving more revenue through the levelized approach than it would under traditional ratemaking. We will therefore will book a deferred asset (years 1 -3) and a deferred liability (years 4 – 10). Conversely, when the PTC's roll-off after year 10, Westar will be again receiving less revenue from the levelized approach and therefore will book a deferred asset for the difference. By year 20, the deferred balance returns to zero, and the total revenue requirement of both the levelized and traditional ratemaking are equal. This levelized revenue requirement approach allows Westar to provide low-cost renewables to customers at static 20 year prices, while not materially affecting the economics of ownership for Westar.

Figure 6



Q. WHAT DO YOU MEAN WHEN YOU SAY THE LEVELIZED APPROACH DOES NOT MATERIALLY IMPACT WESTAR'S ECONOMICS?

A. Under traditional cost of service regulation, the utility benefits somewhat from regulatory lag related to rate based assets. Looking at the single asset in isolation, as rates are set and the asset is depreciated, the rate base value reduces each year, while revenue requirement changes only when the next rate case occurs. The levelized approach would result in eliminating this traditional lag benefit. Given the wide fluctuation in revenue requirement of a wind farm as a result of the impact of PTCs, Westar is

willing to forgo this benefit to provide more consistent and predictable prices for customers.

Q. ARE THERE OTHER BENEFITS OF UTILIZING A LEVELIZED REVENUE REQUIREMENT?

A. Yes. Many of Westar's large industrial and commercial customers have expressed an interest in investing directly in renewable projects to demonstrate their socially responsible values to their own customers. Traditional rate-making puts Westar and other Kansas utilities at a severe disadvantage to out-of-state wind developers who can offer fixed PPA pricing for wind and other renewables. The only service Westar can offer is being the "middle-man" in a PPA transaction, where Westar would issue a request for proposal and select the best value wind projects for our customers and then pass the PPA pricing on directly to our customers under a Green Tariff, as Westar has proposed in Docket No. 18-WSEE-190-TAR, currently pending before the Commission. This provides significant value to our customers, but no value to our investors. The capital investment and return on that investment is made by and given to an out-of-state company and its investors. If Westar could offer a levelized revenue requirement to our customers, Westar could provide our customers the same, if not better value, all while providing our investors value as well. This keeps investment dollars in a Kansas company, a win-win for the state of Kansas.

Q. HOW WOULD THIS OPTIONAL, ALTERNATIVE RATEMAKING TREATMENT AFFECT THE REQUESTED REVENUE REQUIREMENT IN THIS DOCKET?

A. Westar's requested revenue requirement as stated in the Application and supporting schedules includes the revenue requirement for Western Plains calculated under the traditional ratemaking method. However, Westar believes that this alternative ratemaking treatment might be preferable and provide the benefits I discuss above. If the Commission, its Staff, and other parties agree that the levelized revenue requirement approach is preferable, it will be necessary to remove the revenue requirement for Western Plains calculated using the traditional approach from Westar's request and replace it with the levelized revenue requirement, as described in the Direct Testimony of Larry Wilkus.

III. EXPIRATION OF WHOLESALE CONTRACTS

Q. PLEASE DESCRIBE THE THREE WHOLESALE AGREEMENTS THAT HAVE EXPIRED OR WILL SOON EXPIRE.

A. Two agreements with Midwest Energy have already expired. The first agreement was a 120 MW PPA that began on June 1, 2010. The second Midwest Energy agreement began on June 1, 2012 and was a 35 MW Peaking PPA contract. Both Midwest Energy agreements expired on May 31, 2017. These agreements consisted of a demand charge based on a fixed quantity of capacity with the energy priced after the fact based on the resource utilized to serve the energy after Westar's firm load obligations.

The third agreement is a Jeffrey Energy Center (JEC) PPA with Mid-Kansas Electric Cooperative (MKEC) for 8% participation in the JEC facility. Because this is a "participation" agreement, it is priced based solely on the costs of operating the JEC units. This agreement includes a demand charge based on the previous year costs with the energy being priced at the average facility cost to produce energy for each month. This agreement began on April 1, 2004 and will expire January 3, 2019.

Q. DOES WESTAR OWN THE GENERATION AT JEC THAT IS BEING USED TO SERVE MKEC?

A. No. Westar does not own the 8% capacity associated with the MKEC agreement. Westar has a sale/leaseback arrangement with Wilmington Trust Company which will expire at the same time as the PPA with MKEC (January 3, 2019).

Q. HAVE RETAIL CUSTOMERS BENEFITED FROM THESE WHOLESALE AGREEMENTS?

A. Yes. Revenue from these wholesale agreements has been included in base rates through the rate case process providing a benefit to retail customers by reducing our revenue requirement. In the last 20 years, Westar has received nearly three quarters of a billion dollars from these customers in demand charges alone, which have been used to offset costs that would otherwise be passed on to retail customers. In fact, with respect to the Midwest Energy PPAs, retail customers have continued to receive the benefit of those contracts even after they expired and Westar was no longer

receiving revenue from Midwest Energy because the rate credits they once produced are included in base rates set in the last retail rate review. The same would be true for the JEC PPA beyond January 3, 2019, without an adjustment considered in this case to be effective on a delayed basis to January 2019.

Q. WHAT ARE THE MAGNITUDE OF THE CREDITS FROM THESE THREE CONTRACTS THAT ARE CURRENTLY REFLECTED IN CUSTOMERS BASE RATES?

A. The revenue requirement impact associated with the first Midwest Energy Agreement is $12.6 million and the impact from the second Midwest Energy Agreement is $1.9 million. The expiration of the MKEC agreement will result in a revenue requirement impact of $41.5. All together, the expiration of these three agreements increase Westar's revenue requirement by approximately $56 million.

Q. HAS WESTAR BEEN ABLE TO NEGOTIATE NEW AGREEMENTS WITH SIMILAR TERMS WITH MIDWEST OR MKEC OR OTHER PARTIES?

A. No. While these contracts provided great value to our wholesale customers over the terms, these contracts today are priced significantly above current market values. As such, Westar has been unable to negotiate a replacement contract for the JEC 8% participation contract with MKEC. Westar was able to negotiate a 115 MW capacity replacement contract with Midwest Energy although with a significantly lower demand charge as dictated by current market conditions.

Q. PLEASE ELABORATE.

A. MKEC, Midwest Energy, and others have concentrated on either adding renewable energy resources or flexible natural gas generation to their resource portfolio in the current market environment. The current market environment has seen a substantial decrease in the costs for both renewable resources and quick start natural gas fired generation. With respect to the Midwest Energy agreement, Westar was able to provide Midwest Energy with only a reduced quantity of capacity compared to their previous agreements due to additional renewable energy resource Midwest Energy obtained. However, Westar has not been able to negotiate a new agreement with MKEC given current market conditions.

Q. WILL WESTAR SELL THE POWER MADE AVAILABLE BY THE EXPIRATION OF THESE AGREEMENTS INTO THE SPP MARKET?

A. Yes. Westar has and will continue to offer any excess power that is available into the SPP market to generate profits that all go to help reduce costs for retail customers. Any revenues received will flow through the fuel clause (RECA) to benefit retail customers.

Q. WHAT IS THE IMPACT OF THE EXPIRATION OF THESE CONTRACTS ON WESTAR'S REQUESTED RATE INCREASE IN THIS CASE?

A. The expiration of two Midwest Energy PPAs and the addition of revenue from the new contract at the lower rate results in a net revenue requirement increase of $9.5 million. The expiration of the MKEC PPA results in a revenue requirement increase of $41.5 million. As Westar witnesses Larry

Wilkus and Rebecca Fowler explain in their direct testimony, Westar is proposing a two-step rate increase in this docket. The first step would be to set rates based on Westar's revenue requirement not considering the revenue loss from the MKEC PPA. Because the MKEC PPA does not expire until January 3, 2019, the second step of the rate change would become effective after that time, reflecting the loss of revenue associated with the MKEC PPA.

As Westar witnesses Larry Wilkus and Ms. Fowler explain in their direct testimony, Westar is proposing a two-step rate increase in this docket. The first step would be to set rates based on Westar's revenue requirement not considering the revenue loss from the MKEC PPA. Because the MKEC PPA does not expire until January 3, 2019, the second step of the rate change would become effective at that time, reflecting the loss of revenue associated with the MKEC PPA.

Q. WHY SHOULD THE COMMISSION INCLUDE THE REVENUE LOSS FROM THE MKEC CONTRACT IN RETAIL RATES IN THIS RATE CASE WHEN THE CONTRACT DOES NOT EXPIRE UNTIL JANUARY 2019?

A. The expiration of the contract is known and measurable. As I indicated above and Mr. Wilkus and Ms. Fowler discuss, under the two-step rate change process we are proposing, the rate change resulting from the expiration of the MKEC contract will not be effective until after the contract expires.

Q. WHY IS THE COMPANY ASKING RETAIL CUSTOMERS TO PAY THE SAME AMOUNT THEY PAY TODAY FOR THE JEC OPERATIONS AND MAINTENANCE EXPENSE WHEN 8% OF THE PLANT WILL BE OWNED BY WILMINGTON TRUST COMPANY AFTER THE EXPIRATION OF THE LEASE?

A. Westar owns 84% of JEC. Wilmington Trust Company owns 8% of JEC; however, currently, Westar leases that 8% and that portion of the output of the plant is sold to MKEC through the PPA discussed above. Both the lease and the PPA expire in January 2019. KCP&L owns the remaining 8% of JEC. Westar is the operator of JEC and pays the upfront cost for O&M work done at the plant and then bills KCP&L for its 8% share. Currently, all of the O&M costs associated with the shares of JEC owned or leased by Westar (which is 92%) are included in Westar's base rates. The historical revenues from the sale to MKEC are also included in base rates as an offset to those costs.

After the lease expires on January 3, 2019, Westar will continue to serve as the operator of JEC and incur all of the O&M costs associated with running the plant. The three owners' interests in JEC are undivided in the plant as a whole (and cannot be divided), it is not possible for Westar to simply operate and maintain its share of the plant. In order to continue to utilize JEC to provide power to our customers, Westar must operate and

maintain the plant as a whole.[2] Therefore, it continues to be appropriate to include all of the operation and maintenance costs associated with 92% of JEC in Westar's base rates.

Q. IS WESTAR PROPOSING AN ALTERNATIVE TO ADJUSTING BASE RATES TO REFLECT THE REVENUE LOSS ASSOCIATED WITH THE MKEC AND MIDWEST ENERGY PPAS?

A. Yes. As an alternative to adjusting base rates to reflect the revenue loss associated with these agreements, Westar is proposing to make very minor modifications to the RECA tariff to allow these changes in revenue as well as all other changes in wholesale revenue (increases or decreases) to flow through the RECA. Such an approach will provide a real-time, symmetrical reflection of customer bill credits and the costs of energy production. As Ms. Fowler explains in her Direct Testimony, currently the RECA contains language that allows the revenue from all new full requirements wholesale contracts to flow through the RECA to benefit customers almost immediately. These full requirements contracts are very similar to the MKEC PPA except for the time in which the MKEC PPA was signed. The RECA only allows Westar to recover a portion of the lost revenue that occurs when a full requirements wholesale contracts ends (only the revenue

[2] The ownership and operating agreements that govern JEC require, in general, each owner to pay its pro rata share of expenses. Therefore, Westar believes it will have a claim against Wilmington Trust Company to recover the O&M costs associated with Wilmington's 8% interest and Westar will seek recovery of such costs. To the extent Westar is able to recover any amount from Wilmington Trust Company, Westar will defer that amount as a regulatory liability and return it to customers our next general rate case.

associated with those contracts executed after January 1, 2009). Under the current RECA, no revenue associated with any partial requirements agreements flows through – instead, revenue associated with these contracts is only included or removed through a general rate case.

Q. WHAT CHANGE IS WESTAR PROPOSING TO THE RECA?

A. As Ms. Fowler discusses in detail, Westar proposes to eliminate the date restriction from the RECA so that any change in revenue associated with a wholesale agreement (increase or decrease) will flow through the RECA, regardless of whether the agreement was executed before or after January 1, 2009. Westar also proposes to eliminate the language restricting the contracts that flow through the RECA to full requirements contracts and instead allow the change in revenue associated with any wholesale contract – full requirements or partial requirements – to flow through the RECA.

Q. WHY IS IT REASONABLE TO MAKE YOUR PROPOSED CHANGE?

A. Retail customers have received significant benefits from the timely flow through of revenues from new wholesale agreements. Table 3 below reflects the timing and amount of the demand revenue credits related to the wholesale demand revenue that retail customers have received through base rates and the RECA since 2009.

Table 3

	Wholesale Demand Revenue Offset to Fuel Expense through RECA	Wholesale Demand Revenue Offset through Base Rates	Total Demand Revenue Benefit to Retail
2009	$ -	$ 80,933,804	$ 80,933,804
2010	$ 2,646,284	$ 80,933,804	$ 83,580,088
2011	$ 20,396,678	$ 80,933,804	$ 101,330,482
2012	$ 24,011,007	$ 122,626,038	$ 146,637,045
2013	$ 5,210,199	$ 122,626,038	$ 127,836,237
2014	$ 4,802,971	$ 122,626,038	$ 127,429,009
2015	$ 2,903,666	$ 122,626,038	$ 125,529,704
2016	$ 140,820	$ 144,606,032	$ 144,746,852
TOTAL	$ 60,111,625	$ 877,911,596	$ 938,023,221

Note: For illustrative purposes. Assumes rate changes became effective on Jan. 1 of each year. Assumes rate change from Docket No. 15-WSEE-115-RTS became effective 1/1/16.

Retail customers have received the benefits from all new full requirements agreements Westar has entered without waiting for the next general rate case. Instead, the revenue associated with those agreements flows through the RECA shortly after the agreements are effective. Additionally, there have been at least two instances where retail customers received the benefit of a revenue credit from a contract even after the contract expired and Westar was no longer actually receiving the revenue from the wholesale customer. This includes the revenue associated with the earlier discussed Midwest Energy contracts, which expired May 31, 2017. Customers have continued to receive a revenue credit for these

contracts despite the fact that Westar has not been receiving payment from Midwest Energy since May 2017.

The changes we propose to the RECA would simply ensure that going forward, when a wholesale contract expires, rates are adjusted to reflect the decrease in revenue as quickly as they have historically been adjusted to reflect new revenue associated with new wholesale agreements. The changes will also ensure that to the extent Westar is able to enter into new wholesale agreements – whether full or partial requirements – retail customers will receive credit for that new revenue without waiting for the next general rate case. Without our proposed changes, the revenue associated with a new partial requirements contract would not be credited to customers until our next rate case.

Q. HOW DOES YOUR ALTERNATIVE REQUEST TO AMEND THE RECA AFFECT YOUR OVERALL REQUEST IN THIS CASE?

A. If the Commission approves the changes we have proposed to the RECA, it will not be necessary to adjust base rates to account for the expiration of the MKEC and Midwest Energy agreements. As a result, the two-step rate increase I mentioned above would no longer be necessary for this item because the rate change would occur through the RECA, and the only component of the second step rate increase would relate to expiring federal PTCs related to our 2008 owned wind farms. Ms. Fowler provides a more detailed explanation of the impact of the change to the RECA on our overall request in this case in her Direct Testimony.

Q. THANK YOU.