BEFORE THE STATE CORPORATION COMMISSION

OF THE STATE OF KANSAS

DIRECT TESTIMONY

OF

GREG A. GREENWOOD

WESTAR ENERGY

DOCKET NO. 08-WSEE-1041-RTS

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. Greg A. Greenwood, 818 South Kansas Avenue, Topeka, Kansas 66612.

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

A. Westar Energy, Inc., as Vice President, Generation Construction.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE.

A. In 1988, I graduated magna cum laude with a Bachelor of Business Administration degree in Accounting from Washburn University. I am also a certified public accountant, with five years of public accounting experience prior to my joining Westar. I joined Westar in April 1993 as a staff accountant in the corporate tax department. In September 1995, I joined the finance department as a financial analyst. I have held a variety of positions of increasing responsibility within the finance organization since that time, focusing primarily on financial forecasting and financial analysis, as well as raising funds for Westar in the capital markets. I was Treasurer of Westar from February 2003 through August 2006 before being named Vice President, Generation Construction in August 2006.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I will:

1. Update the Commission on construction progress on our 295 MWs of wind energy addressed in the wind energy predetermination case (Docket No. 08-WSEE-309-PRE),
2. Update the Commission on construction progress at Emporia Energy Center addressed in the Emporia Energy Center predetermination case (Docket No. 07-WSEE-616-PRE), and
3. Update the Commission on the progress of installing the new scrubber (FGD) system at Jeffrey Energy Center addressed in previous periodic notices pursuant to the terms of the Environmental Cost Recovery Rider (ECRR) authorized by the Commission in 2005 (Docket No. 05-WSEE-981-RTS).

II. WIND ENERGY

Q. ON DECEMBER 27, 2007, THE COMMISSION ISSUED AN ORDER IN THE WIND PREDETERMINATION DOCKET

(DOCKET NO. 08-WSEE-309-PRE) RELATED TO WESTAR'S PLAN TO CONSTRUCT OR PURCHASE POWER ASSOCIATED WITH 295 MW OF WIND GENERATION. WHAT ARE THE MAJOR ASPECTS OF THE ORDER RELEVANT TO YOUR TESTIMONY?

A. The Commission ruled that:

1. Westar's proposal to own 149 MW of wind generation and to enter into power purchase agreements (PPAs) to purchase 146 MW of wind generation is prudent (Order at page 42).

2. The 295 MW of wind generation is considered used and useful (Order at page 42).

3. To the extent capital is invested in the portion that Westar will own, $282 million will be included in rate base. Any amounts in excess of this will be subject to customary prudence review (Order at page 42).

4. Westar was allowed to include in rates all of its investment and associated costs related to the wind projects that are in commercial operation at least 120 days before the deadline for the Commission's order in this rate review and, for wind generation not yet having reached commercial operation (i.e., still under construction), Westar is allowed to include in rate base construction work in progress (CWIP) through the

date at least 120 days before the deadline for the Commission's order in this docket (Order at page 43).

5. The Commission declined to approve an incentive rate of return on Westar's investment in renewable energy as allowed by K.S.A. 66-117(e) at the time of the order. However, the Commission stated that Westar may in the future request an incentive rate of return on its wind investment and that the Commission has the authority to grant such an additional return (Order at page 43).

Q. WHAT IS THE CURRENT SCHEDULE FOR COMPLETION OF THE THREE WIND PROJECTS?

A. All projects continue to be on their tight original schedules for completion by the end of this year. Maintaining this timeline continues to be critically important for these projects as the federal Production Tax Credit (PTC) has not yet been extended by Congress and is still set to expire on December 31, 2008. The PTC reduces the cost of qualifying production facilities by a significant amount during the first 10 years of production. While we have negotiated provisions that provide every incentive for the developers to meet these tight deadlines, this does not assure that they can.

Q. DO YOU STILL BELIEVE THAT THESE PROJECTS CAN BE COMPLETED BY YEAR-END?

A. Yes. The schedule is tight, but workable so long as turbine deliveries stay on schedule and the weather is not unusually wet or windy.

Q. WHAT HAS WESTAR DONE TO FURTHER MANAGE THIS RISK?

A. We hired a project manager who is dedicated to helping the developers manage these projects and an employee with wind farm operations experience to help with construction management. (Our plans are that he will become our wind farm manager during operation.) Additionally, we have hired an outside engineering firm to assist with all phases of construction, including design review, construction management and start-up. And finally, we are among the utilities who recently have formally encouraged Congress to remove the risk of not qualifying for the PTC by extending the PTC deadline.

Q. HOW DO YOUR CURRENT COST ESTIMATES FOR THE OWNED WIND PROJECTS COMPARE TO THE $282 MILLION APPROVED IN THE PREDETERMINATION CASE?

A. The current estimate for the cost of the 149 MW of owned wind projects is $290 million, higher by about $8 million or 2.8% from the initial estimate.

Q. WHAT HAS CAUSED THE INCREASE IN COSTS RELATED TO THE OWNED WIND GENERATION?

A. A significant portion (55.7 million euro) of the costs related to turbines on the Central Plains Wind Farm was contractually denominated in euros rather than the U.S. dollar. It would have been presumptuous of Westar to place the order for these turbines prior to having received the Commission's order. The bid from RES America and the Commission pre-approved amount used an exchange rate of $1.34 per euro.

In 2007, the dollar continued to weaken against the euro during the last several months of the year. During this time, Westar was negotiating the terms of the agreement with RES America and seeking predetermination from the KCC. The exchange rate at the time of the final predetermination order in late December 2007 was about $1.48 per euro. Within 10 days of receiving the Commission's order, we eliminated further foreign exchange risk by hedging the exchange rate at a slightly more favorable average exchange rate of about $1.47 per euro. The increase in costs due to the exchange rate was about $7.4 million (55.7 million euros x ($1.47 – $1.34 exchange rates)).

We are pleased that the Commission was able to honor our request for expedited treatment, because since that time the dollar has further weakened against the euro. As of May 1, 2008, the exchange rate had fallen to $1.56 per euro. With that change in the exchange rate, we would have suffered a $12.3 million cost increase. Stated differently, by hedging our currency risk when we did, we were able to avoid a further cost increase of $4.9 million.

Q. PLEASE DISCUSS THE COSTS INCURRED OR EXPECTED TO BE INCURRED RELATED TO THE 149 MW OF OWNED WIND PROJECTS AND THAT ARE REFLECTED IN THIS APPLICATION.

A. We have expended $115.9 million on owned wind projects as of March 31, 2008, and expect to have invested $219.5 million of the total $290 million at least 120 days before the deadline for the Commission's order. This post test-year adjustment is authorized by the wind predetermination order as discussed above and is meant to allow Staff and the intervenors sufficient time to audit those figures. The details of the adjustment to include wind generation-related CWIP in rate base will be supported by Mr. Kongs. We plan to update these adjustments for actual costs incurred through data request responses and my rebuttal testimony.

III. EMPORIA ENERGY CENTER (EEC)

Q. ON JUNE 11, 2007, THE COMMISSION APPROVED A JOINT STIPULATION AND AGREEMENT FILED MAY 1, 2007, BY WESTAR, COMMISSION STAFF AND THE CITIZENS' UTILITY RATEPAYERS BOARD IN THE PREDETERMINATION CASE RELATED TO EEC (DOCKET NO. 07-WSEE-616-PRE). WHAT

ASPECTS OF THE ORDER ARE RELEVANT TO INCLUSION OF EEC IN RETAIL RATES?

A. The Commission-approved Joint Stipulation and Agreement (S&A) states:

1. The construction of EEC as proposed is prudent and will result in the appropriate amount and type of capacity to serve Westar's anticipated peak needs (S&A at para 9).
2. The cost of EEC is estimated to be approximately $318 million and the cost is reasonable and, to the extent Westar expends up to and including such amount in the construction of EEC, it shall be allowed for inclusion in Westar's rate base. If the cost of constructing EEC exceeds $318 million, Westar will have the opportunity to explain why the excess is reasonable, without prejudice, and Staff and CURB may take whatever position they choose with respect to their opinions about any capital expenditures in excess of the $318 million, again, without prejudice (S&A at para 10).
3. EEC's initial depreciation rates for various plant accounts, as proposed by Westar are accepted. The rates are as follows:

Account 343, 344	3.45% annual rate
Account 341, 342, 345, 346	2.58% annual rate

These rates remain subject to adjustment in Westar's future depreciation studies (S&A at para 11).

4. In addition to any request to include CWIP in rate base, Westar may make a *pro forma* adjustment to its test year to include investment and operating costs related to Phase I of EEC (Phase I relates to common facilities and the first five of seven units) and no party will contest the inclusion of such adjustments as known and measurable adjustments provided Phase I is operational prior to the Commission's final Order in the 2008 rate proceeding (S&A at para 13).

5. Westar is allowed to use the abbreviated rate setting process contained in K.A.R. 82-1-231(b)(3) for recovery of Phase II of EEC (Phase II comprises units 6 & 7). If substantial changes in law or other major events occur that substantially decrease Westar's costs, it is agreed that these facts could also be addressed in the same abbreviated rate setting process (S&A at para 14).

Q. WHAT IS THE CURRENT SCHEDULE FOR COMPLETION OF PHASE I AND PHASE II OF EEC?

A. Consistent with our plans, Phases I and II are expected to be completed before the time of summer peak demands in 2008 and 2009, respectively. We are on track for both, although we had hoped to have the Phase I units commissioned a few weeks earlier than we now expect. Nevertheless, I am pleased to report that we made our first electricity on April 29 and we expect all Phase I units to be commercially operational before the end of June.

Q. HOW DO THE CURRENT COST ESTIMATES FOR EEC COMPARE TO THE $318 MILLION APPROVED IN THE PREDETERMINATION CASE?

A. Again, I am pleased to report that the overall cost estimate for the EEC remains at $318 million. We currently have about $11.1 million of project contingency and escalation included in the $318 million cost estimate. While, as is typical for such projects, we still have some cost exposure for items like labor, we remain reasonably confident that we can hold the project within the overall cost estimate, or if there were to be overruns, they would be relatively minor.

Q. PLEASE DISCUSS THE COSTS ALREADY INCURRED OR EXPECTED TO BE INCURRED BY NO LATER THAN 120 DAYS PRIOR TO THE DEADLINE FOR THE COMMISSION'S ORDER IN THIS CASE.

A. We have expended $213.7 million on all phases of EEC as of March 31, 2008, and expect to incur costs totaling $270.3 million by no later than 120 days prior to the deadline for the Commission's order, the date through which we ask the Commission to update our CWIP balance. We currently estimate that $199.5 million of this amount relates to Phase I of EEC and is included in plant-in-service in our Application. The remaining $70.8 million in costs relate to Phase II and are included only as adjustments to CWIP in our Application. The details of these adjustments will be supported by Mr. Kongs. We plan to update these adjustments for actual costs incurred through data request responses and rebuttal testimony in this proceeding consistent with the Commission's EEC predetermination order.

Q. ARE THERE OTHER COSTS RELATED TO EEC REFLECTED IN YOUR APPLICATION THROUGH A *PRO FORMA* ADJUSTMENT?

A. Yes. Operations and maintenance costs, including applicable depreciation, for Phase I are included as adjustments in our Application. The development of these adjustments is described and supported in the testimony of Mr. Kongs.

IV. JEFFREY ENERGY CENTER FLUIDIZED GAS DESULFURIZATION (FGD) SCRUBBER UPGRADE

Q. HOW DOES WESTAR EXPECT TO RECOVER THE COSTS RELATED TO THE JEFFREY ENERGY CENTER FGD PROJECT?

A. As with other investments required for compliance with air emission regulations, we are recovering, or intend to recover the related capital costs through the ECRR approved by the Commission in 2005, and not in base rates. Nevertheless, because of the importance of this project, I will take this opportunity to update the Commission on it as well.

Q. HAVE ANY COSTS RELATED TO THIS PROJECT ALREADY BEEN INCLUDED IN RATES THROUGH THE ECRR?

A. Yes. In 2006, Westar incurred capital costs of $14.6 million related to the project. Through an ECRR notice made in March 2007, the revenue requirement associated with this level of investment was reflected in retail rates beginning June 1, 2007. In 2007, Westar made additional capital investment of $156.7 million, for which the associated revenue requirement was included in our March 2008 ECRR filing, and will be included in rates beginning June 1, 2008.

Q. WHAT IS THE TOTAL EXPECTED COST OF THE PROJECT?

A. The current estimated cost of the total project is $360 million, which is consistent with the high end of the range in Westar's most recent ECRR notice provided to Staff.

Q. WHAT AMOUNT OF ESCALATION AND CONTINGENCY IS INCLUDED IN THE CURRENT COST ESTIMATE?

A. The current level of project escalation and contingency is down to $6.6 million with all but $1 million specifically allocated to contracts that we believe will need to be increased due to scope changes.

Q. DO YOU EXPECT TO BE ABLE TO COMPLETE THE PROJECT AND MAINTAIN THE TOTAL COST AT $360 MILLION?

A. Only $1 million of unallocated contingency on a project of this size and complexity that will not be complete until May 2009 does not leave much margin. However, we have contracted for almost all of our labor and equipment needs and by June 2008 we will have completed common facilities needed to run the FGD system for all three units and have completed all the unit-specific work on the first unit. Once we commission Unit 1 we intend to re-evaluate the project cost using knowledge gained to date. My intuition is that we will see an upward adjustment, but one which is fairly modest relative to the size and complexity of the project. The ability of our contractors to continue to perform in accordance with their commitments will be central to the ultimate result.

Q. WHAT IS THE PLANNED SCHEDULE FOR COMPLETION OF THE FGD PROJECT?

A. The original project schedule was to have completed all of the common facilities needed to run the systems for all three JEC units by May 1, 2008, and to begin running the FGD system for Unit 1 also in May. The completion of the Unit 3 and Unit 2 specific systems was scheduled for completion in fall 2008 and spring 2009, respectively.

Q. WHAT MODIFICATIONS, IF ANY, HAVE YOU HAD TO MAKE TO THIS SCHEDULE?

A. Due to the complexity of the schedule, inclement weather that affected our work earlier this year, the financial failure of one of our contractors and the turnover among contract laborers, we have had to modify our schedule slightly. We finished our planned Unit 1 outage within about two and a half weeks of the planned outage schedule, but were unable to fully complete and test all of the new scrubber equipment so as to restart the unit while actually using the new FGD system. Following a full equipment check-out and testing in parallel with post-outage operations, we expect to begin operating the FGD system on Unit 1 in June. I am disappointed with the short delay, but certainly not surprised given a project of this size and complexity – all having to be installed at an operating plant. With the common plant complete, we have been able to maintain the original schedules for the second and third unit's FGD equipment.

Q. THANK YOU.