Approved: February 25, 2011
Date

MINUTES OF THE HOUSE ENERGY AND UTILITIES COMMITTEE

The meeting was called to order by Chairman Carl Holmes at 9:00 A.M. on January 18, 2011 in Room 785 of the Docking State Office Building.

All members were present except:
Mike Burgess-excused
Phil Hermanson-excused

Committee staff present:
Cindy Lash, Kansas Legislative Research
Corey Carnahan, Kansas Legislative Research
Matt Sterling, Kansas Legislative Revisor
Renae Hansen, Administrative Assistant

Others attending:
Twenty-Four including the attached list.

Representative Forrest Knox moved to introduce (Attachment 1) committee bills. Seconded by Representative Annie Kuether. Motion carried unanimously.

Representative Tom Sloan moved to introduce a bill concerning a state energy plan bill. The motion was seconded by Representative Annie Kuether. Motion carried unanimously.

Informational hearing on:
KCC Staff Petition 11-GIME-492-GIE

Tom Day, KCC, spoke to the committee on the origination of the KCC Staff Petition 11-GIME-492-GIE (Attachment 2). Mr. Day also introduced some of the staff present with him: Michael Gross, Tom Stratton Jr., and Dr. Michael Schmidt.

Dr. Michael Schmidt presented information from the KCC (Attachment 3) concerning the KCC Staff Petition 11-GIME-492-GIE. He spoke about some of the new EPA rules that will be implemented by 2015. He noted that they estimate $1 billion dollars in cost to retrofit the older coal plants in order to meet the new EPA regulations. Dr. Schmidt explained several questions they are hoping to answer with this exploratory petition. He noted that generally the energy company will come to the KCC to ask for rate adjustments after the utility has already invested in the upgrades. This time, they are hoping to look at the cost of retrofitting versus building a new plant, prior to the upgrade initiative. He gave the committee estimates for cost per unit of energy of retrofitting the plants to meet the new EPA standards versus building new plants using either coal, natural gas, or nuclear power.

David Springe, CURB, spoke to the committee about the KCC Staff Petition 11-GIME-492-GIE, noting that they filed a motion to open the docket and a motion to intervene should they decide to open the docket. He asked that the procedural piece that allows the docket to be open would also allow more time for the research and procedural process of the exploration.

Questions were asked by Representative Carl Holmes.

Mark Schreiber, Westar, (Attachment 4) spoke to the committee about the staff petition and provided the committee information on the generation process and its affects on rates. Additionally, he provided graphs showing the cost in environmental stewardship and how that has affected the emissions of SO_2, NO_x and other particles. Included in Mr. Schreiber's testimony is the different generators they own and the planned projects they have to upgrade the emissions control equipment. He also talked to the committee about the cost of fuel and its price volatility in the market.

Scott Jones, KCPL, (Attachment 5), in response to the KCC staff petition offered the committee information on what they have done in the past to clean up the air emissions from their power production plants. Additionally, they noted some of their future plans to retrofit the plants.

The minutes of the House Energy and Utilities Committee at 9:00 A.M. on January 18, 2011, in Room 785 of the Docking State Office Building.

Questions were asked to all presenters, and comments made by Representatives: Stan Frownfelter, Vern Swanson, Don Hineman, Annie Kuether, Nile Dillmore, Forrest Knox, Carl Holmes, Richard Proehl, and Don Schroeder.

Paul Lane, KCP&L, environmental manager, helped answer some of the questions asked by the committee. Tom Gross, KDHE also helped to answer some of the committee questions.

The next meeting is scheduled for January 19, 2011.

The meeting was adjourned at 10:50 A.M.

HOUSE ENERGY AND UTILITIES COMMITTEE
GUEST LIST

DATE: January 18, 2011

NAME	REPRESENTING
Colin Curtis	The Sandstone Group
Tom Day	KCC
Tom Graves	KDHE
Rick Brunetti	KDHE
Paul Snider	KCPL
Michael Wagner	KCC
Phil Wages	KEPCo
Scott Jones	KCPL
Michael Schmidt	KCC
Judy Bada	Capitol Advantage
Mike Scott	AT&T
Larry Bell	Midwest Energy
Mark Schreiber	Westar Energy
Bill Eastman	Westar Energy
Jim Gartner	BT&T
Lon Stanton	NNG
Melissa Ward	Hein Law Firm
Lydia Buster	Federico Consulting
Joe Mosimann	PMCA of KS
Kimberly Svaty	KMA

HOUSE ENERGY AND UTILITIES COMMITTEE
GUEST LIST

DATE: January 18, 2011

NAME	REPRESENTING
Corey Mohn	KDOC
Bill Brady	Cap Ct.
Clare Gustin	Sunflower Electric
Don Gulley	"
[illegible]	El Paso
Leslie Kaufman	Ks Co-op Council
Wes Ashton	Black Hills
[illegible]	KEC

HOUSE COMMITTEE ON ENERGY AND UTILITIES
BILL INTRODUCTIONS
1/18/11

1) Ownership of pore space for CO2

2) Wind rights to surface land owner

3) Require KCC to produce electric supply-demand reports every 2 years for all electric utilities in Kansas

4) Direct the KCC to consider energy storage devices as part of the infrastructure that they will support for rate recovery and earnings purposes

5) Require telecommunications providers to provide broadband services

6) Interim utility rates subject to refund

7) Right of way of 200 feet for transmission lines

HOUSE ENERGY AND UTILITIES

DATE: 1/18/2011

ATTACHMENT 1

BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

In the Matter of a General Investigation Into KCP&L and Westar Generation Capabilities, Including as these Capabilities May Be Affected by Environmental Requirements	Docket No. 11-GIME-~~412~~-GIE

STAFF'S PETITION FOR GENERAL INVESTIGATION INTO THE GENERATION CAPABILITIES OF KANSAS CITY POWER AND LIGHT CO. AND WESTAR, FOCUSING ON BUT NOT LIMITED TO UNITS CURRENTLY SUBJECT TO ENVIRONMENTAL REQUIREMENTS AND FOR RELATED RELIEF

The Staff of the Kansas Corporation Commission (Commission) seeks a Commission investigation into the generation capabilities of: 1) Kansas City Power and Light (KCP&L) and 2) Westar Energy, Inc. and Kansas Gas and Electric Company (collectively referred to as "Westar"), particularly as these capabilities may be affected by environmental upgrade requirements. In addition, Staff seeks the establishment of criteria to be used when evaluating retrofit, decommission, or replacement decisions, as more fully described at paragraph 11. In furtherance of and to facilitate the Commission's investigation and findings, Staff seeks the immediate entry of a Commission order: 1) opening a general docket for the purpose of addressing the issues described in this Petition, 2) establishing a procedural schedule, and 3) assessing costs of this docket to KCP&L and Westar.

1. Westar and KCP&L face environmental regulatory requirements for retrofits of existing plants if they want to continue operating these plants. The Commission Staff wants to ensure that the full scope of the environmental retrofit decisions and alternative options are fully considered, and, if necessary, guidance given by the Commission to the companies, prior to commitment of additional funds or

resources to executing the currently-contemplated retrofit decisions. Staff recognizes the companies have been involved in consideration and planning for some time and have legitimately viewed the process from their own points of view. Staff seeks the establishment of this docket so that the Commission has an opportunity to consider these issues from its own wider point of view, which includes in particular the public interest. Staff views this as essential due to the very long-term financial impact of the expenditures at issue. The full scope of the retrofitting decision involves three fundamental questions:

a. Is the capacity and/or energy provided by the plant to be retrofitted needed by the utility?

b. If the capacity and/or energy is needed, then is the decision to retrofit a more economically efficient choice than decommissioning the existing plant and building a new plant?

c. If the retrofit choice is the better choice, then has the utility chosen the best retrofitting option?

2. Staff contends the appropriate time to examine these questions is before the utilities incur financial obligations that could potentially be charged to ratepayers and before the commencement of construction executing a retrofitting decision. Accordingly, Staff now seeks to ensure that these questions are fully investigated within a formal structure with understood criteria for evaluation of the answers to the three fundamental questions.

BACKGROUND

3. In support of its Petition, Staff asserts the broad jurisdiction of the Commission, describes the dynamic environmental regulatory environment in which decisions about electricity generation are being made, provides an overview of the pertinent generation fleet of the subject utilities and specifies the relief now sought, as follows:

4. Pursuant to K.S.A. 66-101, the Commission has full power, authority and jurisdiction to supervise and control the electric public utilities operating in Kansas and is empowered to do all things necessary and convenient for the exercise of such power, authority and jurisdiction. K.S.A. 66-101b states that electric utilities subject to the Commission's jurisdiction are "required to furnish reasonably efficient and sufficient service and facilities for the use of any and all products or services rendered, furnished, supplied or produced by such electric public utility, to establish just and reasonable rates, charges and exactions and to make just and reasonable rules, classifications and regulations." K.S.A. 66-101g states that the provisions of the Kansas Public Utilities Act and all grants of power, authority, and jurisdiction made to the Commission shall be liberally construed, and all incidental powers necessary to carry into effect the provisions of this act are expressly granted and conferred upon the Commission. The Commission has previously found that KSA 66-1239, the statute providing for predetermination of rate-making principles, does not limit the Commission's broad authority to continue to oversee a utility's investment and operations.[1]

5. In 1977, the Clean Air Act (CAA) was amended by the addition of §169 to protect visibility in Class I designated areas (e.g. national parks, wilderness areas, and

[1] Final Order, Docket No. 08-WSEE-309-PRE, ¶13 (Dec. 27, 2007)

international parks) from regional haze.[2] In 1980, the Environmental Protection Agency (EPA) codified regulations at 40 C.F.R. 51.300-51.307 addressing regional haze within designated Class I areas "reasonably attributable" to specific anthropogenic sources of pollution. "Anthropogenic sources" refers to those pollution sources resulting from the influence of human beings on nature. Under 40 C.F.R. 51.302, states were required to determine which facilities should install Best Available Retrofit Technology (BART) to control pollutants contributing to visibility impairment in Class I areas. The CAA was again amended in 1990 by adding §169B, which made §169 now §169A, authorizing the EPA to conduct further research and to assess progress.[3]

6. In 1999, the EPA finalized the Regional Haze Rule requiring each state that contributes to visibility impairment to develop a state implementation plan (SIP) addressing regional haze visibility impairment.[4] Under 40 C.F.R. 51.308, states are required to set reasonable progress goals for achieving natural visibility conditions, to establish a long-term emissions reduction strategy, and to develop monitoring and recordkeeping procedures to assess and report on visibility.[5] Section 51.308(e) specifically outlines requirements for applying best available retrofit technology (BART) to interstate emission sources that contribute to visibility impairment in any Class I federal area, irrespective of state boundaries.[6]

7. In 2005, the EPA amended the 1999 regulations and established guidelines

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[2] State of Kansas Air Quality State Implementation Plan: Regional Haze, Kan. Dep't. of Health and Env't (October 26, 2009) p. 9 [hereinafter KDHE SIP], available at http://www.kdheks.gov/bar/reghaze/KDHERegHaze.pdf. KCP&L Regional Haze Agreement, Kan. Dept. of Heath and Env't, p. 2 (Dec. 5, 2007).
[3] KDHE SIP, supra note 2, at 9.
[4] Id. at 7.
[5] Id.
[6] Id.

2-9

for states to identify facilities subject to BART, to set presumptive emission limits for coal-fired electrical generating units (EGUs), and to determine the level of control technology required to implement BART.[7] Using the methodology prescribed by the EPA's BART Guidelines, the Staff of the Kansas agency charged with carrying out these duties, the Kansas Department of Health and Environment (KDHE),[8] identified the following five EGU units subject to BART controls under the Regional Haze Rule: KCP&L-La Cygne 1, KCP&L-La Cygne 2, Westar-Gordon Evans 2, Westar-Jeffrey 1, and Westar-Jeffrey 2.[9] Each owner, KCP&L and Westar, was then provided with a guidance document for conducting its own BART analysis.[10]

8. Westar submitted its BART Five Factor Analysis for Jeffrey Units 1 and 2 and Gordon Evans Unit 2 in August 2007.[11] Subsequently, Westar entered into an agreement with KDHE to meet the presumptive BART Nitrogen Oxide (NO_x) emission rates for Jeffrey Units 1 and 2 using new low NO_x burner systems for each unit.[12] In addition, Westar agreed to meet the Sulfur Dioxide (SO_2) presumptive limit of 0.15 lb/MMBtu for Jeffrey Units 1 and 2 by rebuilding the existing wet scrubber on each unit.[13] For Gordon Evans, Westar agreed to switch from No. 6 fuel oil to natural gas with

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[7] On July 6, 2005, EPA published a revised final rule, including Appendix Y to 40 C.F.R. part 51 "Guidelines for BART Determinations under the Regional Haze Rule (BART Guidelines), which provides direction to states on determining which of these older sources may need to install BART and how to determine BART." KDHE SIP, supra note 2, at 44; Westar Energy Inc. Regional Haze Agreement, Kan. Dept. of Health and Evn't, p. 3 (Feb. 29, 2008).

[8] KDHE has general jurisdiction of over matters involving air quality under the Kansas Air Quality Act, pursuant to KSA 65-3001 et seq. Westar Energy Inc. Regional Haze Agreement, Kan. Dept. of Health and Env't, p. 1 (Feb. 29, 2008).

[9] KDHE SIP, supra note 2, at 25, 45-49.

[10] Id. at 49.

[11] The document was amended with additional modeling analysis for Gordon Evans in May 2009. KDHE SIP, supra note 2, at 50.

[12] KDHE SIP, supra note 2, at 50.

[13] Id.

1% sulfur content or less by weight to achieve the visibility improvement requirements.[14] Under a separate settlement agreement with the EPA, Westar further agreed to install a selective catalytic reduction (SCR) system on at least one of its three Jeffrey units by the end of 2014, estimated to cost approximately $200 million.[15] Westar has installed low NO_x burners and upgraded the wet scrubbers on all three units and is currently in the process of engineering the SCR.[16] It bears mentioning that Westar is a 50% owner of La Cygne Units 1 and 2, which are operated by KCP&L.

9. KCP&L also submitted its own BART Five Factor Analysis.[17] During the course of implementing a BART agreement with KDHE, KCP&L proposed limits more restrictive than the presumptive BART limits.[18] KCP&L agreed to the higher limits in order to be consistent with its agreement with the Sierra Club and with the expectation that the Kansas City metro area would likely be designated a nonattainment area for ozone.[19] "Nonattainment area for ozone" means the standards are not being met.[20] Since that agreement, Kansas City has been designated a nonattainment area for ozone. [21] Pursuant to its agreement with KDHE, KCP&L plans to install wet scrubbers, baghouses,

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[14] Id. at 50-51. Westar Energy, Inc. Regional Haze Agreement, Kan. Dept. of Health and Env't, p. 5 (Feb. 29, 2008).
[15] The EPA settlement agreement requires the company to install a selective catalytic reduction (SCR) system on one of the three Jeffrey Energy Center coal units by the end of 2014. Depending on the NOx emission reductions attained by that SCR and attainable through the installation of other controls on the other two coal units, a second SCR system would need to be installed on another Jeffrey coal unit by the end of 2016, if needed to meet the reduction targets. Westar Energy, Inc., Quarterly Report (Form 10-Q), at 26 (For the quarterly period ended September 31, 2010).
[16] SNL Financial, Jeffrey Energy Center Unit Emission Controls Report (Jan. 4, 2011); Westar's KCC Major Construction Update, September 10, 2010; E-mail from Leslie Wines, administrative assistant to Dick Ross, Westar Energy, to Bob Glass, Chief of Economic Policy, KCC (Jan. 4, 2011) (on file with KCC).
[17] KDHE SIP, supra note 2, at 49-50.
[18] KDHE SIP, supra note 2, at 50.
[19] Id.
[20] Environmental Protection Agency, Ground-level Ozone Standards Designation, http://www.epa.gov/ozonedesignations/ (last visited Jan. 6, 2011)
[21] KCP&L Annual Report (Form 10-K), p. 14 (For the fiscal year ended December 31, 2009).

and a common chimney for La Cygne Units 1 and 2 as well as a selective catalytic reduction (SCR) system and low NOx burners for unit 2.[22] KCP&L provided to Staff a confidential estimate of the expected cost of the retrofit project.[23] In its 2009 Annual 10k filed with the Securities Exchange Commission, KCP&L noted the various rules issued by the EPA are in a state of flux then said: "Great Plains Energy's and KCP&L's current estimates of capital expenditures (exclusive of allowance for funds used during construction and property taxes) to comply with the currently effective Clean Air Interstate Rule (CAIR) and with the best available retrofit technology rule (BART) is (sic) a range of approximately $0.8 billion - $0.9 billion."[24] As noted in the preceding paragraph, Westar has estimated a cost of approximately $200.0 million to install an SCR on one of its three Jeffrey units by the end of 2014. KCP&L, which has an ownership interest in the Jeffrey Units, notes that Westar has estimated the cost of two SCRs at Jeffrey–if an additional SCR unit is required–will be approximately $500 million.[25] As the Commission recognized in its November 22, 2010 Order in 10-KCPE-415-RTS, page 111, the cost of upgrading La Cygne "will be very expensive." This is only an initial cost estimate, not a definitive cost estimate, of the retrofit construction and does not include the cost of any additional construction needed to extend the life of the two generators at La Cygne, which are more than 30 years old. While most steam production coal units built in the 1950s through the 1970s had an initial life span of 40 years, these life spans were increased to more appropriate life spans in the 55 to 60 year range following capital improvements to the boiler or turbine. Specifically, the Commission recently determined

[22] Memorandum from Curtis D. Blanc, Senior Director of Regulatory Affairs, KCP&L, to Michael R. Schmidt, Director of Utilities, KCC (September 30, 2010) (on file with KCC).
[23] Id.
[24] KCP&L Annual Report (Form 10-K), p. 14 (For the fiscal year ended December 31, 2009).
[25] Id. at 15.

the life spans for La Cygne Units 1 and 2 were 59 and 55 years, respectively.[26] Construction on the common chimney at La Cygne has already begun and construction on the remaining elements of the retrofit is expected to begin in 2011 to be completed by the June 1, 2015 KDHE Agreement deadline.[27]

CURRENT ISSUES

10. Great expense to ratepayers will result from the continued implementation of these negotiated and agreed solutions, which involve agreements over which the Commission had no regulatory oversight. Until now the companies have implemented the described solutions, often independent of meaningful Commission involvement in considering the alternatives. Traditionally, the Commission would not review the prudence and reasonableness of such decisions and costs until the utility has incurred the costs. Staff contends the Commission should review the short and long term planning decisions necessitated by environmental requirements to help ensure all alternatives have been considered *before* costs are incurred to provide guidance to utilities about what the Commission concludes is the most reasonable and efficient approach to the generation fleet. Even more expense will occur if additional environmental requirements are imposed on the aging EGUs owned by these companies.[28] The basis in law for the

[26] Order: 1) Addressing Prudence; 2) Approving Application, in Part; and 3) Ruling on Pending Requests, Docket No. 10-KCPE-415-RTS, p. 66, 111 (Nov. 22, 2010) (Adopting a 60-year lifespan for Iatan 2 and finding that the average life span for KCP&L's other steam production units is 59.4 years).
[27] Interview with KCP&L at La Cygne Generating Station. (Nov. 2, 2010).
[28] As stated by Westar in its 2009 annual report: "Environmental requirements have been changing substantially and have become more stringent over time. Accordingly, we may be required to further reduce emissions of presently regulated gases and substances, such as SO2, NOx, particulate matter and mercury, and we may be required to reduce or limit emissions of gases and substances not presently regulated (e.g., carbon dioxide (CO2)). Proposals and bills in those respects include: the EPA's national ambient air quality standards for particulate matter and ozone, regulations being developed by the EPA that will require emissions controls for mercury and other hazardous air pollutants, additional legislation introduced in the past few years in Congress requiring reductions of presently unregulated gases related primarily to concerns about climate change, state legislation introduced recently that could require mitigation of CO2 emissions, and additional requirements regarding storage and disposal of non-hazardous

environmental requirements imposed on these KCP&L and Westar EGUs is well-established, but alternatives to these expensive solutions should be analyzed to evaluate the efficient use of ratepayer cost-recovery. Alternatives to environmental retrofit that the Commission should consider include decommissioning or replacement.

11. Decisions to implement expensive solutions for individual EGUs must be understood within the broader context, taking into account the marginal capacity requirements of electric utilities and the effect of these decisions on local and state economies. Accordingly, Staff now seeks to establish Commission guidelines for the types of analysis expected from electric utilities facing these decisions as well as to clarify the decision mechanism and criteria to be used when evaluating retrofit, decommission, or replacement decisions. Staff contends these criteria should be established now to serve as a basis for the Commission's consideration and findings when addressing issues such as those in a predetermination docket more fully described at paragraph 14.

12. During the investigation phase in this docket, the Commission's order should require KCP&L and Westar to answer the following questions:

a. What EPA and KDHE regulatory programs apply to each EGU within the KCP&L and Westar fleets?

b. What are the emission allowances for each unit?

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fossil fuel combustion materials, including coal ash. If enacted, the impact of these proposed laws and regulations on our consolidated financial results cannot be accurately predicted because of various factors outside our control including, but not limited to, the specific terms of such laws or regulations, the amount and timing of required capital expenditures, the cost of any emission allowances or credits we may be required to purchase and our ability to recover additional capital and operating expenses in prices. Based on currently available information, we cannot estimate our costs to comply with these proposed laws and regulations, but we believe such costs could be material." Westar Energy, Inc., Annual Report (Form 10-K), p. 19 (For the fiscal year ended December 31, 2009).

c. What are Westar and KCP&L's expected capacity and/or energy needs over the appropriate investment planning horizons (e.g. 10, 15, 25 years) given the Companies' existing generation portfolios?

d. If capacity and/or energy is not needed, then how should non-compliant plants be treated?

e. If capacity and/or energy is needed, should KCP&L and Westar retrofit existing non-compliant plants or build new plants?

f. What criteria should be employed to determine optimal retrofit configurations to meet regulatory requirements? Has this analysis been performed for individual plants? Which plants?

g. Do the environmental retrofit projects that are currently installed, under construction or planned represent the end of the upgrading process for their corresponding generation units, or will the environmental retrofit projects, in-turn, require additional improvements to these units?

h. For any planned but incomplete environmental upgrades, has analysis been performed on how the planned upgrades may impact the expected life of the plant at the completion of the upgrades? If so, what criteria for analysis was used?

i. If replacement of a plant is considered as an option, what criteria should be used to determine the size and type of the generation plant to be built?

j. What factors were considered in any hypothetical resource portfolio scenarios which have been run?

k. How do Westar and KCP&L plan to regulate the wind and other renewable generation that is required by the Renewable Energy Standards Act (KSA 66-1256 through 66-1262)? If Westar and KCP&L plan to add generation to regulate wind and other renewable generation, how much generation and what fuel sources are planned to be used at these new plants used for regulation?

13. In addition to addressing the questions contained in the preceding paragraph, the parties should provide additional comments to assist the Commission in its consideration of the impact of potential environmental upgrade requirements on all EGUs owned by them.

14. KCP&L has informed Staff of its intent to file, pursuant to KSA 66-1239(c), a docket pertaining to environmental upgrades at La Cygne (Predetermination Docket). In this Predetermination Docket, the Commission will be asked to determine, within 180 days of the date of filing of the petition, the rate-making principles and treatment that will be applicable to KCP&L as it pertains to the La Cygne upgrades. Staff contends the criteria discussed in paragraph 11 should be promptly established here to provide a basis for the Commission's consideration and findings in the Predetermination Docket, and suggests it is essential that the Commission have an adequate opportunity to establish the criteria before taking up the issues with which it will be presented in the Predetermination Docket. Staff notes 2009 Supp. K.S.A. 66-1239(c)(2) requires a company seeking predetermination to describe, among other things, its ten-year generation and load forecasts and all power supply alternatives considered to meet the utility's load forecasts, but Staff maintains additional information, including that identified in paragraph 12, is also needed. Mindful that the La Cygne project has time

constraints, and based on its contention the Commission will be hampered in its ability to fully consider issues presented in KCP&L's Predetermination Docket until progress is made in this docket, Staff asks the Commission to move forward with this docket without undue delay and proposes the following aggressive procedural schedule for this docket:

a. KCP&L and Westar answer questions set out in paragraph 12 within 30 days of the order opening docket or no later than February 11, 2010, whichever occurs first;

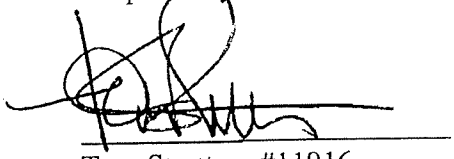
b. KCP&L and Westar, as well as intervening parties, file comments to the issues identified in the Commission's order opening docket within 30 days of the order; and

c. Upon receipt and consideration of answers to paragraph 12 questions and comments, and with the goal of establishing guidelines for analyzing retrofit, decommission, or replacement decisions and of clarifying the decision mechanism, the Commission should determine what other and further proceedings may be necessary. In its discretion, the Commission may decide that responses are needed to the Companies' answers to questions and comments, by Staff and other parties. In that case, Staff requests the Commission consider the scope and complexity of the issues addressed in setting a deadline for response.

WHEREFORE, Staff seeks a Commission order that opens this general docket for purposes of a general investigation into the status of the subject KCP&L and Westar EGUs, particularly as that status may be affected by current or future environmental requirements, establishes the procedural schedule suggested in paragraph 14, assesses the

costs of this docket to KCP&L and Westar, and for other and further relief as the Commission deems appropriate.

Respectfully Submitted,



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ATTORNEYS FOR KCC STAFF

CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that a true and correct copy of the above and foregoing Staff's Petition For General Investigation was placed in the United States mail, postage prepaid, or hand-delivered this 10th day of January, 2011, to the following:

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PRESENTATION OF THE KANSAS CORPORATION COMMISSION

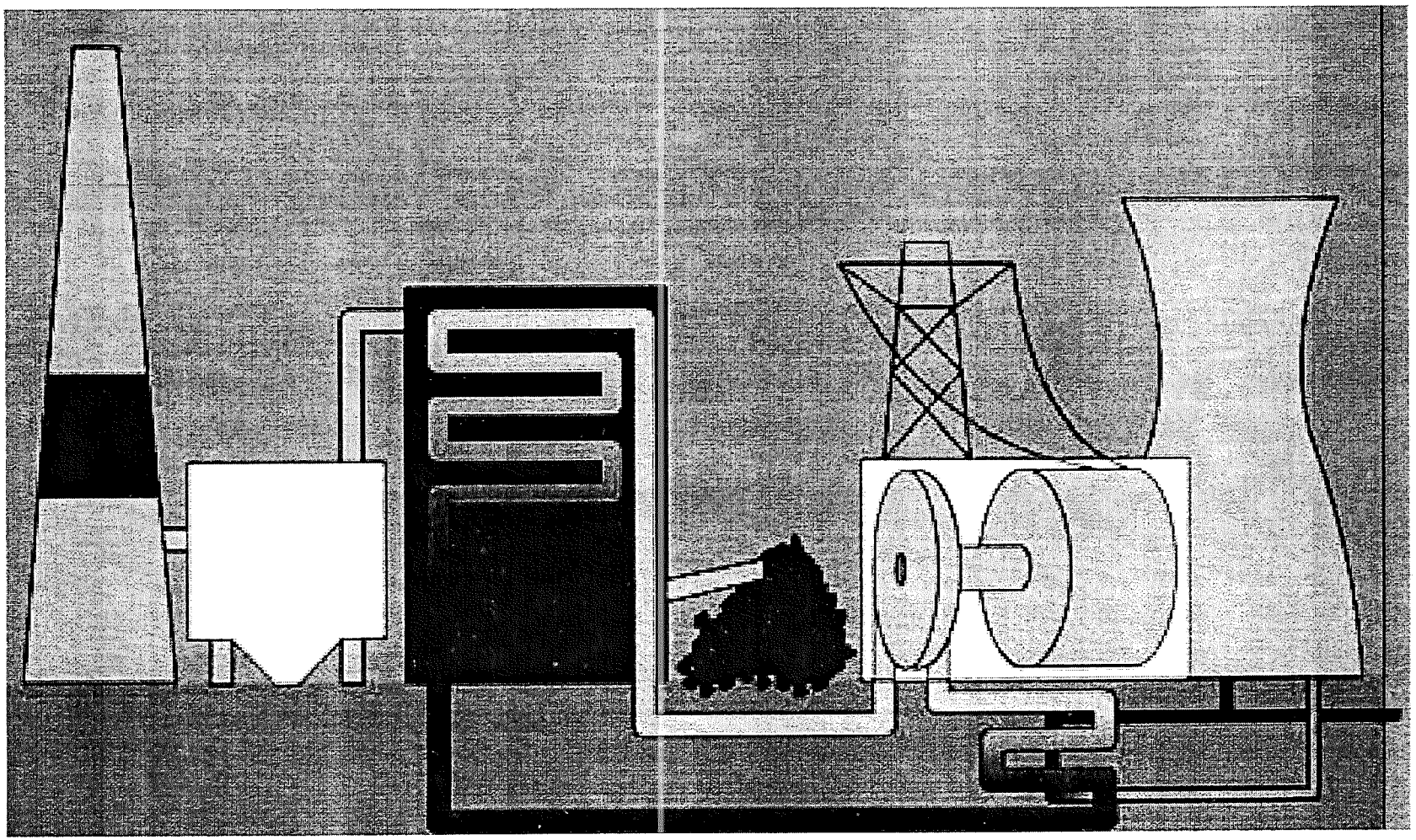
BEFORE THE HOUSE ENERGY AND UTILITIES COMMITTEE

Environmental Upgrades to Coal Generating Stations KCC DOCKET NUMBER 11-GIME492-GIE

Dr. Michael R. Schmidt
Director of Utilities
Kansas Corporation Commission
1/18/2011

3-2

A Coal Plant



New Environmental Rules

- New EPA rules coming in regard to Ozone and Regional Haze – NOx and SOx
- Final standards due this summer
- Compliance by summer 2015
- Will require massive capital investments
  - Likely north of $1 billion for the larger coal plants
  - Will result in significant rate increases to electric customers ~ $200,000,000 per year increase in cost of service

3-4

The KCC seeks answers

- Is the capacity and/or energy provided by the plant to be retrofitted needed for the utility's native retail load?
- If the capacity and/or energy is needed, then is the decision to retrofit a more economically efficient choice than closing the existing plant and building a new one (or purchasing power from the wholesale markets)?

- If the retrofit choice is the better choice, then has the utility chose the best retrofitting option/technology?

3-6

Considerations

- Plants are older – 30 to 40 years with an expected life of 40 to 50 years.
  - For example the LaCygne plant near Kansas City is almost 40 years old.
- Coal/carbon is likely to be under further regulatory (EPA) scrutiny in the future.
- What, if any, non-pollution related capital improvements are needed to meet the expected life of the plant – "repowering"?

Regulatory Approval

- Usually after the fact – facility already built.
- KCC seeks to be proactive on this issue before expenditures are made by the utilities.
- From a public interest point of view – how best to spend the billions of dollars at stake here.
- Investigate alternatives.

Cost of Replacements

- $2,000,000,000 for Iatan 2. Coal fired. 850,000 kilowatts of capacity.
  - $2,350 per kilowatt of capacity
- $600 to $1,200 per kilowatt of capacity for natural gas.
- $12,000 per kilowatt of capacity for nuclear (at an existing site).

What others have told us
KDHE

- Old Ozone standard: 0.075 ppm
- New Ozone standard: 0.06 ppm
- Clean Air Act Section 169 requires states to address visual impairment of national parks and wilderness areas
  - Goal: Natural visibility conditions by 2064
  - Pollutants of concern: NOx, SOx, and particulate matter
- Retrofits must use Best Available Retrofit Technology (BART)

What others have told us
Credit Suisse (CS)

- CS envisions coal plant retirements in response to EPA rules exceeding 50,000,000 KW on the installed 340,000,000 KW fleet with another ~100,000,000 KW requiring hefty investment to meet new EPA emissions rules.
- CS assumes the EPA's targeted compliance dates of late 2014 / early 2015 will be extended by another 2 years to allow for the challenges of meeting compliance targets.

CS predicts closures

- A large chunk of the coal fleet is vulnerable to closure simply due to economics.
  - coal pricing at a premium to natural gas out the forward curve when adjusting on an electricity equivalent basis.
- 15-30% of the US coal fleet is at risk of either closure or needing significant capital expenditures to stay in operation

3-18

CS concerned about age of plants

- 70% of the US coal fleet is over 30 years old and 33% of the fleet is over 40 years old
- More than 30% of US coal capacity has no emission controls at all (mainly older plants)

3-13

CS sees huge capital expenditures

- CS sees total investment this decade to meet EPA compliance in the $70-100 billion range
- The range jumps to $110-150 billion if plants lacking scrubbers will also need to be addressed.

3-14

CS estimate for costs

- $600 / KW for environmental capital expenditures on the over 300,000 kW units.
- The LaCygne plant is 1,529,000 kW
  - Expected cost $917,000,000
  - Could be higher depending on technology, market conditions for plant and labor, building site conditions

3-15

CS says US Congress may mitigate EPA rules

- If Congress gets involved, CS thinks the effort will be more reactive to uproar from the coal producers and coal generators.

CS says fuel prices drive replacement

3-16

- Given the expensive and soon to be "mandatory" nature of emission controls, CS thinks the question to ask for companies with uncontrolled coal plants will be if they are planning to retire / mothball or retrofit plants in the coming years.
- **The Credit Suisse analysis indicates the current commodity price environment does not support retrofit.**

CS suggests rate comparison

- The decision for regulated coal plants is straight forward: companies should compare the impact on electric utility rates of retrofit versus building new generation.

3-18

Next Steps

- Commission Order in response to Staff petition.
- Hire consultant.
- Seek answers to the questions posed in Staff petition.
- Predetermination filing by KCPL and Westar for LaCygne.

3-19

Expected results on LaCygne

- Go/no go decision on retrofit

3-20

Questions

Westar Energy®

Effects of EPA Air Emission Regulations on Westar Generation

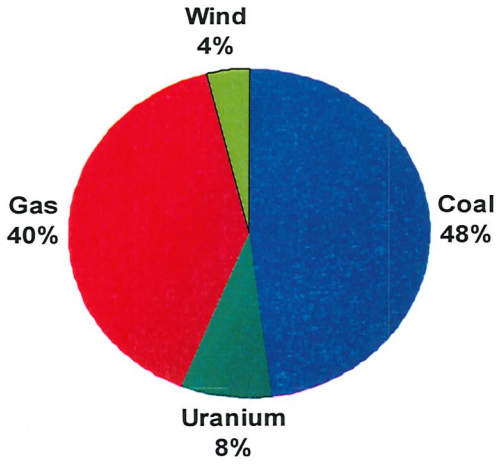
Presented by Mark Schreiber, Westar Energy

Before House Energy and Utilities Committee

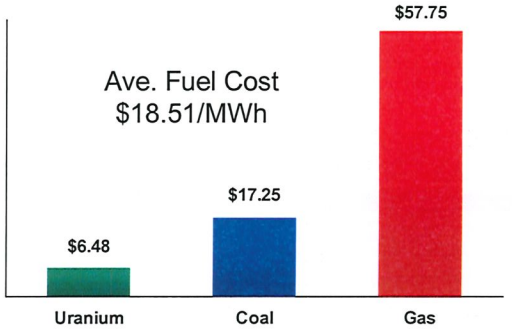
January 18, 2011

Favorable Supply Portfolio

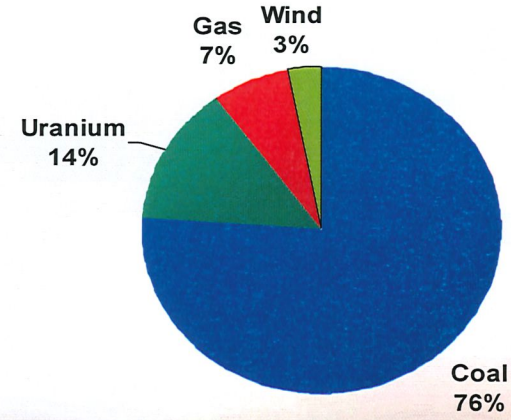
MW Capacity



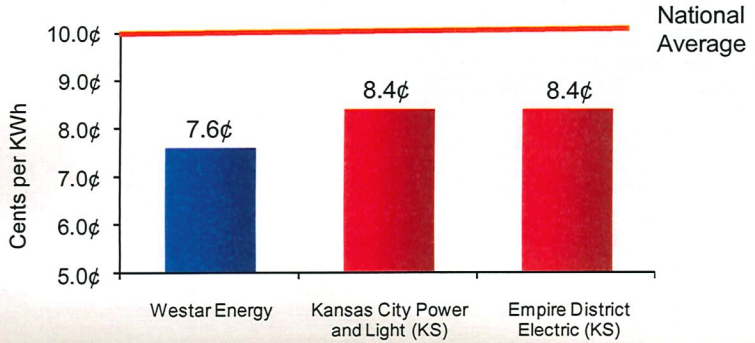
Cost of Fuel



Fuel Mix



Low Rates



Source: Edison Electric Institute 07/01/2010

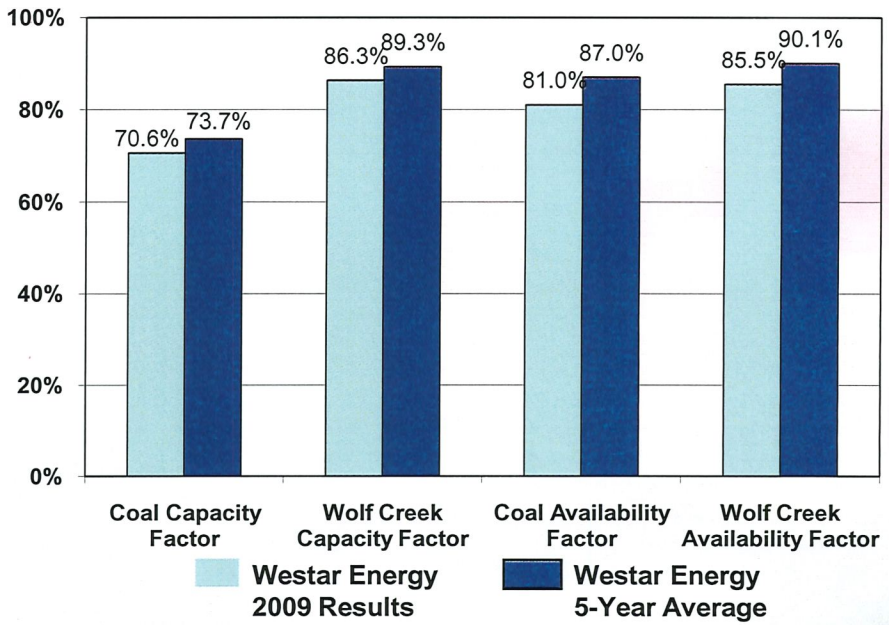
Westar's Plants

	Westar's MW	Operator	Years Installed
Pulverized coal			
Jeffrey Energy Center	1,991	Westar	1978, 1980, 1983
Lawrence Energy Center	529	Westar	1954, 1960, 1971
Tecumseh Energy Center	202	Westar	1957, 1962
LaCygne Station	709	KCPL	1973, 1977
Nuclear			
Wolf Creek	545	WCNOC (1)	1985
Gas steam turbine			
Gordon Evans Energy Center	537	Westar	1961, 1967
Hutchinson Energy Center	162	Westar	1965
Murray Gill Energy Center	293	Westar	1952, 1954, 1956, 1959
Neosho Energy Center	67	Westar	1954
Gas combustion turbine			
Abilene Energy Center	64	Westar	1973
Gordon Evans Energy Center	295	Westar	2000, 2001
Hutchinson Energy Center	230	Westar	1974, 1975
Spring Creek Energy Center	278	Westar	2001
Tecumseh Energy Center	37	Westar	1972
Emporia Energy Center	663	Westar	2008, 2009
Gas combined cycle			
State Line	199	EDE Co.	2001
Diesel			
Gordon Evans Energy Center	3	Westar	1969
Hutchinson Energy Center	3	Westar	1983
Wind			
Meridian Way	96	Horizon (2)	2008
Central Plains	99	Westar	2009
Flat Ridge	100	Westar (3)	2009

Available generation	
At Dec. 31, 2009	7,102

(1) Wolf Creek Nuclear Operating Company is a company formed specifically to operate Wolf Creek for its owners. WCNOC is governed by a board of directors consisting of the CEO of WCNOC and senior executives of the plant owners.
(2) 100% of generation purchased under Power Purchase Agreement (PPA)
(3) 50% owned and 50% of generation purchased under PPA from BP Alternative Energy

Plant Performance



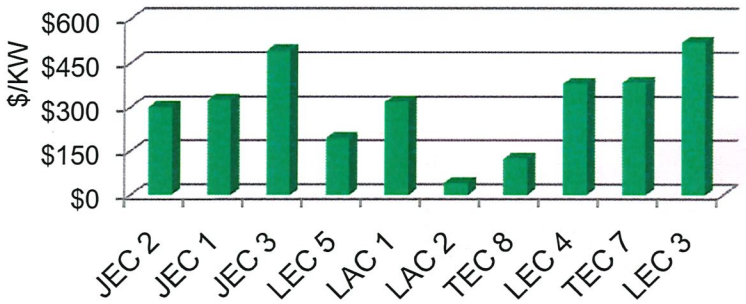
Westar Energy

Low-Cost Coal Fleet

- Very low fuel cost
  - PRB coal
  - Excellent rail arrangements
  - Proximity to mines
- Low embedded capital cost
- No high-heat rate obsolete plants

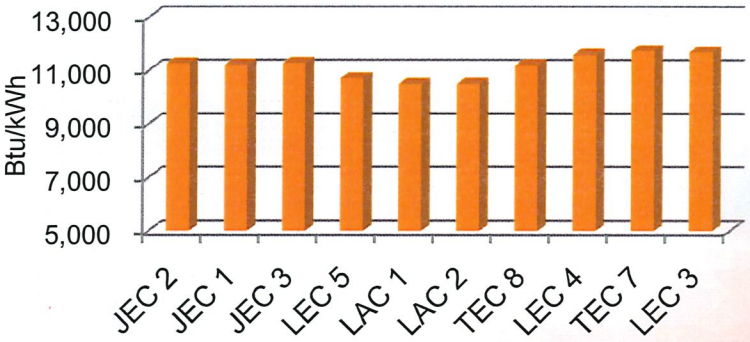
Low Embedded Cost

(net book value)

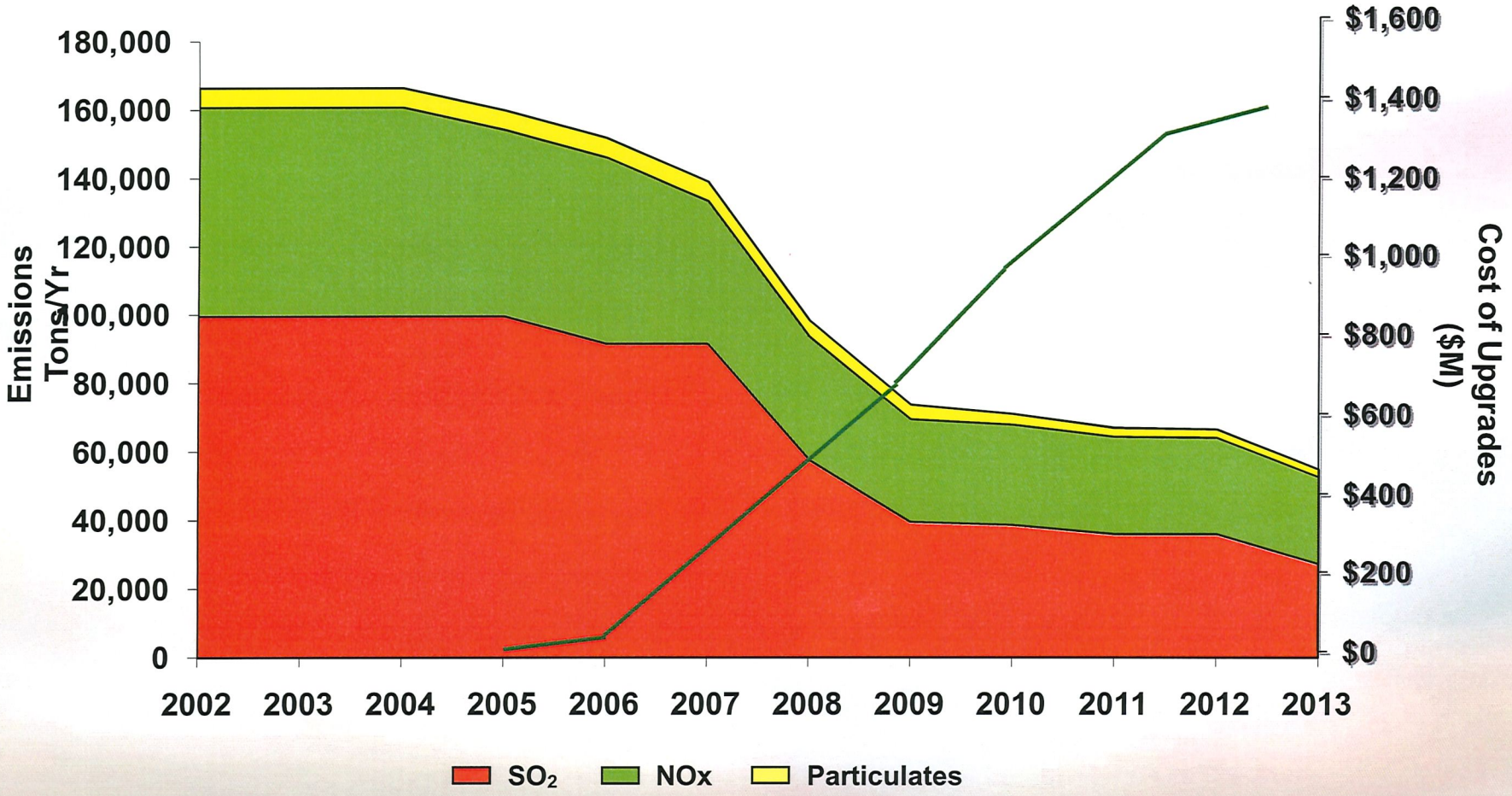


LAC 2 subject to lease agreement

Heat Rate



Environmental Stewardship



Westar Energy

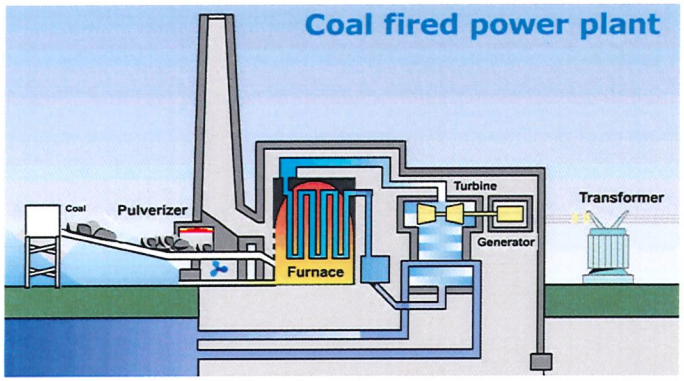
Westar Coal Fleet Emission Control Equipment

Unit	Scrubber	Precipitator	Fabric Filter	Low Nox	SCR	Completed Projects	Planned Projects
Jeffrey 1	Yes	Planned	No plans	Yes	Planned	$170M	$295M
Jeffrey 2	Yes	Planned	No plans	Planned	Potential	$150M	$72M
Jeffrey 3	Yes	Yes	No plans	Yes	No plans	$207M	
Lawrence 3	No plans	Planned	No plans	Planned	No plans		$19M
Lawrence 4	Planned	NA	Planned	Planned	No plans		$142M
Lawrence 5	Planned	NA	Planned	Planned	No plans		$224M
Tecumseh 7	No plans	Yes	No plans	Yes	No plans	$22M	
Tecumesh 8	No plans	Planned	No plans	Planned	No plans		$27M

NA – Not Applicable
No present projects underway for CO2
"No Plans" means no current plans based on current regulations

Pressures From EPA

- EPA rules are challenging continued reliance on base load coal plants—particularly, older, smaller units



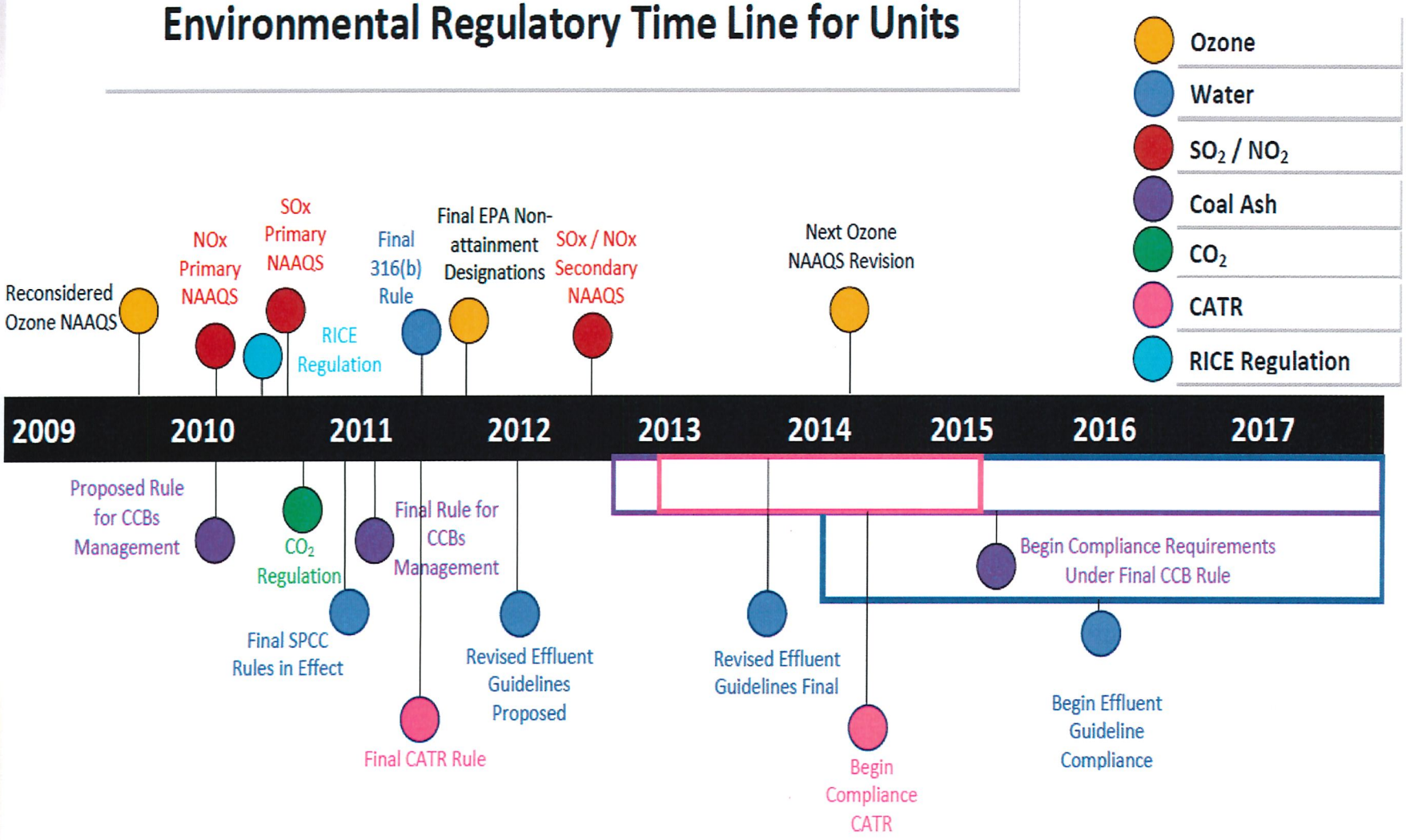
Retrofits for More Air Quality Controls

vs.

Early Retirement & Replacement with Gas Turbines

-Energy efficiency & renewables help, but are no substitute for base load capacity
-New coal plants are difficult to permit
-New nuclear is far more costly & uncertain

Environmental Regulatory Time Line for Units



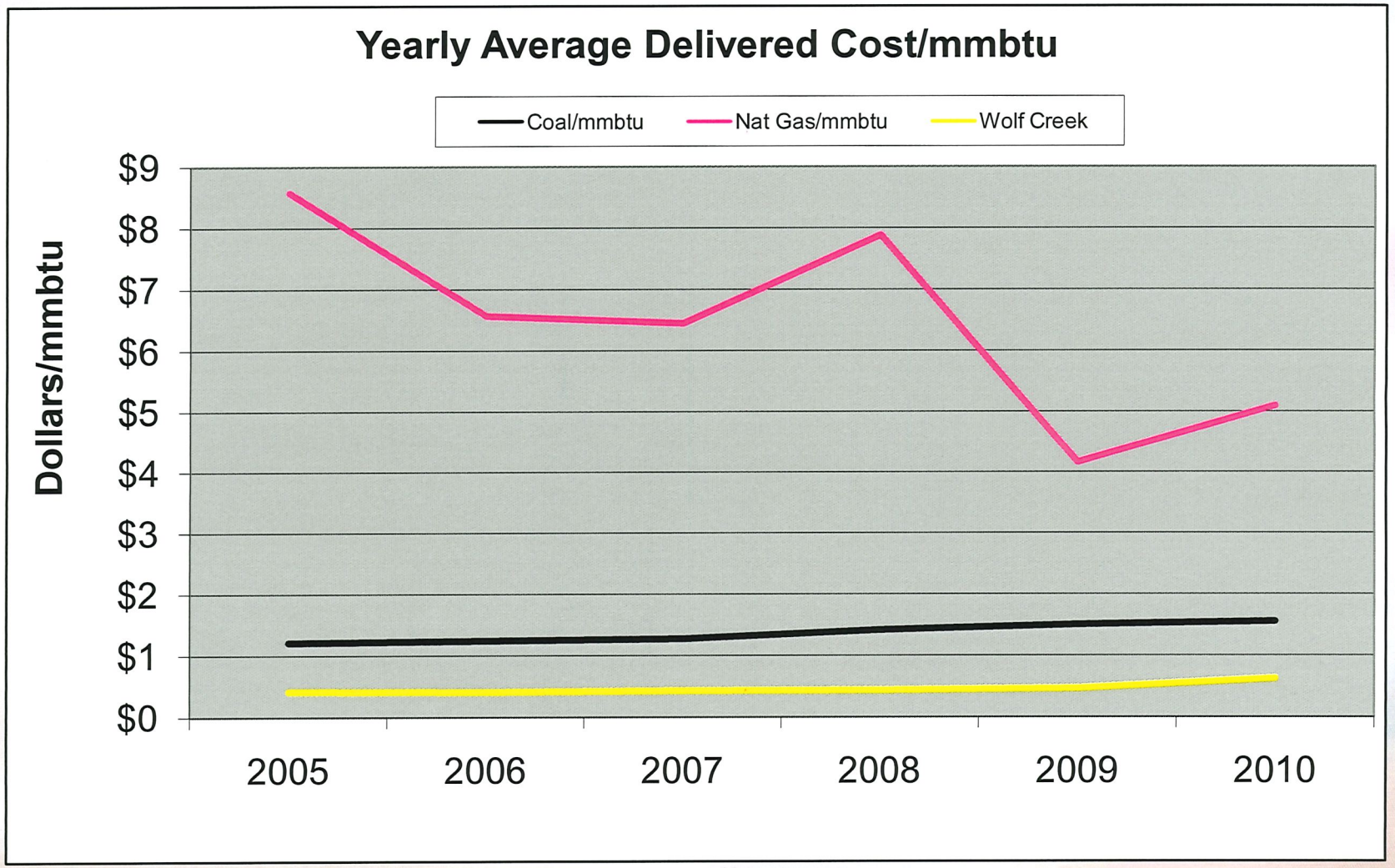
Volatile Planning Environment

Why planning for long-lived assets is so challenging:

	June 2008	Today
Oil/barrel	$129	$ 90
Natural gas/$MMBtu	$11.90	$4.40
Wholesale electricity/MWh	$100	$ 40
Short-term interest rate	2.42%	0.30%
Unemployment rate	5.6%	9.8%
Change in elec. demand ('08- '09)	- 0.9%	- 4.1%

4-10

Fuel Cost Volatility



Westar Energy.

Volatility Exacerbated by Time

Typical time (years) to construct and recover power plant investments:

	To Construct	Depreciable Life
Natural gas peaking plant	2-3 yrs	30 – 40 yrs
Combined cycle natural gas	3-4	30 – 40
Base load coal	5-7	60
Base load nuclear	7-11	60

Questions?

EPA Air Emission Regulations Impacts on KCP&L

Presented to

House Energy and Utilities Committee

January 18, 2011

Scott Jones, KCP&L

KCP&L℠
energizing life

Environmental Control Equipment Definitions

Nitrogen Oxides (NOx) Controls

- *Selective Catalytic Reduction* – In SCR systems, vaporized ammonia injected into the flue gas stream reacts to form nitrogen and water. The reaction mechanisms are very efficient, achieving NOx emission reductions as high as 95 percent.
- *Low-NOx Burners* – LNBs control and balance the fuel and air flow to each burner so that fuel devolatilization and high-temperature zones are not oxygen rich, thus reducing NOx production.
- *Overfire Air* – OFA is introduced above the main combustion area creating a fuel-rich combustion zone that reduces NOx formation.

Sulfur Dioxide (SO2) Controls

- *Wet Scrubber* – Wet scrubbers introduce the flue gas to an alkaline liquid or slurry within an absorber. A cleaned flue gas exits the absorber and a liquid or slurry byproduct containing the sulfur dioxide removed from the gas is discharged from the absorber.
- *Dry Circulating Fluid Bed Scrubber* – Dry CFB scrubbers remove SO2 from the flue gas by passing flue gas through multiple venturis where hydrated lime and water is injected separately and the flue gas mixture is circulated within a cyclone chamber. A cleaned flue gas exits the top of the chamber and the reagent and particulate matter captured in the downstream baghouse is re-introduced into the cyclone chamber for re-utilization and the spent solid waste byproduct is discharged from the chamber into a landfill for disposal.

Particulate Matter (PM10) Controls

- *Baghouse* – Baghouse or fabric filters are media filters that the flue gas passes through to remove the particulate. Cloth filter media is typically sewn into cylindrical tubes called bags. Each fabric filter may have thousands of these filter bags. The filter unit is typically divided into compartments, which allows online maintenance or bag replacement. Each compartment includes at least one hopper for temporary storage of the collected fly ash.
- *Electrostatic Precipitator* – ESPs energize electrodes that attract particulate matter as it enters from the flue stream. Collected particles are periodically removed by mechanically rapping the collection plates. The collected particulate drops into hoppers below the precipitator and is removed by the ash handling system.

Mercury (Hg) Controls

- *Activated Carbon Injection (ACI)* – Powdered activated carbon (PAC) is pneumatically injected from a storage silo into the flue gas ductwork of a coal-fired power plant. The PAC adsorbs the vaporized mercury from the flue gas and is then collected with the fly ash in the facility's particulate collection device.

Hawthorn Generating Station

Hawthorn Unit 5

563 MW completed in 1969, located in Kansas City, MO

Ownership: KCP&L (100%)

Rebuilt in 2001 with a new boiler, uprated turbine and Best Available Control Technologies (BACT) including SCR & Low NOx Burners (NOx), Scrubber (SOx and particulate control), and Baghouse (particulate control) following a 1999 explosion.

Environmental Upgrades Needed

Activated Carbon Injection (ACI) for mercury control

EPA Regulations driving upgrade: Utility HAPs MACT Rule

Anticipated installed date: 2015-2017

Estimated installed cost: $5-6 million

Iatan Generating Station

Iatan Unit 1

706 MW completed in 1980, located near Weston, MO

Ownership: KCP&L (70%), KCP&L GMO (18%), Empire District (12%)

Recent Environmental Upgrades

Best Available Control Technologies including SCR & Low NOx Burners (NOx), Scrubber (SOx and particulate control), Baghouse (particulate control), and ACI (mercury control)

EPA Regulations driving upgrades: CAIR, Regional Haze, Ozone

Installed date: 2009

Approximate installed cost: $350 - 400 million*

Iatan Unit 2

850 MW completed in 2010, located near Weston, MO

Ownership: KCP&L (55%), KCP&L GMO (18%), Empire District (12%), MJMUEC (12%), and KEPCO (3%)

Environmental Equipment Installed

Best Available Control Technologies including SCR & Low NOx Burners (NOx), Scrubber (SOx and particulate control), Baghouse (particulate control) and ACI (mercury control)

EPA Regulations driving controls: CAIR, Regional Haze, Ozone

Installed date: 2010

Approximate installed cost: $400 - 450 million*

*The Iatan 1 and Iatan 2 projects involved more than just environmental equipment. These are approximate estimates of the portion of the installed costs related to the environmental equipment.

La Cygne Generating Station

La Cygne Unit 1

736 MW completed in 1973, located near La Cygne, KS

Ownership: KCP&L (50%), Westar (50%)

Existing Air Quality Control Equipment

Scrubber (SOx and particulate control)

SCR (NOx control) recently installed in 2007 (Cost approximately $80 million)

EPA Regulations driving controls: CAIR, Regional Haze, Ozone

Environmental Upgrades Needed

Replacement Scrubber (SOx control), Baghouse (particulate control), ACI (mercury control)

EPA Regulations driving upgrades: Transport Rule, Regional Haze, Ozone, PM, SO2, NO2, Utility HAPs MACT Rule, Coal Combustion Residuals

Anticipated Installed Date: 2015

Estimated Installed Cost: Under evaluation

La Cygne Unit 2

682 MW completed in 1977, located near La Cygne, KS

Ownership: KCP&L (50%), Westar (50%)

Existing Air Quality Control Equipment

Electrostatic Precipitator (particulate control)

Environmental Upgrades Needed

Scrubber (SOx control), SCR & Low-NOx Burners and Overfire Air (NOx control), Baghouse (particulate control), ACI (mercury control)

EPA Regulations driving upgrades: Transport Rule, Regional Haze, Ozone, PM, SO2, NO2, Utility HAPs MACT Rule, Coal Combustion Residuals

Anticipated Installed Date: 2015

Estimated Installed Cost: Under evaluation

No commitment has been made to retrofit La Cygne. An analysis is in process.

KCP&L energizing life

Montrose Generating Station

Montrose Units 1, 2 and 3

Located near Clinton, MO approximately 90 miles southeast of Kansas City

Unit 1: 170 MW completed in 1958

Unit 2: 164 MW completed in 1960

Unit 3: 176 MW completed in 1964

Ownership: KCP&L (100%)

Environmental Upgrades Needed

Dry CFB Scrubber (SOx control), Baghouse (particulate control), ACI (mercury control), SCR & Low-NOx Burners and Overfire Air (NOx control)

EPA Regulations driving upgrades: CAIR, Transport Rule, Regional Haze, Ozone, PM, SO2, NO2, Utility HAPs MACT Rule, Coal Combustion Residuals

Anticipated Installed Dates: 2015-2017

Rough Estimated Installed Costs (2010 $$$): Total all units $200-300 million*

*Estimated costs are not based upon bid proposals. Actual costs may vary significantly.

No commitment has been made to retrofit Montrose. An analysis is in process.

KCP&L energizing life

Evaluation process

- Decisions to invest significant capital require careful and thorough analysis – including economic evaluation of alternative options to meet demand and regulatory requirements.

- Recent investments were made under the umbrella of KCP&L's comprehensive energy plan which involved scores of stakeholders and evaluation of alternative investments to meet KCP&L's growing demand. It resulted in a regulatory plan spanning five years and four rate cases and included significant investments in environmental equipment.

- Additional investments and alternatives are currently being evaluated and will undergo regulatory review through the process put in place by the Kansas legislature under K.S.A. 66-1239.

QUESTIONS

KCP&L energizing life