

**Kansas Energy Council
June 10, 2008, Meeting Notes**

KEC Members Attending:

Ken Frahm, Co-Chair	Hans Nettelblad
Lt. Gov. Mark Parkinson, Co-Chair	Adrian Polansky
Rex Buchanan	Mark Schreiber
Dave Dayvault	Tom Sloan
Sarah Dean	Bruce Snead
Joe Dick	Josh Svaty
Steve Dillard	Michael Volker
Jay Emler	Steve Weatherford
Steve Johnson	Curt Wright
Dave Kerr	Tom Wright
Janis Lee	

KEC Staff: Liz Brosius, Ray Hammarlund, Corey Mohn, Jennifer Knorr;

Opening remarks, introductions

KEC Co-Chairs Ken Frahm and Lt. Governor Parkinson opened the meeting at 9:15. Frahm relayed the bad news that Dr. Repetto's flight had been delayed and, ultimately, cancelled, and he will not be joining the meeting today. Parkinson said that the agenda would be rearranged and that Randy Gunn, Summit Blue, would give his presentation first thing, followed by a break and housekeeping matters.

Report on statewide energy efficiency potential study

Liz Brosius, KEC Director, noted that the presentation on the preliminary results of the study was timely in light of the KCC's recent order on one of the two energy efficiency dockets.

Gunn began his Power Point presentation by outlining the project objectives—to develop an estimate of the technical, economic, and achievable energy efficiency (EE) potential in the residential, commercial, and industrial sectors for the next 20 years (presentation is available on the KEC web site, <http://www.kec.kansas.gov/mga/index.htm>, under the June 10, 2008, meeting heading.) He noted that although the estimates were largely based on secondary data sources, they had also received primary data from some of the state's electric and natural gas utilities.

Gunn outlined Summit Blue's approach to estimating the potential. He said they used 4 inputs: (1) baseline market profiles, (2) information about energy and demand savings associated with specific DSM measures, (3) benefit-cost results for each measure, and (4) 2005-2006 results from other utilities in the Midwest and other parts of U.S. Much of the data for the above inputs came from the U.S. Department of Energy's Energy Information Administration (EIA) data sets. In their benchmarking effort, they collected information on DSM measures from 24 organizations in North America, half from Midwest, primarily from utilities' annual reports to state regulatory agencies and also EIA Form 861. Regarding the 24 organizations, Gunn noted that each utility or agency had very different approaches to promoting EE (or punishing the lack thereof) and said that was a caveat to the results shown on slides 9 and 10.

Brosius asked how the energy savings (% of sales) shown on slide 10 were calculated? In other words, how do they measure how much energy is conserved by EE measures? Gunn said they divided the savings number by total sales, which was not necessarily what the utilities report (varies from utility to utility). He noted that there was a lot of variation when it comes to determining what would have happened without DSM program—hard to determine connection between savings and the program, also hard to determine how much “free ridership” is involved (that is, those individuals who take advantage of program incentives who would have implemented EE measure on their own); said the Midwest has less research in this area.

Paul Johnson, from the audience, asked if the numbers were weather normalized? Gunn said yes, they were generally, although not with variations in peak demand between an exceptionally warm vs. normal year.

Steve Dillard asked if the revenues on slide 9 were net or gross; Gunn said they were gross.

Brosius asked if the savings reported were estimates provided by each utility individually, and Gunn said yes. Frahm asked how do you measure conservation—such as people switching off their lights—and Gunn said they couldn’t measure this, that most programs were not behavior based.

Michael Volker commented that states typically are spending more than they’re saving, but this doesn’t necessarily mean it’s not cost-effective to do EE; he referred to SDGE on slides 9 and 10 (spending 3%, saving 2%), but noted that energy savings are on volume basis and cost savings would likely be higher. Gunn said that spending is typically higher than savings typically; most DSM measures focus on reducing peak demand.

Paul Johnson asked about Efficiency Vermont. Gunn said the Northeast is very different from the Midwest; Efficiency Vermont is a publicly funded agency that delivers EE services. Overall results don’t indicate that agency efforts are any better than utility sponsored programs.

With respect to the plot showing how different entities compared in terms of first year costs and energy savings (slides 14-15), Gunn noted that the center point is at the medians for both, not at zero. Benchmarks use median results for the base case. Mark Schreiber asked if they looked at length of programs in place as a variable? Gunn replied that utilities on right-hand side of the line have been performing programs for 5+ years.

Paul Johnson asked if utilities generally have a good idea of the end use efficiency of customers? Gunn said no; at most, they have done broad brush assessments. Gunn agreed that this information would make a difference in setting up programs.

Sarah Dean asked Gunn why some states favored the Efficiency Vermont approach and others utility-sponsored EE? She also asked, if EE is the lowest cost solution, as we commonly hear, why we are talking about spending more than is saved. Gunn said the cost of conserved energy over the lifetime of a measure equates to 1 to 2 cents per kwh, which is ¼ of retail cost of electricity, thus the argument is that EE avoids additional power plant construction. On agency

vs. utility, each state determines its political solution; there's lots of variance. In Vermont, the city of Burlington is served by utility-run programs, with Efficiency Vermont covering all other areas to make smaller utilities more efficient. More services delivered by utilities than agencies as indicated by the chart.

Following a discussion of Energy Service Contractors (ESCO's), which provide energy conservation improvements financed through annual energy savings and focus almost entirely on the commercial, industrial, and public sectors, Paul Johnson asked if there were any significant efforts on the residential side? Gunn said that some have tried, but they are not all that successful.

Steve Johnson asked if there was some stratification in terms of new programs vs. old in terms of results? Gunn said about 20-30% of the programs in some states are new. For smaller utilities, it's hard to develop effective new programs because they are tailored for big buildings. Commercial accounts for more sales than residential.

Hans Nettleblad asked if requirements in states like IL and MN are hard to meet or could utilities afford to spend more than that? Gunn said they could, but a different question is whether it would be cost effective to do so. Brosius noted that it was likely that any program expenses would be passed on to customers; Gunn concurred, saying it depended on the specific policies in different states.

In summarizing the natural gas (preliminary) results, Gunn noted that there was less information on the natural gas side than on the electric side. They looked at 6 utilities in Iowa and Minnesota (slides 16-18). Sloan asked if there was a difference when utilities decouple; Gunn said many of these already have decoupled rates. Volker asked if they can show how usage per customer has changed over time; Gunn said they had no idea. Volker commented that Midwest Energy has seen natural gas savings of roughly 1-2%, more commonly with residential customers. Gunn noted that there was a wide range in costs of natural gas EE programs; higher costs generally associated with programs that do more with low-income customers. Paul Johnson asked if substance of the programs makes a difference? Gunn said that Xcel had best savings from boiler program (commercial), and for Interstate P&L, the escrow program for upgrades most successful.

Gunn reviewed the baseline market profiles, developed by sub-contractor (slide 20) and based largely on EIA data bases, with Kansas-specific utility data. With respect to the residential electric end-use profile, Paul Johnson asked if they considered age of equipment? Gunn said while they did look at the percentage of appliances that were efficient vs. inefficient, they had no good data on ages. Dietrich Earnhart, audience, suggested that the 18% in the "other" category may reflect error in estimating; Gunn said yes, partly that and partly other uses that didn't fit categories on pie chart. Nettleblad asked why we don't see a larger percentage in the "other" category in the industrial end-use pie chart? Gunn said this could be due to different data sources that allocate consumption into different categories.

Paul Johnson asked if they had looked at co-generation over different states? Gunn said most programs do not include co-generation.

Gunn discussed how they performed the EE measure characterization, using E-Quest for weather-dependent measures, noting that they had not collected primary data (though they had been supplied some primary data from state utilities), so used secondary data and adjusted the models to fit Kansas. Volker asked if this was the DOE model, and Gunn said it was.

Brosius asked if the avoided energy and capacity costs were weighted averages? Gunn said he didn't know and would get back to the KEC on this.

Gunn summarized the benefit-cost tests, noting that the Total Resource Test (TRC) is the one they primarily relied on; this test assumes that EE is cheaper than building a new power plant. He noted that they used avoided cost data received from Westar, KCP&L, and Midwest Energy and averaged for state. Used Xcel Energy data to estimate natural gas in Kansas. Noted that external costs such as environmental damages are included in Societal test.

In response to Summit Blue's conclusion that lighting measures fail the RIM test, Janis Lee asked if we should still encourage people to buy CFLs? Discussion clarified that, while it is cost-effective for individuals to replace incandescent bulbs with CFLs, it is not cost-effective for utilities to operate programs to promote use of CFLs. Gunn also noted that using CFLs does little to shave peak demand.

Gunn outlined three-step approach they used to estimate the potential for increased EE in Kansas (slide 32). He noted that Summit Blue does not advise Kansas to try to implement as many programs as California. Regarding the expenditures on EE programs, Nettelblad asked if costs would be passed along to customers and Gunn said yes. Sloan noted that this statewide average does not take into account the difference in costs: wouldn't smaller utilities with higher residential makeup have a higher cost? Gunn said that utilities with higher rates may have more chance to save; wasn't suggesting that goals of all utilities should be the same.

Summit Blue's results show 68% of residential electric savings coming from lighting, with 25% from HVAC. Joe Harkins asked where do improvements to the house shell fit in, and Gunn clarified that they were lumped with HVAC. Dean asked how do we reconcile the large energy savings attributed to residential lighting with the fact that lighting programs are not cost effective? Gunn said that cost savings alone should lead customers to buy CFLs, but they buy more when there is a rebate. Volker said it's important to continue to educate customers, but we don't need to be giving away CFLs. Dean noted that it seems like we should be focusing on the HVAC side with PR for lighting. Gunn said that it's less costly to run education programs—there's a lot of trial and error. National experience suggests that the price point for CFLs needs to be \$1/bulb for people to buy them, though that is changing as they are better known. Volker asked if average age of house was considered and Gunn said they didn't focus on age. Paul Johnson: Do you do a blended savings over seasons? Partnerships with utilities? Gunn: Has happened in Indiana – sometimes happens. Much more common for combination utilities offer these programs, then all electric and gas just focus on specific measures.

Gunn summarized the findings for the commercial and industrial sectors, where lighting accounts for 40% and “custom, motors, and process” is another 40%. He noted that they had not yet completed the natural gas potential estimates.

Bruce Snead asked if there were efficiencies to be gained in utility systems? Gunn said they had not worked in this area, though there were likely opportunities. Snead asked if Gunn had any thoughts on approach to DSM programs that have greater chance of success in Kansas? Gunn said that the utility-run programs tend to be more efficient than agency programs.

Paul Johnson asked about integrated resource planning (IRP) for the state? Gunn said that about half the utilities in the nation do this; some states require it, others don't; but they are getting similar EE results.

Lee asked if they had done any evaluations of the impact of tax breaks. Gunn said they hadn't.

Dean questioned the lack of primary data in the Kansas study: can you design a good program with secondary data? Gunn reminded her that Summit Blue did have some Kansas-specific data, that they used both types of data. He noted that results of an effective lighting program are pretty well known, though of course, the more primary data, the better the results.

Break

Status of KEC 2008 recommendations and summary of energy-related legislation

Brosius outlined the action (or lack thereof) taken on the KEC's six recommendations for 2008, referring to the written summary in the notebooks.

Program Review of Existing Biofuels Incentives—This has been accomplished, coordinated by y the Dept. of Commerce; Lyle Peterson reported on the results to the House and Senate utilities committees during legislative session.

KCC Energy Efficiency Dockets—Brosius said that the KCC had issued its order on 08-GIMX-442-GIV on June 2nd and asked Janet Buchanan, KCC, to summarize the order. Buchanan reported that the Commission was interested in programs that addressed EE more holistically on the entire home, as well as those targeting reduction in peak load; they will view EE as a resource; EE education is a priority; they will consider a range of benefit-cost tests and would like utilities to use reasonable estimates for potential carbon tax/fee (for more information on EE docket, see KCC web site: <http://kcc.ks.gov/scan/200806/20080602152539.pdf>).

Annual State Funding for Weatherization—Brosius noted that a bill containing the KEC proposal for \$2 million in annual state funding for WAP had been introduced in the Senate Utilities Committee, had undergone amendments, and ultimately died in conference committee.

Low-interest Loan Program (KEEP)—Brosius reported that KHRC had actually expanded program before the KEC recommendation was released; the program is now available to all Kansans regardless of income; loan traffic has increased. Steve Weatherford said they have seen a small increase, but they need help with education and marketing; he suggested that working with utilities is another way to promote and mentioned collaboration with Midwest Energy's How\$mart program. Brosius said that the recommendation called for the Energy Programs Division to work with KHRC on promotion and that this effort would likely move forward.

Model Energy Efficiency Codes—Brosius said that Ray Hammarlund, Director of the KCC

Energy Programs Division was coordinating the effort and working to set up initial meeting. Hammarlund said he would work with Bruce Snead and have more to report at August 13th meeting.

Energy Efficiency Standards in Public Buildings—Brosius summarized history of SB 452, which included a similar recommendation but died in committee. Nettleblad asked if these issues would be resurrected in next session; Brosius said perhaps the KEC legislators could comment on this during the upcoming discussion of energy-related bills.

Annual State Funding for Energy Conservation Education (K-12)—Brosius noted that KACEE staff would work with KEC staff to get \$30,000 funding implemented during next session.

Corey Mohn reviewed the legislative summary contained in the notebooks. He noted that it was divided into two sections, the first dealing with KEC-related recommendations, which Brosius had already summarized. The second section dealt with the various bills related to the Holcomb expansion.

Jay Emler pointed out an error in the summary of SB 452: it was referred to Ways and Means and thus did survive turnaround. Brosius said this would be corrected. Emler also noted that bills can be reintroduced at any time.

Governor's recent energy and policy initiatives

Frahm turned to Lt. Governor Mark Parkinson to summarize the Governor's recent initiatives—Wind Working Group (WWG), Kansas Energy and Environmental Policy Advisory Group (KEEP), and the new KEC Executive Order.

Parkinson said the WWG grew out of a discussion with Larry Flowers from NREL, who was impressed by the success of the voluntary RPS and suggested Kansas tap into DOE funding to create WWG. Parkinson said the group had three purposes: (1) keep large-scale wind development moving forward beyond the 1,000 MW of nameplate capacity that we will have by end of 2008; (2) explore community wind; (3) pursue wind energy as a strong economic development driver for Kansas. He noted that Kansas was the focus of Windpower 2008 in Houston. He said the state needed to make a cost-benefit analysis of what our opportunities are in wind, relative to other industry opportunities. He noted that the WWG would piggyback on the renewable energy conference in September, at which Jim Hansen would be the keynote speaker.

Regarding the new advisory group KEEP, Parkinson said that group would analyze how the state could reduce its carbon footprint. It was being run by the Center for Climate Strategies, who had made a proposal to the KEC last year. KEEP will look at 300 or more actions to reduce our carbon footprint. It is a directed process divided into five committees who will meet on multiple occasions. The process is very detailed and involves many KEC members.

As for the new Executive Order, Parkinson noted that the mission of the KEC had been slightly amended and referred members to the copy of the new order in the notebooks. He said there probably was not enough study to date in the state of Kansas regarding energy and what is going

on at the federal level. The energy topic is so broad that we need multiple groups. We will not continue any redundant agency or board and KEEP has an 18-month timeline. At least for now, the KEC is the place where all things are raised and discussed. It would be premature to throw up our hands and eliminate KEC. The legislature will be taking a look at this and may move on some actions after the election. We have gone through a divisive session and hopefully we can pull back together and reach consensus.

Rex Buchanan asked if KEEP is looking at geologic sequestration of CO₂? He noted that he served on an MGA working group looking at this topic and wondered whether this was being dealt with by several entities and how that was being coordinated. Brosius said she expected it was too early in KEEP's process for them to know which policy issues they'd be concentrating on; she said that audience member Tom Gross, Kansas Department of Health and Environment, could provide further clarification of KEEP's process. Lee asked if they are limited to the 300+ options? Parkinson said no, other options would be considered.

Regarding the WWG, Nettelblad asked if they were considering only energy for export or will there be more integrated into existing system for use in Kansas? Parkinson said the amount that will be produced in Kansas will be more than we can use. Frahm noted that a coalition of farmers was working together with Union of Concerned Scientists on behalf of alternative energy and was promoting extension of the federal PTC.

KEC Committee Updates

Electricity Committee—Brosius pointed KEC to the written report from Chair Stuart Lowry, who was unable to attend this meeting. She noted that the Electricity Committee's objective was to understand the current status of electric generation in the state as well as the anticipated growth in demand over the next 20 years. She said the committee had heard a series of presentations from the state's utilities related to planning for future generation, as well as on the results of the KCC staff cost-benefit analysis of wind energy. She noted that the committee would meet next week, June 17th, and would hear presentations from KPP, Midwest Energy, and Empire. All presentations and notes are posted on the website. She referred to Lowry's summary and said that the Committee has gained a better understand complexities of utility generation and how those issues might intersect with policy. She pointed out that Lowry had raised the question of whether the Council wanted to have a presentation on the wind study results. Brosius also noted that one of the work products was a summary of existing power plants, a draft version of which was included in meeting notebooks.

Parkinson asked if it was fair to say that the ultimate goal of the Committee is to determine baseload need and then recommend how to get there? Brosius said it was her understanding that the Committee did not want to prescribe solutions for individual utilities, but understand what the expected need was and what were the options to meet that demand.

Dean asked when the Committee would get to projections of what we need? Lee said some utilities have addressed, some have not; some have provided detailed information and some fuzzy. Volker said the information is implicit in all presentations, but it's something we can do in committee if need be.

Nettelblad said it would be interesting to see where wind lands in comparison to these power plants. Brosius said that wind substitutes for energy, not capacity. Nettelblad asked if there was a summary of how wind was performing; Brosius noted that historical capacity factors are presented in Kansas Energy Chart Book, but on average, Kansas wind farms have capacity factors of roughly 35% to 40%. Parkinson noted that in terms of nameplate capacity, Kansas was already at 364 MW, with 1,015 MW expected to be on-line at the end of 2008. Frahm said by end of year, the state would have 10% of nameplate capacity in wind.

Greenhouse Gas Policy Committee

Snead said the Committee started out focusing on understanding the Midwestern Governor's Association Greenhouse Gas Accord and energy platform, but after the initial meeting, they decided to broaden focus to consideration of greenhouse gas policy. He outlined the Committee's objectives:

1. Increase understanding of various policy approaches for controlling Greenhouse Gas (GHG) emissions at the **national level** as well as their relative strengths and weaknesses in terms of economic efficiency, political feasibility.
 - a. Understand leading proposals currently under consideration by Congress (e.g., Lieberman-Warner, Bingaman-Specter).
 - b. Consider impacts to Kansas economy based on specific elements of national policy (e.g., permit allocation, use of revenue, inclusion of offsets, upstream/downstream targeting).
 - c. Consider recommendation endorsing national-level regulation.
2. Consider appropriate **state-level policies** to control GHG emissions.
 - a. Develop state-level policy options for consideration by full Council.
 - b. Receive regular updates on new recently formed Kansas Energy and Environmental Policy Advisory Group (KEEP).
3. Identify promising research trends and funding needs in Kansas.
 - a. Meet with researchers from Regents institutions to begin discussion.
 - b. Consider recommendation for research funding.
4. Receive regular updates on MGA Accord and Platform and other regional initiatives.
5. Develop background information for possible inclusion in *Kansas Energy Report*.

Snead noted that the Committee had received a series of presentations from staff on national policy options (posted on web site) and also on the MGA progress to date. He said Rex Buchanan had agreed to pull some folks together from the Regents institutions to discuss research priorities and was working with Brosius to set up initial meeting. Dean asked about the scope of the research efforts, where do we intend to go with this? Buchanan said the focus was as broad as possible, embracing renewables and non-renewables on the energy side. He said he'd expect a Kansas focus. Dean asked if it would include CO2 sequestration and compressed air energy storage? Buchanan reiterated that it could include anything energy related.

Snead said the Committee would work to identify policy recommendations at their next meeting (date of meeting to be determined). Brosius said the full Council would get that information prior to the August 13th meeting. Dean asked Snead how he saw this committee doing something different than KEEP? Snead acknowledged that communication is important; as KEC develops recommendations, those can be plugged into KEEP process if it fits. Dean asked if the KEC may be a bit ahead of the KEEP process?

Frahm commented that the Committee had received good reports on MGA process; he said he had come to believe that the MGA process of thinking through cap and trade and what would benefit Kansas is incredibly important; impressed with the analytical work being done on that.

Brosius noted that there were two scopes for policy discussions—federal- and state-level. Does the group as a whole have a preference on where we should focus? Snead said federal legislation would be preferred because of synergies. The question then is what can we do to position Kansas? The second question is addressing state policy to effect GHG emissions.

KEC/Committee Next Steps

Brosius referred to the handout of the KEC Planning Schedule for 2008 and reminded the Council that they would be considering in August the policy options to bring forward for the public comment period. She noted that the Electricity Committee will have at least 1-2 more meetings; the GHG Policy Committee will meet once more before the next meeting of the whole.

Schreiber asked about the question that Lowry had raised: whether wind report should be presented to the whole group? The question was put to the Council and there was no strong response to have such a presentation.

Brosius said staff would work to reschedule a presentation from Dr. Repetto.

Meeting adjourned.