



**Energy Supply (ES)
Technical Work Group (TWG)**
Kansas Energy and Environmental Policy (KEEP) Advisory Group
Meeting #4: Conference Call Summary
November 4, 2008

Participants

TWG Participants

Monica Cameron, Diamond Solar Solutions
Rob Freeman, TradeWind Energy
Tim Gelvin, Johnson County Community College
John Grimwade, Kansas City Power & Light
Colin Hansen, Kansas Municipal Utility
Nancy Jackson, Climate and Energy Center
Brad Loveless, Westar
Stuart Lowry, Kansas Energy Cooperatives, Inc.
Lt. Governor Mark Parkinson
Wayne Penrod, Sunflower Electric Power Corporation
Emil Ramirez, United Steelworkers District 11 AFL- CIO

Pat Renner, Kansas Corporation Commission (KCC) (*substitute for Tom DeBaun*)
George Thullesen, Empire District Electric Company
Frank Wewers, KCC

Kansas State Government Participants

Jennifer Knorr, KS Governor's Office
Andy Hawkins, KDHE

CCS Staff

Rob Greenwood, Ross & Associates
Tim Larson, Ross & Associates
Amy Wheelless, Ross & Associates

Public Participants

Stephanie Cole, Sierra Club

Meeting Summary

Meeting Materials

All materials for the Energy Supply Technical Working Group (ES TWG) are available on the ES TWG website: <http://www.ksclimatechange.us/ee.cfm>. For this meeting, the following materials are available:

- Meeting Notice & Agenda
- Meeting Presentation
- Meeting #3 Summary
- Results of Notional Rating Exercise
- Results of Balloting Exercise

Welcome, Introductions and Approval of Meeting #3 Summary

The summary for Meeting #3 was approved by the TWG with no changes.

Review of Balloting Exercise Results

Rob Greenwood reviewed the results of the balloting exercise that ES TWG members had undertaken in the previous weeks. In reviewing the results, a set of eight priority options seemed to cluster at the top, based on balloting numbers and comments on possible bundling of options. These preliminary Tier 1 options were the following:

1. Advanced Fossil Fuel Technology (e.g. IGCC, CCSR, Advanced Pulverized Coal, CFB) Incentives, Support or Requirements (*ES-4.1*)
2. New Nuclear Capacity (*ES-4.2*) and Relicensing/Up-rating Existing Nuclear Power (*ES-4.3*)
3. Transmission System Upgrading (*ES-4.2*); Reduction of Transmission and Distribution Line Losses (*ES-7.2*); and Smart Grid Systems (*ES-7.8*)
4. Renewable Portfolio Standard (*ES-2.1*); Energy Efficiency Resource Portfolio Standard (*ES-3.1*); Utility Energy Efficiency Incentives or Other Barrier Removal (*ES-3.2*); and Consumer Energy Efficiency Incentives or Other Barrier Removal (*ES-3.3*)
5. CCSR Incentives, Requirements and/or Enabling Policies (Administration, Regulation, Liability, Incentives) (*ES-6.1*) and R&D for CCSR (*ES-6.2*)
6. Technology Focused Initiatives (Biomass Co-Firing, Energy Storage for Renewable Energy Generation, Fuel Cells, etc.), including Grant Programs (*ES-2.7*) and Research and Development for Renewable Technologies (*ES-2.8*)
7. Technology Research and Development (*ES-1.6*)
8. Green Power Purchases and Marketing (*ES-2.4*) and General Education to Public on Energy Supply Options (*ES-8.1*)

The ES TWG discussed their reactions and ideas on this preliminary set of options, whether the ES TWG had a balanced portfolio based on this, and whether these bundling of options made sense. TWG member comments are summarized below:

- A number of members said that they would rather see more options, rather than bundle options together that may not be complementary.
- Renewable Portfolio Standard and Energy Efficiency Portfolio Standard should be analyzed separately for these purposes, though future policymaking may lump them as potential options for meeting some greenhouse gas emission reduction goal.
- A few members questioned if an option related to natural gas transmission should be included in the set of priority options for analysis.
- A few members noted that “New Nuclear Capacity” is fairly distinct from “Relicensing and Up-rating Nuclear Facilities”, but others noted that they would support each other, as plants that are not uprated or relicensed will take away nuclear capacity, thereby working against the overall option goal of increased nuclear capacity.
- The TWG agreed to disaggregate the original Option 3 into separate options, as transmission upgrading would not be related to reducing distribution line options and the option for Smart Grid systems.
- A TWG member commented that there were educational components as a part of all the ES TWG options, and that it should be focused on as a separate option from Green Power Purchases and Marketing, dependent on the final options that the ES TWG develops.

- A member questioned why no option related to GHG emission disclosures had been raised in the options. As Kansas is a member of the Midwestern Governors’ Accord on Climate Change, and EPA is expected to release a mandatory greenhouse gas emissions reporting rule soon, other group members expressed that they did not feel it was necessary for Kansas to pursue this option.
- The group determined that “compressed air energy storage” could be an option addressed under “Technology Focused Initiatives” and that hydroelectricity would be addressed as a renewable energy option where applicable in the options.

Based on these comments and discussion, the next draft of the Tier 1 priority options for further analysis is listed below. This set of options, after further refinement, will be sent to the KEEP following final review by the ES TWG.

- ES-1. Advanced Fossil Fuel Technology (e.g. IGCC, CCSR, Advanced Pulverized Coal, CFB) Incentives, Support or Requirements (*ES-4.1*)
- ES-2. New Nuclear Capacity (*ES-4.2*) and Relicensing/Up-rating Existing Nuclear Power (*ES-4.3*)
- ES-3. Transmission System Upgrading (*ES-4.2*)
- ES-4. Renewable Portfolio Standard (*ES-2.1*)
- ES-5. CCSR Incentives, Requirements and/or Enabling Policies (Administration, Regulation, Liability, Incentives) (*ES-6.1*)
- ES-6. Technology Focused Initiatives (Biomass Co-Firing, Energy Storage for Renewable Energy Generation, Fuel Cells, etc.), including Grant Programs (*ES-2.7*)
- ES-7. R&D for CCSR (*ES-6.2*)
- ES-8. (Emission Reduction) Technology Research and Development (*ES-1.6*)
- ES-9. Green Power Purchases and Marketing (*ES-2.4*)
- ES-10. Energy Efficiency Resource Portfolio Standard (*ES-3.1*)
- ES-11. General Education to Public on Energy Supply Options (*ES-8.1*)

Comments on the Draft KS GHG Emission Inventory and Forecast

Rob Greenwood asked the ES TWG members for any comments to the Draft Kansas Greenhouse Gas Emission Inventory and Forecast. Thus far, no comments have been submitted from the ES TWG. The KEEP will address any comments it receives at the December KEEP meeting.

ES TWG members will have additional time to submit comments or suggested changes. The following are some questions for ES TWG members to consider when reviewing the inventory and forecast (http://ksclimatechange.us/Inventory_Forecast_Report.cfm):

- Do you have any thoughts on the key uncertainties that were identified for the energy supply sector, specifically regarding the transmission and distribution losses and onsite parasitic loads for generation in Kansas?
- With future wind growth, how will the future statewide fuel mix change; would you make any changes to the fuel mix projections in the forecast?

Next Steps

- After this call, Rob Greenwood and Amy Wheelless will send a revised listing of the priority tiers of Energy Supply Options for review by the group. Once the group has completed a review period, any necessary changes will be incorporated and a revised set of options will be sent to the KEEP for review and approval as priority options for further analysis.
- The ES TWG will also have additional time to submit any comments or suggested changes for the draft KS Greenhouse Gas Inventory and Forecast.
- ES TWG members are encouraged to attend the upcoming December KEEP meeting. Further details, including agenda and location, will be posted on the KEEP website: <http://ksclimatechange.us/stakeholder.cfm>.

Public Comments and Announcements

There were no public comments or announcements.

The next meetings of the ES TWG will be scheduled for December or January. When this time is known, the ES TWG website will be updated and materials for this meeting will be available on the website prior to the meeting. Members of the public can listen-in to all ES TWG meetings by calling (800) 704-9804, passcode 489 418.