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MEETING SUMMARY
ARKANSAS GOVERNOR'S COMMISSION ON GLOBAL WARMING
Energy Supply (ES) Technical Work Group (TWG)
Call #12, August 22, 2008
3:00 p.m.–5:00 p.m. Central Time

Attendees

GCGW: Joan Cash, Rob Fisher; Art Hobson, PhD; Robert McAfee, PhD; Kevin Smith

Governor's Office: Jillian Hicks

Advisory Body Members: John Bethel

Arkansas Energy Office: Jenny Ahlen

Center for Climate Strategies (CCS): Randy Strait, Bill Dougherty, Joan O'Callaghan

Other: Steve Cousins (member of GCGW and Residential, Commercial, and Industrial Sectors TWG), Paul Means and Eddy Moore (members of the public)

Background Documents (All posted at www.arclimatechange.us/ee.cfm)

1. Notice and Agenda
2. PowerPoint for Teleconference
3. Draft ES Policy Option Descriptions
4. Call #11 Meeting Summary

Introductions and Review of Agenda

Randy Strait initiated the call, welcomed the participants, and completed a roll call of the members of the ES TWG, GCGW Advisory Body, and others. Bill Dougherty outlined the agenda for teleconference #12 as being to briefly review changes to the reference case scenarios agreed to during teleconference #11 and then to review ES policy options 3a, 3b, 6, 7, and 9.

Discussion of Analytical Framework

Assume Self-Sufficiency and No Net Exports

During teleconference #11, the TWG agreed that the analysis should assume that Arkansas will be self-sufficient in meeting electricity demand (i.e., no imports), and also that there would be no exports during the planning period. Dougherty clarified that, given the current capacity additions of the Plum Point and Hempstead plants, Arkansas electricity demand would still be higher than in-state supply over the planning period. As proposed by the TWG, the analysis considered that to meet the deficit and avoid imports, natural gas combined-cycle (NGCC) technology would come online as needed. Also, natural gas-fired stations will have the same capacity factor as in 2005 for all years, and will be backed down as needed to satisfy the criterion of no net exports in any year. **The TWG confirmed the analysis should proceed with these assumptions.**

ES-3A: Renewable Energy Portfolio

A representative of the Arkansas Energy Office will send Dougherty a link to a recent Department of Energy (DOE) report that projects that (1) Arkansas will generate 1,000 megawatts (MW) of wind energy by 2020, with a significant amount being generated in the upper third of the state, and (2) wind energy will comprise 20% of electricity generation by 2030. The TWG agreed that the analysis should move forward based on the assumption that by 2025 Arkansas will produce 1,000 MW of electricity from wind energy generated in the upper third of the state (both the northeast and the northwest). Reasonable costs will be developed to include expansion of transmission line capacity for the new wind power.

The TWG discussed the assumed costs and performance characteristics of in-state and out-of-state wind energy. Dougherty will research and compare both 50-meter and 100-meter wind maps.

ES-3B: Feed-in Tariffs

The incentive for installing small-scale wind and solar photovoltaic (PV) technology is greater than large-scale projects because Germany already has policies in place supporting large-scale generators, and small-scale generators represent a significant untapped market. Dougherty will check whether the higher price of solar technology would tend to favor wind production.

Dougherty explained that he could only find data relative to wind and solar PV energy related to the experience in Germany. The analysis could be expanded to include the other sources in the definition of renewable energy (advanced biomass, geothermal, and new hydroelectric installations), but it would be speculative, because there is no information on the performance of feed-in tariffs other than for wind and solar PV. **The TWG agreed that the policy option document should keep the broad definition of renewables, but the analysis should focus only on the proven success of wind and solar PV in Europe.**

Some TWG members were surprised by the negative costs in the cost-effectiveness column for both Reference Scenarios #1 and #2. Dougherty proposed looking at the full societal costs to both consumers and the state, which will make the cost-effectiveness numbers positive. He asked the TWG members to send him suggestions for altering the fundamental assumptions of this policy option in order to revise the analysis accordingly.

ES-7: CO₂ Sequestration From New Fossil Plants

The TWG agreed the key assumptions on page 91 of the PowerPoint presentation should be changed as follows for Scenarios #5 and #8:

- *Scenario #5:* For Plum Point, replace pulverized coal with integrated gasification combined-cycle (IGCC) technology, and insert 83% by 2020 in the last two columns. By 2020, assume retrofit with carbon capture and storage technology, with a pipeline to geological storage to be determined.
- *Scenario #9:* For Plum Point, the last two columns should read the same as for Hempstead—i.e., insert 83% by 2020.

Dates and Times for Next GCGW Meetings

- Meeting #9, Tuesday, September 9, 2008, 9:30 am – 4:30 pm CDT
- Meeting #10, Thursday, September 25, 2008, 9:30 am – 4:30 pm CDT

Dates and Times for Next ES TWG Meetings

- Meeting #13, Thursday, August 28, 2008, 1:00 pm – 3:00 pm CDT
- Meeting #14, Tuesday, September 16, 2008, 9:00 am – 11:00 pm CDT
- Meeting #15, Monday, September 22, 2008, 2:00 pm – 4:00 pm CDT

Before AR ES TWG teleconference #13 The TWG will:

(1) Review the posted 8/8 meeting #11 summary, and submit any comments or suggestions for revision to Dougherty by COB 8/26 (billd@sei-us.org).

(2) Review the latest version of the AR ES POD and the PowerPoint posted for meeting #12, specifically: (a) send Dougherty any suggestions for revisions to the analysis of ES-3b; (b) review the latest results for ES-7; and (c) review the information in ES-3a, ES-6, and ES-9, which will be discussed during the call.

Public Input and Announcements

None.