



MEETING SUMMARY
NORTH CAROLINA CLIMATE ACTION PLAN TECHNICAL WORK GROUP

Energy Supply TWG Call #9, January 11, 2007, 3:30-5:30 pm

Prepared by Kimberly Garnett and Bill Dougherty

The meeting was called to order by Bill Dougherty of CCS staff a few minutes after 3:30 pm. In attendance were the following TWG Members

- Deerhake, Marion – Environmental Management Commission
- Ericson, Roy – NC Utilities Commission
- Hobbs, Alex – NC Solar Center
- Kanesh, Matthew – Piedmont Natural Gas (represented by Steve Lisk)
- Lam, Thomas – Public Staff on NCUC
- Koger, Robert Dr. – Advanced Energy (represented by Ward Lenz)
- Nixon, Marily – Southern Environmental Law Center
- Shore, Michael – Environmental Defense
- Toben, Tim – Carolina Green Energy
- Urlaub, Ivan – NC Sustainable Energy
- Will Vicky – Progress Energy

From DENR staff, the following were in attendance:

- Garnett, Kim – NCDENR/DAQ Liaison with Energy Sector TWG
- Davis, Charles – NCDENR/DAQ

From the public, no one was in attendance.

From CCS staff, the following was in attendance:

- Bill Dougherty
- Sivan Kartha

TWG members not in attendances were:

- Everett, George, PhD – Duke Power
- Howard, Preston – Manufacturer Chemical Industry Council
- MacDowell, Pete – NC Waste Awareness and Reduction
- Rich, Simon – Energy industry
- Shirley, Larry – State Energy Office (or Len Hoey in substitution)
- Smith, Stephen – Southern Alliance for Clean Energy

The background documents that were used as the basis for the discussions had been posted on the website in advance of the meeting (http://www.ncclimatechange.us/Energy_Supply.cfm). These included the following documents:

- Meeting notice and agenda
- Summary of ES TWG Call #8
- PowerPoint presentation for TWG Call #9
- Narrative description of analysis of ES-1, ES-2, ES-3/9, ES-6, ES-7, ES-8, and ES-10

The agenda of this meeting was as follows:

1. Call to order
2. Roll call of TWG members and public
3. Review and approval of summary of TWG call #8 (December 19, 2006)
4. Review draft results of ES-1, ES-2, ES-3&ES-9, and ES-6, ES-7, ES-8, and ES-10
5. Review of approach to ES-4 and ES-5
6. Call for any public comments/input
7. Proposed agenda items and date/times for next meeting
8. Announcements

Bill Dougherty called the meeting to order and took the roll call (as summarized above). The summary of TWG call #8 was adopted without comment.

Then began an overview of the process for completing the analysis in anticipation of the next CAPAG meeting to be held on 24 January 2007, as follows:

- Revised GHG inventory and forecast has been finalized. There were no comments on the latest draft analysis received by TWG members by the 5 January 2007 deadline.
- First drafts of 8 out the 10 energy supply options have been completed.
- First draft of the remaining to energy supply options to be completed over the course of the next few days.
- ES TWG analytical results need to be posted at least one week in advance of the upcoming CAPAG meeting, or by 17 January 2007.

Then began a review of key technical issues that ES TWG input and advice is needed for completion of the analyses, as follows:

- Full fuel cycle CO2 emission factors or generation-only CO2 emission factors? The analysis is currently set up to evaluate both.
- RCI targets of ES targets? In cases of overlap between mitigation options considered by both the ES and RCI TWGs there are differences in efficiency targets. The analysis is currently set up to evaluate both.
- Include new hydro generation or not? The analysis is currently set up to evaluate with and without new hydro capacity.
- Hog waste only, or include poultry litter as well? The analysis only address hog waste currently.

- What resources to consider for estimating the marginal impacts of options (GHG reductions and costs)? Some of the policies (as well as when relevant policies are added together) yield significant reductions that will need to consider the retirement of existing units. Which units should be retired?

Then began a review of the draft analytical results of ES-1, ES-2, ES-3&ES-9, ES-6, ES-7, ES-8, and ES-9 based on the narrative description that was posted on the website. The following detailed comments were offered by the TWG on the initial draft of the individual options:

- ES-1 (incentives) – there were some clarifying questions about the nature of the incentive. The analysis results were considered acceptable.
- ES-2 (environmental performance standard) – the analysis for this option should be revised subject to the following points:
 - *Impact of deep reductions in generation:* To model generation reductions that cannot be accounted for by the displacement of projected new capacity, old coal units (i.e., installed prior to 1972) will be retired in the analysis. The annual dispatch of these units will be assumed to be consistent with a 30% annual capacity factor.
 - *Biomass cofiring:* cost and performance assumptions should be reviewed and revised as necessary based on information that a TWG member (Vicky Will) will provide to the CCS analysis team.
 - *Poultry litter:* This biomass resource should be considered along with hog waste.
 - *System reliability:* the analysis needs to clarify if system reliability criteria will be met in the mitigation scenario.
- ES-3 & ES-9 (CHP) – The analysis results were considered acceptable.
- ES-6 (IGCC with and without carbon capture and storage) – the analysis for this option should be revised subject to the following point:
 - *Emissions associated with transport of captured carbon:* The levels associated with transport of CO₂ to its repository site need to be made explicit in the analysis.
- ES-7 (public benefit fund)- the analysis for this option should be revised subject to the following point:
 - *Eligible resources:* Clarification should be obtained from the RCI TWG analysis team regarding whether both energy efficiency and distributed renewable generation are considered eligible under their PBF option analysis.
 - *Design of ES-7:* The ES TWG’s original option design should be checked to see if centralized renewable facilities are eligible, and the conclusion published in this summary.
 - ❑ After checking with [CCS, Description of Draft Energy Supply Policy Options](#) posted for the TWG #7 call, **the original intent of the ES TWG was that funds amassed from the PBF would be used for energy efficiency only.**

- ES-8 - The analysis results were considered acceptable.
- ES-10 - The analysis results were considered acceptable.

Then began a brief discussion of the approach for analysis of the remaining two options (ES-4 and ES-5). Bill agreed to provide a summary of the proposed approach for the analysis of these two options by Monday, 15 January.

The next ES TWG meeting is TBD.

There were no members of the public in attendance, and hence no comments from the public.

There were no announcements.