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**MEETING SUMMARY**  
**SOUTH CAROLINA CLIMATE, ENERGY AND COMMERCE ADVISORY**  
**COMMITTEE**

**Energy Supply (ES) Technical Work Group (TWG)**

In person meeting #7, November 15, 2007 from 1:30 PM to 4:00 PM

**Attendance:**

1. Technical Work Group Members:

- Mark Tye (for Lonnie Carter – President and CEO, Santee Cooper)
- Trish Jerman (for John Clark – Director, South Carolina Energy Office)
- Bob Fledderman – Manager, Environment and Regulatory Assurance, MeadWestvaco
- Jerry Freck – Environmental Engineer, South Carolina Department of Health and Environmental Control
- Mike Kennedy (for Emerson Gower – Vice President, Southern Region, Progress Energy Carolinas)
- Jeff Hinson – Utilities Manager, Clemson University
- Fred Humes – Chairman of the Board of Directors of the South Carolina Hydrogen and Fuel Cell Alliance
- Mark Lewis – Vice President, Westinghouse Electric
- Henry Barton (for Kevin Marsh – President, South Carolina Electric & Gas)
- Ben Moore – Coastal Conservation League
- David Odell – President, Sunstore Solar of Greenville, South Carolina
- Mark Hollis (for James E. Rogers – Chairman, President and CEO, Duke Energy Corporation)
- Anthony James (for C. Dukes Scott – Executive Director, Office of Regulatory Staff)
- John Wilson (for Steve Smith – Executive Director, Southern Alliance for Clean Energy)
- Coleman Smoak – General Manager, Piedmont Power
- Joette G. Sonnenberg – Associate Laboratory Director, Energy Security, Savannah River National Laboratory
- John Tiencken – Former CEO, Santee Cooper

2. Center for Climate Strategies (CCS) Staff:

- Ezra Hausman – Lead facilitator
- Alice Napoleon

3. South Carolina Department of Health and Environmental Control (DHEC):

- Michael Juras – SCDHEC; Agency Liaison

4. South Carolina Agency Observers

- Representative Ben Hagood, CECAC Chairman

5. Public Attendees:

- Erica Hartwig – SC Energy Office
- Jeanette McCain – Progress Energy
- Ray Pinson – Santee Cooper
- Paul Wojowski – SC DHEC

6. Technical Work Group Members not attending:

- Robert Boyles – Deputy Director, Marine Resources Division, Department of Natural Resources
- Joan Bozzone – Physical Scientist, National Nuclear Security Administration
- John Plodinec – Savannah River National Lab
- Nick Rigas – Director, South Carolina Institute for Energy Studies

**Background documents:**

Posted at [http://www.scclimatechange.us/Energy\\_Supply.cfm](http://www.scclimatechange.us/Energy_Supply.cfm):

1. Meeting Notice and Agenda
2. Draft Summary of Meeting #6
3. PowerPoint for Meeting
4. Straw Policy Proposals (Updated November 9, 2007)

**Discussion items and key issues:**

This was the 7<sup>th</sup> meeting of the ES TWG.

1. CCS called the meeting to order, completed the roll call and reviewed the agenda and plans for the call.
2. Draft meeting summary
  - a. Prior to the meeting, John Wilson had emailed Ezra with comments on the draft summary of Call #6. Section 9.b.iii did not accurately reflect the method John proposed for modeling the generation mix forecast and assumptions for T&D losses. John suggested striking the portion of the summary that mischaracterizes his proposal and attaching the discussion John provided by email to the notes.
  - b. A member asked for clarification on whether the TWG has decided on a baseline CO<sub>2</sub> inventory for 2003 and forecast for 2007-2020 to recommend to the CECAC. It was noted that generation from IPPs (in both inventory & forecast) and generation mix (applies to forecast only) are still outstanding issues. Ezra indicated that he will provide a proposed updated I&F, to be discussed at the next TWG meeting.
  - c. There were no objections to the meeting summary, subject to edits noted above.
3. Ezra described the goal for the meeting, which is to review and modify the goals, timing, coverage of parties, and description of the straw policy proposals, for the purpose of further analysis. At this meeting, the ES TWG would review as a group the draft straw proposals that were developed by TWG volunteers. CCS will present the revised draft straw proposals to the CECAC for its consideration at the November 30 meeting.

4. Policies were discussed in descending order by policy number. Volunteers for each policy proposal were asked to introduce the proposal.
  - a. ES-8:
    - i. John Tiencken described the policy design. In crafting this straw proposal, the volunteers were looking for the best way to encourage renewable energy on the distributed level. The volunteers attempted to set goals for total capacity (MW) and a percent carve out for solar, but they thought that more research needed to be done before presenting numbers. For coverage of parties, only sources behind the meter were considered (i.e., no 3<sup>rd</sup> party generators or utilities). The goal is stated in terms of capacity (MW), but it could be changed to a production basis (MWh).
    - ii. Ezra noted that a similar policy in the RCI sector, RCI-3, has numerical goals. The goals for RCI drew on what other states have considered to be feasible.
    - iii. Ezra indicated that the TWG is not making recommendations for policies to be implemented at this point; it is putting parameters on policies to see if they make sense or not. If the TWG decides down the road that a goal is too low or too high, the goal can be modified.
    - iv. Alice noted that since we don't know what the potential is for this policy, we could state the goal as, for example, "50% of economic potential". "Maximize the potential" was suggested. Ezra indicated that CCS needs to have a number by the next TWG meeting in order to begin analysis.
    - v. John expressed concern about the pricing for solar hot water. David Odell indicated that currently there is probably close to 0% penetration of solar hot water in the state. The ES TWG recommended that the solar HW component of ES-8 be transferred to RCI.
  - b. ES-7
    - i. Ezra noted that ES-7 (Attract renewable energy businesses to state) has a lot in common with ES-2 (Technology R&D). He doesn't know how CCS could do analysis on these, they may be best left un-quantified.
    - ii. It was suggested that "per capita" be inserted into goal #2.
    - iii. Support was expressed for the business clusters model.
    - iv. There were no objections to moving this policy option forward.
  - c. ES-6
    - i. Alice Napoleon noted that RCI is developing a similar policy (RCI-9), which has a different goal (5% participation rate) than ES-6 and uses the PaCE definition of renewable energy. RCI recommended moving state purchasing requirements to RCI-7 (Government Lead by Example). Trish Jerman also noted that the RCI policy recommended recognition for industry participation in green power programs and top generators of green power.

- ii. Anthony James described PaCE. In drafting ES-6, they were trying to be broader than PaCE.
  - iii. A question was raised about the limit on the size of qualifying hydropower—Is 10 kw too small? Ezra noted that small hydro may need an extra push. There was some discussion about the definition of renewable energy resources, and whether that is interchangeable with green power. Jeff Hinson checked the EPA website for the definition of renewable energy resources and read it to the TWG: EPA green e certification includes hydro that is certified as low impact, less than or equal to 5 MW, run of the river. Eligible resources will be changed to include “small hydro-electric” (no size noted) and upgrades to existing facilities.
  - iv. Other eligible resources: there were 2 objections to including MSW, and at least 1 objection to keeping it out. No change was made.
  - v. The goal was changed to 1% by 2012 on a kWh basis.
  - vi. A comment was raised in support of requiring resources to be in-state to be eligible. For comparison, it was noted that the power for North Carolina’s program (NC GreenPower) is produced inside the state. “Preference for in-state resources” was added to policy design.
  - vii. Munis & coops are added to parties involved.
  - viii. There were no objections to moving this policy option forward.
- d. ES-5
- i. The volunteers had difficulty reaching consensus on a draft policy to present to the TWG. Mark Hollis noted that one version had the agreement of all of the volunteers for the policy option except Steve Smith. Mark paraphrased Steve’s concern about the statements about the DOE GNEP reprocessing program. Duke agrees that GNEP is too optimistic on cost but thinks it is important to move forward with reprocessing. John Wilson stated support for Mark’s recommended edit on reprocessing. The TWG recommended changing the language on “too aggressive & commercially unrealistic” to “the NAS has recommended changes to GNEP”
  - ii. John Wilson stated the other concerns he and Steve Smith have with the proposal drafted by Mark Hollis et al.: some of the language is conclusory (it “jumped the gun” on the findings of the group in this process). Also, some of the material belongs under “other benefits” rather than in the policy description. Trish Jerman noted that some of the language distracts from what the policy should focus on, i.e., GHG benefits.
  - iii. A member noted that the focus of the policy is to recommend state & leg actions to support new nuclear power.

- iv. One member felt that the costs were mischaracterized, given nuclear's life-cycle costs. Also, the goals should include the accounting of full costs of disposal & risks, not just direct costs.
  - v. It was noted that the final paragraph in the policy description on jobs impacts has no data source. Ezra asked that all such "facts" have a source identified. Mark Hollis will provide one; he noted that he went lower than the sources' estimates in order to be conservative.
  - vi. Ben Hagood noted that the CECAC will have a lot to consider on Nov. 30, that this is stepwise process, that the TWG is not going to reach consensus on everything, and that the CECAC had indicated a clear desire for nuclear to be considered. He suggested that CCS edit the document to account for the different perspectives heard today, and put a version out for comments. Ezra acknowledged that "policy descriptions can be fast & loose in other states" but that he would move material that belongs in other sections out of the description section and take out material that isn't consensus-driven. There was one objection to giving Ezra the authority to make the next edit independently.
  - vii. Ezra noted that ES-5 would be a descriptive product, and probably not quantifiable.
  - viii. There were no objections to moving on.
- e. ES-4
- i. Ezra explained that two versions of the policy were presented by the volunteers. He will edit down, consistent with Ben Hagood's suggestion for ES-5.
  - ii. John Wilson was involved with drafting the proposal. He didn't see the comments by Duke but has been discussing it with Bob Fledderman and Emerson Gower. He tried to reflect comments, but "timely recovery of costs" should've been included. The final proposal wasn't reviewed by the group.
  - iii. Mark Hollis noted that the alternate version was from Emerson, Mike Kennedy, & Mark Hollis, not just Duke.
  - iv. There was some discussion about the primary purpose of the policy. Is it mainly about equalizing returns, or providing incentives?
  - v. Mark Hollis sees the 3 points on p. 16-17 (Timely recovery of costs, Recovery of Lost Revenues, and Financial Incentives) as critical.
  - vi. Bob Fledderman expressed concern about how the policy works for ratepayers. He said it sets up utilities as sole purveyors of DSM, but he thinks others would be interested. Anthony James noted that the Commission has a docket open—anyone who's interested can open it & have a read.
  - vii. It was clarified that the policy is not proposing decoupling.

- viii. It was noted that a weakness of the policy is that it's presented in a vacuum—as a standalone policy, it would do nothing to actually produce DSM. Ezra asked the TWG what DSM would go along with this.
  - ix. Ezra indicated he would edit, and add the 3 points. No objections to moving forward.
- f. ES-3
- i. The definition of renewable energy will be the same as for ES-6, but it will also include large hydro.
  - ii. Ezra noted that some of the goals were more properly implementation mechanisms.
  - iii. No objection to moving this policy forward.
- g. ES-2
- i. Joette gave an overview of the policy.
  - ii. It was noted that there is some overlap with ES-7.
  - iii. Insert 3-5 years for the time period for funding.
  - iv. There were no objections to moving this policy forward.
- h. ES-1
- i. Two versions of the policy were presented by the volunteers. Ben Moore noted some of the differences in the policy description. He tried to include Mark Hollis's language, and also tried to have clear goals.
  - ii. Mark Hollis noted that the alternative proposal was by a number of utilities, not just Duke.
  - iii. A member felt that putting numerical goals in before the analysis is conducted is like chasing a "bogey", as with ES-8. We could begin the study & then come up with numbers. A range of 12.5% - 20% renewables and energy efficiency was suggested in place of "A 20% renewable and energy efficiency portfolio standard by 2020." A member suggested that in-state potential for renewables might be more like 5-8% of demand. The Florida commission found 5% renewable-only potential. Final proposal is to consider targets of 5%, 12.5%, & 20% for renewables and efficiency (combined) by 2020.
  - iv. There was discussion on a preference for in-state versus out of state resources.
  - v. The TWG recommends a specific set-aside for solar resources.
  - vi. There was a suggestion to leave out the language on RECs.
  - vii. It was proposed that language be included to accommodate for regions such as PMPA that are already served by a high percentage of low- or non-CO<sub>2</sub> resources (90% of PMPA is nuclear).

5. CCS solicited input from the public. No comments or questions were raised.

**Next steps and agreements:**

6. Ezra to attempt to re-write certain policy options, stripping out extraneous language and reconciling issues following today's discussion to the best of his ability. These will be circulated for TWG comment before being posted for the upcoming CECAC meeting.
7. At its next meeting on November 30, the CECAC will review the work submitted by the TWGs on proposed priority policy options description and design. The CECAC may elect to make changes before approving the content of the proposed priority options for further analysis.
8. At its next meeting, the TWG will review the CECAC's actions, review proposed data sources, methodologies, and key assumptions to begin the analysis phase, and conclude its discussion of the generation mix forecast. This meeting (#8) is scheduled to be held by phone Monday, December 17 at 10:00 AM – 12:30 PM (*This is a changed from the previously announced schedule.*)
9. Teleconference call #9 is scheduled for Wednesday, Jan. 16 from 3:30 – 5:00 PM, and the 10<sup>th</sup> call is scheduled for Friday, Feb. 8 from 2:00 – 3:30 PM.