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Meeting #4 Summary
Climate, Energy and Commerce Advisory Committee (CECAC)
Columbia, South Carolina
November 30, 2007

Attendees:

CECAC Members:

Representative Ben Hagood - SC House of Representatives, CECAC Vice Chair
Dana Beach, Executive Director - SC Coastal Conservation League
Jim Byrd, Deputy Director - Market Services Division, SC Department of Insurance
Lonnie Carter - President and CEO, Santee Cooper
John Clark - Director, SC Energy Office
Barry Falin - Vice President and General Manager of Carolina Operations, Voridian
Bob Fledderman Manager - Environment and Regulatory Assurance, MeadWestvaco
John Frampton - Director, SC Department of Natural Resources
Dr. Paul Gayes - Director, Center for Marine and Wetlands Studies, Coastal Carolina Univ.
Ladd Hall, was replaced by Gibb Dautridge.
Emerson Gower - VP, Southern Region, Progress Energy Carolinas
Joe James - CEO, Corporation for Economic Opportunity
Bob King - Deputy Commissioner, SC Department of Health and Environmental Control
Kevin Marsh, President South Carolina Electric and Gas
E. Bruce Morgan - Mayor, City of Union
Dr. Marcus Newberry - Former Dean, MUSC College of Medicine
Mike Olbrich - Plant Manager, BP Chemical
James E. Rogers, Chairman, President and CEO, Duke Energy Corporation
Bob Scott - President, SC Forestry Association
Lanneau Siegling - Past Chairman, Hospitality Association of SC
David Smalls - President, Walterboro-Colleton Chamber of Commerce
Steve Smith - Executive Director, Southern Alliance for Clean Energy
John Tiencken - Former CEO, Santee Cooper
Brad Wyche - Executive Director, Upstate Forever

Office of the Governor:

Justin Evans

South Carolina Department of Health and Environmental Control (DHEC)

Michael Juras, Agency Liaison

Center for Climate Strategies (CCS):

Tom Peterson, Executive Director

Randy Strait, Ezra Hausman, Steve Roe, Will Schroeer, Linda Schade, and by telephone
Alice Napoleon

Background Documents: (all posted at www.scclimatechange.us)

1. Notice and Agenda
2. Draft Summary for CECAC Meeting #3 (Continued)
3. Powerpoint Presentation
4. CCS Memo to CECAC on Preparation for Meeting #4
5. CCS Memo to CECAC on Quantification Methods
6. Policy Option Descriptions for Analysis

Discussion and Conclusions:

1. Welcome and Introductions

Chairman Ben Hagood opened the meeting and went around the room with introductions by members of the CECAC, Technical Work Groups (TWGs), the public, South Carolina agencies, and CCS. Chairman Hagood then reviewed the agenda for the meeting.

2. Review of CECAC Process and Next Steps

Chairman Hagood encouraged CECAC members to participate and openly discuss concerns. Tom Peterson explained that the purpose of today's meeting is for the CECAC members to review and approve of the draft "straw proposals" suggested by the TWGs for each of the pending priority policy options. Specifically, the CECAC is asked to focus its questions, comments, and approval of the draft description, design characteristics (goals, timing, and parties involved), and related policies and programs in place in South Carolina provided in the handout for each of the TWGs. Once approved by the CECAC (including revisions to address the CECAC's comments), the design characteristics will be used as the basis for quantification of emission reductions and costs (or cost savings) for each of the pending priority policy options. The information provided on related policies and programs in place in South Carolina will be used to assist in determining baselines for quantification.

The next meeting date was set for Friday, February 22 from 9:00 am to 6:00 pm. Chairman Hagood will notify the CECAC of the meeting location.

Peterson explained that the goal for CECAC Meeting #5 will be to review the initial quantification results of emission reductions, and costs or cost savings, of the pending policy options. The next meeting will include in-depth discussion of these numbers. The CECAC will review and decide which of the draft policy options are ready for their consideration as final and which options will be returned to the TWGs for refinement and to address the CECAC's comments.

3. Approval of draft summary of CECAC Meeting #3 (Continued)

The summary for CECAC Meeting #3 (Continued) was not posted to the website in time for the CECAC members to provide a thorough review of the summary. Chairman Hagood asked the CECAC members to send him comments on the summary within a week after today's meeting, and the summary will be revised (if needed) and posted to the website. [Note: no comments were received on the summary].

4. Review and Approval of Straw Policy Design Proposals for Draft Policy Options

The CCS facilitator for each TWG provided a brief summary of the description and design characteristics for each pending priority policy option. TWG members were then invited to provide additional points on their work on each option. If applicable, the CCS facilitator and TWG members identified options for which the TWG members had differing points of view. The CCS facilitator and TWG members then responded to questions and comments from the CECAC. The CECAC members then noted any objections to proceeding with further development and analysis of each option after incorporating the CECAC's comments, if applicable.

Note: The following paragraphs summarize the discussion that the CECAC had at the beginning of its review of the AFW TWG's recommended straw proposals. It is placed here in this summary because the discussion also concerned issues that apply to the straw proposals recommended by the other TWGs.

Several of the CECAC members asked for clarification on what they were being asked to approve. Specifically, if they are asked to approve the design of a pending policy option that specifies numeric goals or targets, can they change the goals or targets later or will the CECAC be locked into the goals or targets specified in a straw proposal that they approve today? Some members also expressed the need for more citations of data sources to provide a greater level of comfort and confidence in the design parameters being presented, especially for members not on a particular TWG.

Peterson responded that the purpose for proposing numeric goals or targets in the design of a straw proposal is to provide a starting point for beginning the quantification analysis. The CECAC will review the initial quantification analysis of the pending policy options at its next meeting. At that time the CECAC would be able to change design parameters such as numeric goals or targets if the quantification results were unreasonable to the CECAC. The TWG would then revise the quantification analysis to address the CECAC's comments. Today the CECAC could ask the TWG to adjust design parameters as well, or that the TWG run sensitivity analyses on the design parameters. Peterson requested that the CCS facilitators and TWGs provide clear documentation of design parameters and assumptions used in the quantification analysis going forward.

Several members wanted to go on record, however, retaining the right to object to numbers or policies "at any point in the process." It was noted that approval of the full policy option was not on the agenda today because none of the options have been completed yet; today the CECAC is being asked to merely approve of the concepts (i.e., straw proposal designs) for further study.

Peterson also referred the CECAC to the "Quantification Methods" memo that was prepared for the CECAC to explain the framework for the quantification analysis, and noted that each TWG will adapt this framework as needed for the quantification analysis of options. The CECAC should provide any questions or comments on this memo.

Agriculture, Forestry & Waste Management

For each of the AFW straw proposals, Steve Roe of CCS provided a brief summary of the design characteristics and related policies and programs in place in South Carolina. AFW TWG members provided additional information and assisted in responding to the CECAC's questions and comments.

Summary of Comments and Responses to Questions:

AFW-1 (On-Farm Energy Efficiency) – In response to a CECAC member's comment, it was agreed that going forward the design and analysis of this option will acknowledge that groups of farmers working together can take action and be more effective at achieving the goals than they can as individuals. It was noted that this is true for several of the AFW options.

A question was asked why organic fertilizer was mentioned in the policy description but not the goals? It was agreed that the policy description and the discussion of goals under the policy design section of the straw proposal be synchronized. CCS will also revise the policy description to link this issue to AFW-6a (Soil Carbon Management), where it will be addressed.

In response to a CECAC question, Roe confirmed that the goals of the straw proposal are the TWG's best estimate established in some cases by evaluating what other states have considered. These goals could be further refined by the TWG and CECAC going forward as the quantification analysis it developed.

It was asked if the analysis will be based on what is realistic for South Carolina, and if the analysis will be prepared to show what achieving the goals does to reduce GHG emissions in the state? Roe responded "yes" to both questions. He noted that the TWG will evaluate important factors such as, under AFW-4, the extent that bio-fuels might affect the food system in the state such as when crops for fuel start displacing crops for food.

A member expressed concern that he needed more background on the cost information that the TWG had generated in order to feel comfortable going forward. Peterson explained that the next step of the CECAC process would address just that kind of concern – and that goals, assumptions, and feasibility estimates would be adjusted accordingly.

AFW-2 (On-Farm Waste Energy Recovery) –Roe explained that AFW-2 is about methane recovery in part from manure management and also about using poultry litter as an energy source using gasification technologies, anaerobic digestion, thermo-chemical conversion. A TWG member added that the TWG tried to write this to accommodate new technologies as they become available. It was raised that it would be desirable and productive to encourage collaborative efforts by farmers through AFW-2. The USDA Agricultural Research Service could be a resource and is currently interested in this.

A member commented that the percentage reductions seemed to be low. Roe confirmed that the TWG would bring numbers back to help the CECAC refine goals, as desired, following the analysis. After another round of comments on the credibility of the

numbers, Peterson offered that this could be an opportunity to do a quantitative sensitivity analysis and that the group could decide to look at a second round of data.

Another member added that because methane has a high global warming potential relative to CO₂, it will be important to implement actions quickly to aggressively control methane emissions.

A member expressed that it would be helpful to have a brief narrative to help CECAC members understand the meaning and implications of the numbers, for example, we can get 5% with chicken farms, and 20% with hogs but that's more expensive. Roe noted that the analysis phase of the process will provide these details.

AFW-3 (Expanded Use of Local Agricultural Products) –Roe noted that AFW-3 has been difficult to quantify in other states. Some states have recognized the need for this type of policy but also recognized that information for quantifying the benefits and costs is often not available. For these states, the policy has been developed and included in the final set of recommendations as a non-quantified option.

A member commented that the South Carolina Food Policy Council should be included in the straw proposal. The Council may be able to help to clarify baselines in the next step. Roe noted that very few states have begun gathering this data yet and discussion within the TWG indicates that South Carolina has limited data in this area. A big part of the work on this straw proposal will be to identify information to help define an in-state baseline. The TWG members will be working with several CCS staff to develop recommendations for this option going forward.

AFW-4 (In-State Liquid Biofuels Production) – Roe noted that the TWG will be evaluating feasibility issues such as the different types of liquid biofuel feedstock and production methods, what acreage is needed to support the levels of production envisioned, impacts on existing acreage in South Carolina, etc. A TWG member explained the numbers behind the goals and noted that corn-based ethanol is not workable but cellulosic-based ethanol is for reaching the goals.

It was agreed that the TWG will evaluate a range of targets: one based on the initial straw proposal from the TWG and another representing levels that the TWG feels are upper bounds of potential feedstock availability.

AFW-5 (Expanded Use of Biomass Feedstocks for Electricity, Heat, or Steam Production) – The intent of AFW-5 is to use locally produced biomass to produce energy. The TWG has had discussions with large cellulosic producers and they are concerned that when these operations move to the eastern states, with smaller landholdings, there needs to be a greater effort to organize farmers and it will be important to do that in South Carolina if this is to move forward at a desirable rate.

A member asked about the basis for the 25% goal. Roe clarified that this was the TWG's initial goal based on levels of utilization sought in other states (conservative estimate based on other similar state policies).

Several members expressed concern that the straw proposal is not clear on the fact that by its very nature biomass cannot be transported very far, and that it needs to address mechanisms for increasing the availability of biomass grown in South Carolina to support the goals of the straw proposal. It also needs to acknowledge and address mechanisms for

collecting the biomass grown by farmers through a coordinated, cost-effective effort. The straw proposal needs to be clear on how South Carolina can encourage in-state production of biomass.

Member Question: Does a tax credit affect different actors or companies equally, for example, one energy company versus another? A member from an energy company noted that they pay a sales tax, not income taxes. Questioning member stated that they agreed that burdens should be shared equally.

AFW-6 (Terrestrial Carbon Sequestration) – This options has been divided into two parts: AFW-6a for agriculture and AFW-6b for forestry.

A clarification was sought from South Carolina Department of Natural Resources (DNR) about whether this policy could represent an internal conflict, asking how one might alter management of lands to accommodate short-term carbon gains? A member noted that they do not think it is reasonable to expect an agency to grow timber for production if it is for recreation, aesthetic values, etc. Agencies do not manage on a short-term rotation. We cannot manage land for production. The marketplace should determine how we manage our forests. A member from the South Carolina Department of Natural Resources responded that land that is protected is in better shape than land with concrete on them. A member stated that active management is the best strategy.

Roe: We'll have an opportunity to explore what implementation mechanisms the CECAC wants to use to achieve the goals we set here (i.e. short-term rotation is not the only management method that affects production and carbon benefits). A final member comment was that the intent is to conserve forest or land. CCS told the CECAC that forest conservation is handled under AFW-7.

Commenting on 6b: Forest management for sequestration

One member thought that 6b and 7 complement each other.

On 6a (agricultural terrestrial carbon sequestration) a member asked if it would make sense to include as part of permanent cover, perennial bio-crops? Perhaps switch grass? CCS mentioned that it could and that the policy description will be revised to include this possibility (i.e., in 6a, paragraph #4, first sentence, 'convert marginal' add 'such as perennial bio-crops').

Tom restates: In moving forward, with 6a, it should be understood that the TWG will look at what these detailed goals are and how they should be framed.

AFW-7 (Conservation and Restoration of Forest and Agriculture Lands for Enhanced Carbon Sequestration) – Peterson explained that for AFW-7, implementation mechanisms include putting land in public holding or under conservation easement to prevent conversion to developed use. The practices on the protected land could still include sustainable harvest.

Member comment: So when we change land use from forest to residential or commercial, it seems a lot of trees get cut down.

Peterson: This is where we could include 'tree retention language' in the policy goals.

Member: Does that go into the land use side?

Peterson: It is implied in the rate of conversion and there are various ways to reduce the footprint of development.

Roe – I think it goes better in 6b with the mention of urban forestry.

It was agreed that this issue will be moved to 6b.

AFW-8 (Advanced Recycling and Composting) – Roe noted several updates to the straw proposal for AFW-8 including a discussion of what is meant by the term diversion (refers to all waste management practices that keep solid waste out of landfills (e.g., source reduction, recycling, organics recovery including composting, and waste to energy combustion). CCS will be working with DHEC to provide additional background information on current waste management practices in South Carolina, including the current recycling and composting rates.

Questions: What is our current recycling practice? What is diversion?

Another member responded that diversion to incineration is a major part of status quo in South Carolina. But if we're close to 30% (recycling) now, it seems like we should shoot for higher. CCS explained that diversion accounts for recycling as well as waste to energy and composting; so the actual recycling rate is much lower than 30%. The TWG will bring back more detailed baseline information during analysis.

Member: Can we get information on what waste management practices are employed at the county-level? Counties do this and it might be worthwhile to look at the urban counties and see who has programs and who doesn't. CCS will work with DHEC to incorporate this detail into the baseline information of the policy write-up.

There was a decision to look at a range of 35% to 50% combined for recycling and composting.

AFW-9 (Waste-to-Energy Reclamation) – CCS noted that the focus of this option is to direct organic waste from landfills for energy recovery (anaerobic digestion) or for waste that is landfilled to achieve higher levels of capture of landfill gas. The TWG is not recommending additional waste to energy combustion. CCS suggested that a change to the name of the policy option (e.g., something like "Organics Management for Energy Recovery" will be explored within the TWG to make this clearer.

AFW-10 (Water and Wastewater Energy Efficiency Improvements) – Questions were asked about how the solar tax incentive relates to the goals for this option. It was felt that there may be more applicable incentives and Chairman Hagood asked TWG member Erika Hartwig (an expert on this topic) to look at this more closely.

Objections/Modifications from the CECAC:

The following reflects the CECAC's decisions on the AFW straw proposals, incorporating comments noted during the question and answer session summarized above.

AFW-1 – No objections to moving forward for further analysis.

AFW-2 – No objections to moving forward for further analysis.

AFW-3 – No objections to moving forward for further analysis.

- AFW-4 – No objections to moving forward for further analysis.
- AFW-5 – No objections to moving forward for further analysis.
- AFW-6a – No objections to moving forward for further analysis.
- AFW-6b – No objections to moving forward for further analysis.
- AFW-7 – No objections to moving forward for further analysis.
- AFW-8 – No objections to moving forward for further analysis.
- AFW-9 – No objections to moving forward for further analysis.
- AFW-10 – No objections to moving forward for further analysis.

Transportation and Land Use

For each of the TLU straw proposals, Will Schroeer of CCS provided a brief summary of the design characteristics and related policies and programs in place in South Carolina. TLU TWG members provided additional information and assisted in responding to the CECAC's questions and comments.

Summary of Comments and Responses to Questions:

TLU-1 (Adopt California Clean Car Standards) – No comments or questions.

TLU-2 (Transportation System Management) – No comments or questions.

TLU-3 (Tax Credits for Efficient Vehicles) – No comments or questions.

TLU-4 (Improve Development Patterns) – The goal of this policy is to stabilize per-capita vehicle-miles traveled at today's levels by 2010. The straw proposal design identifies several areas for providing state incentives and resources and improving planning at the state and local levels to meet this goal. Schroeer noted that the TWG choose a target of what the state thinks is do-able, looking at specific cities. Typically the goal will be higher than you think you can get.

A member expressed concern about implementation noting that South Carolina does not have a statewide development plan. Most cities do not understand what will reduce VMT. We need to provide more direction and identify the highly correlated variables are. Another member asked how one would determine success in reducing VMT through residential or employment density. Schroeer noted that X % of new growth will go within urban boundaries, and only Y% will go to sub-urban areas. A member asked that the TWG specify the four factors that correlate with VMT. Another member agreed that VMT goals should be based on these four factors.

The CECAC asked the TWG to specify the factors that affect VMT. The TWG will also include more detail on the two reports cited in the goals.

TLU-5 (Transit & Bike-Pedestrian) – No comments or questions.

TLU-6 (Alternative Fuel Infrastructure) – It was noted that the TWG had included several programs related to this option in the straw proposal under related

policies/programs in place. It was noted that the existing tax incentive for retailers, and the cap needs to be re-evaluated and perhaps eliminated.

TLU-7 (Anti-Idling) – It was agreed that the title of this option will be changed to “Diesel Engine Emission Reductions and Fuel Efficiency Improvements.”

TLU-8 (Stricter Enforcement of Speed Limits) – No comments or questions.

TLU-9 (Make Full Use of CMAQ funds) – No comments or questions.

TLU-10 (Commuter Choice) – No comments or questions.

TLU-11 (Increased Fuel Tax (with use of revenue for travel alternatives)) – A CECAC member expressed concern over the title of this option as they do not feel it is appropriate to raise the fuel tax. There are many other ways to raise funds to support the goals of this option. Another member thought that there could be benefits to increasing the fuel tax. In the end it was agreed that this option should evaluate all types of funding mechanisms and that the title of the option will be changed to “Explore Available Resources for Funding Road Maintenance and Mass Transportation.”

TLU-12 (Low-GHG Fuel Standard) – No comments or questions.

TLU-13 (Freight Vehicle Technology Improvements) – No comments or questions.

TLU-14 (Rail – Freight and Passenger) – The TWG recommended that freight and passenger rail issues be addressed in a separate option. A TWG member explained that freight rail will be important to evaluate in terms of emissions per ton for transport. Another member expressed hope that that includes looking at the Amtrak through the state. The CECAC agreed with the TWG’s recommendation and asked the TWG to develop a straw proposal for the CECAC to evaluate.

Objections/Modifications from the CECAC:

The following reflects the CECAC’s decisions on the TLU straw proposals, incorporating comments noted during the question and answer session summarized above.

TLU-1 – No objections to moving forward for further analysis.

TLU-2 – No objections to moving forward for further analysis.

TLU-3 – No objections to moving forward for further analysis.

TLU-4 – No objections to moving forward for further analysis.

TLU-5 – No objections to moving forward for further analysis.

TLU-6 – No objections to moving forward for further analysis.

TLU-7 – No objections to moving forward for further analysis with title change noted.

TLU-8 – No objections to moving forward for further analysis.

TLU-9 – No objections to moving forward for further analysis.

TLU-10 – No objections to moving forward for further analysis.

TLU-11 – No objections to moving forward for further analysis.

TLU-12 – No objections to moving forward for further analysis.

TLU-13 – No objections to moving forward for further analysis.

TLU-14 – Approved as a priority for analysis.

Residential, Commercial and Industrial

For each of the RCI straw proposals, Ezra Hausman of CCS provided a brief summary of the design characteristics and related policies and programs in place in South Carolina. Alice Napoleon of CCS participated by telephone. RCI TWG members provided additional information and assisted in responding to the CECAC's questions and comments.

A member commented that RCI-6 was a corollary to utility-sponsored programs in RCI-1. Napoleon noted that the TWG recommends breaking RCI-6 into two policies: RCI-6 for buildings and manufactured housing and RCI-11 for appliances. The CECAC approved of this.

Summary of Comments and Responses to Questions:

RCI-1 (Demand-Side Management (DSM)/Energy Efficiency Programs, Funds, or Goals for Electricity (including expansion of same) (Residential, Commercial, and Industrial)) – A member noted that RCI-1 originally included demand side management that would be promoted through the utilities. There are two entry points: through utilities (e.g., a Good Cents standard) and through consumers as opposed to a state-sponsored tax credit to individuals. Hausman mentioned that 3rd party providers can provide energy efficiency services and programs, as well as utilities. A second member noted that this option should also include incentive programs such as Energy Star and loan programs that allow one to pay back the load through energy savings.

It was agreed that RCI-1 specifically includes utility-sponsored programs. All utility sponsored programs are to be considered in this policy.

RCI-2 (Demand-Side Management (DSM) Energy Efficiency Programs, Funds, or Goals for Natural Gas, Propane, and Fuel Oil) – A member questioned how the TWG planned to develop the analysis for this option and expressed concern with the reduction goal in the straw proposal. Hausman explained the meaning of the 1% reduction, which several people thought was very aggressive. There was discussion about base year versus baseline. The goal will be changed to specify that it is relative to a baseline forecast.

RCI-3 (Incentives and Regulatory Reform (including net-metering) to Promote Implementation of Renewable Energy Systems, Including PV and solar thermal (Residential, Commercial, and Industrial)) – The CECAC agreed to take 'net metering' out of title but explicitly recognizing its importance in the text of the straw proposal as stated in the third bullet point – including 'net metering' right after 'metering technology' in text.

RCI -4 (Energy Management Training/Training of Building Operators) – No comments or questions.

RCI-5 (Incentives, Resources, and Regulatory Reform (including net-metering) to Promote Energy Recycling Including Combined Heat and Power) – Hausman noted that the goal of 50% is not strongly supported as a feasible overall goal. One member asked about the title, recommending that ‘net metering’ be removed. A second member added that the spirit of this policy is in the regulatory reform to capture combined heat and power (CHP). Chairman Hagood affirmed with the CECAC to remove ‘net metering’ from the title of this option.

One member asked about the timing of assuming that 100 megawatts (MWs) of capacity can be reached by 2009, stating that unless permits have been issued and contractors have been hired, there is no way that this will happen by 2009. Napoleon responded that the year for implementation can be adjusted by the CECAC. The CECAC agreed to revise the year of the goal to 2011.

RCI-6 (Incentives and policies for improving building and appliance efficiency, including building energy codes and appliance standards) – A member proposed that utility-sponsored programs and incentives in RCI-1 be included in RCI-6 so it applies to buildings. Napoleon noted that the decision was to break it into two policies: RCI-6 for buildings, and RCI-11 for appliances.

In response to a question, Napoleon clarified that the goal to achieve market penetration of 75% for Energy Star labeled manufactured homes by 2010 applies to new manufactured homes. A member expressed concern that 75% was rather aggressive to achieve by 2010. The TWG noted that it felt that it was important to set a “stretch” goal.

A member recommended that additional incentives be offered for mobile homes. Another member commented that we need to reconfigure how the system will work. We will need to be more creative to get the homeowner to realize the benefits of purchasing a more efficient home, using loans, grants, or some other kind of program to increase penetration. Another member asked if the policy design could be achieved by focusing on the manufacturers of homes to produce greener homes. With the right structure and entry point, we could get close to 100% penetration.

Based on the discussion, it was agreed to change the goal to range from 25% to 75%. It was also agreed to include programs that provide incentives for efficiency for conventional housing, new and existing housing and renovation, and market based incentives, for example, should be made available in the commercial and residential market. Tax credit rebates and other programs could be offered to consumers.

RCI-7 (Improved Design and Construction in new and existing state and local government buildings, “Government Lead-by-example”) – No comments or questions.

RCI-8 (Post-secondary College and University Programs) – The CECAC agreed to move this option to the Cross Cutting Issues option for Public Education and Outreach (CC-6).

RCI-9 (Green Power Purchasing for Consumers) – It was noted that the TWG has not yet defined what the reporting mentioned in the policy design would require: “Implementation of regulatory requirements that power sources and emissions data be

reported in consumer utility bills.” Would information go out to all customers? Concern was expressed about consumers getting information that is not useful to them.

Member: My utility has done an annual reporting requirement in other places – monthly may be more than is needed. That has been the standard in other areas to insert something that explains where their power comes from. A utility representative said that on an annual basis we can do it.

It was agreed to change the goal to a range from 1% to 5%, voluntary consumer green power purchase by 2012, and to specify that the relationship between RCI-9 and a renewable portfolio standard will be determined by the CECAC.

Request that goal #3 (State Sponsored Green Power Initiatives) have a more detailed analysis. Table 1 will be moved to implementation mechanisms.

The CECAC agreed to transfer this option to ES-6 (Green Power Purchases and Marketing) of the ES TWG.

RCI-10 (Participation in Voluntary Industry-Government Partnerships (including incentives)) – No comments or questions.

RCI-11 (Incentives and policies for improving appliance efficiency, including appliance standards) – No comments or questions.

Objections/Modifications from the CECAC:

The following reflects the CECAC’s decisions on the RCI straw proposals, incorporating comments noted during the question and answer session summarized above.

RCI-2 Vote: No objections to moving forward in studying the concept.

RCI-3 – No objections to moving forward for further analysis.

RCI-4 – No objections to moving forward for further analysis.

RCI-5 – No objections to moving forward for further analysis.

RCI-6 – No objections to moving forward for further analysis.

RCI-7 – No objections to moving forward for further analysis.

RCI-8 – No objections to moving forward for further analysis.

RCI-9 – No objections to moving forward for further analysis. This policy option was transferred to the ES TWG under ES-6.

RCI-10 – No objections to moving forward for further analysis.

RCI-11 – No objections to moving forward for further analysis.

Energy Supply

For each of the ES straw proposals, Ezra Hausman of CCS provided a brief summary of the design characteristics and related policies and programs in place in South Carolina. Alice Napoleon of CCS participated by telephone. ES TWG members provided

additional information and assisted in responding to the CECAC's questions and comments.

Summary of Comments and Responses to Questions:

ES-1 (A thorough study of energy options for portfolio standards including renewables, energy efficiency, nuclear power, waste to energy, landfill gas, offshore wind, and hydro) – The TWG members had several differences of opinion on the design of this option. Representatives of the utilities presented a revised straw proposal that reflected their point of view. The following discussion reflects the CECAC's review of all points of view presented on this option.

Member asked: Are we talking about new generation or total generation? Hausman responded that for this option evaluates total generation. He noted that South Carolina is a net exporter of power.

Member: We had trouble coming to consensus – so utility members wrote its own draft including a 'renewable environmental standard' rather than 'renewable energy standard.' It has a limit for what had to come from renewables.

South Carolina currently produces 50% of its generation from nuclear sources – so what does the CECAC want to carve out for renewables? Member: We'd look at where we are today and decide where we want to be. Of that 50% nuclear, only 28% is for South Carolina residents.

A member suggested keeping all options on the table for analysis rather than narrow it to one option now. There are 5 different ways you could analyze this. It is important to retain RPS as a term of art.

ES-1 allows broad based analysis, and 'environmental' is a broader term. It was suggested that a conventional description of the two terms be used: RES and RPS.

There was significant discussion in an effort to clarify the various options presented.

It was noted that constraining the percentage of renewables and efficiency may raise the overall cost.

Chairman Hagood suggested deleting all text prior to the scenarios to be studied. The final text will include four options, with the fourth being "Renewables and energy efficiency, with a minimum percentage of the goal to be met with renewable energy". The percentage to be worked out in the TWG. Availability of each resource type was raised as an issue.

It was noted that the quantification of this option will include an evaluation of costs and cost savings for all fuels.

A second question is how did we get attached to incineration for dealing with municipal waste? It was agreed to replace 'incineration' with 'energy conversion.'

A member noted that one utility has issued a request for proposal to complete an evaluation of renewable fuels for South Carolina and that work will be completed by the end of this year.

ES-2 (Technology Research and Development, including state funding) – A member asked if the straw proposal for this option is limited to hydrogen. The TWG responded that hydrogen is used only as an example and that the intention of the straw proposal is to cover other fuels.

ES-3 (Renewable Energy (full range) financing, tax incentives, loans) – The TWG noted that so far they have not specified a goal for the straw proposal.

ES-4 (Regulatory model to equalize utility returns on energy efficiency with returns on traditional power supply to allow investment in efficiency and renewables to be considered in parity with investment in new conventional capacity) – The TWG members had several differences of opinion on the design of this option. Representatives of the utilities presented a revised straw proposal that reflected their point of view. The following discussion reflects the CECAC's review of all points of view presented on this option.

The goal is to make profits through energy efficient equal to or greater than those from building power plants. Hausman noted some differences between the text, including removing the 'de-coupling' paragraph and changing 'returns' to 'earnings.'

One member suggested including incentives for utilities to produce green energy.

Third member: We got this from the utilities yesterday. We drafted some language last night and we are prepared to adopt this with a few minor adjustments – but you don't want a backlash against efficiency. If we can include all cost effective efficiency and protection against overreaching, we should be able to reach agreement if we just have a little more time.

Hausman: For analysis purposes, what can compare the costs of doing energy efficiency either through this policy or through RCI-1, which is more of a mandate than an incentive program.

Chairman Hagood summed up discussion by concluding that one more good faith effort should be taken by the TWG to resolve differences. This will move forward by email and at the upcoming TWG meeting.

ES-5 (New nuclear power, including reprocessing) – It was noted that this option needs more specifics, and the TWG will be evaluating costs.

ES-6 (Green Power Purchases and Marketing - Decision: Move RCI-9 to ES-6) – No comments or questions.

ES-7 (Attract renewable energy technology businesses to South Carolina) – No comments or questions.

ES-8: Distributed renewable energy incentives and/or barrier removal (Including Interconnection Rules) – It was noted that this option overlaps with RCI-3 but with different goals.

Objections/Modifications from the CECAC:

The following reflects the CECAC's decisions on the ES straw proposals, incorporating comments noted during the question and answer session summarized above.

ES-1 – The CECAC returned the straw proposal back to the TWG to work out an agreement on the design characteristics for the straw proposal.

ES-2 – No objections to moving forward for further analysis.

ES-3 – No objections to moving forward for further analysis.

ES-4 – The CECAC returned the straw proposal back to the TWG to work out an agreement on the design characteristics for the straw proposal.

ES-5 – No objections to moving forward for further analysis.

ES-6 – No objections to moving forward for further analysis.

ES-7 – No objections to moving forward for further analysis.

ES-8 – No objections to moving forward for further analysis.

Cross Cutting Issues

Due to time constraints, the CECAC was unable to review the priority policy options for the cross cutting issues TWG. Chairman Hagood will coordinate with the CECAC to arrange for a teleconference call to review and obtain the CECAC's approval of TWG's recommended straw proposals.

5. Review and discussion of South Carolina's Draft GHG Inventory & Forecast

Due to time constraints, TWG recommendations for updating the draft inventory and forecast were not discussed.

6. Public Input and Announcements

Members of the public did not provide any comments. There were no announcements.

The meeting was adjourned.