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DRAFT MEETING SUMMARY
NEW MEXICO CLIMATE CHANGE ADVISORY GROUP (CCAG)

Santa Fe, New Mexico

Meeting #5, August 8, 2006

Attending:

Climate Change Advisory Group (CCAG) members present included:

Abeyta	Cecilia	Farm Bureau
Bensinger	Charles	Sunbelt Biofuels
Blake	Adriana	Ski Taos (NM)
Boulanger	Lucy	Physicians for Social Responsibility
Burks	Jeff	PNM
Curry	Ron	NM Environment Department
Epel	Joshua	Duke
Etsitty	Stephen	Navajo Nation
Fierro	Joyce	NM Association of Counties
Gantner	Bruce	Burlington
Garcia	Paula	NM Acequia Association
Green	Gregory	National Environmental Trust
Ihle	Jack	Xcel Energy - Southwestern Public Service
Kaplan	Howard	Wilson & Company
Lewis	Brad	Salopek Farms
Luce	Ben	Coalition for Clean Affordable Energy
Michel	Steve	NMIEC
Miller	Melissa	LANL
Singer	Tom	NRDC
Thaddeus	Eva	Sierra Club
Zak	Bernard	Sandia National Laboratory

State Agency Representatives present included:

Aaboe	Erik	NM Environment Department
Ely	Sandra	NM Environment Department

Musick	Brad	NM Environment Department
Norton	Jim	NM Environment Department
Stone	Marissa	NM Environment Department
Uhl	Mary	NM Environment Department
Weaver	Lany	NM Environment Department
Prukop	Joanna	NM Energy Minerals & Natural Resources Department

Center for Climate Strategies (CCS) team members present included:

Tom Peterson, Ken Colburn, David Von Hippel, and Lewison Lem.

Introductions

New Mexico Environment Department (NMED) Secretary Ron Curry opened the meeting shortly after 9 AM, thanked CCAG and Technical Work Group (TWG) members for their participation, and remarked on the increasing profile of climate change issues in the US and on New Mexico's participation in the Chicago Climate Exchange. He introduced Joanna Prukop, Secretary of the New Mexico Energy, Minerals and Natural Resources Department, who emphasized the need for action, and pledged her collaboration. She introduced Jim Norton of NMED, who gave an update on some regional developments, including a climate resolution at the last Western Governors Association (WGA) meeting and the ongoing development of greenhouse gas (GHG) inventories and forecasts for a number of Western Regional Air Partnership (WRAP) states as well as a new project of the WRAP to explore development of a regional greenhouse gas registry. Introductions of CCAG members and others in attendance followed.

A member raised the issue of whether to focus on small or large number of options. Jim Norton responded that it is up to the CCAG to determine how many options to consider and in what form. Jim also encouraged the CCAG to highlight which options they consider most important to implement.

Public Comment

The meeting was then opened for public comment.

Sharon Lombardi, Executive Director of the Dairy Producers of New Mexico: She expressed concerned about some AF options, and noted that a TWG member from her industry had to drop out of the CCAG process. She pledged that she would continue to provide input to the process. This ended the public input period.

Review of Meeting Agenda and Process

Tom reviewed the day's meeting agenda. He then asked for and received approval of the summary of the April 26, 2006 CCAG meeting #4.

Tom reminded members where the CCAG is in its overall process, with the fifth meeting deigned to identify a first set of final recommendations, and the remainder to be determined at the sixth and final meeting. He gave an overview of the options under consideration. He noted

that the individual GHG reduction estimates for policy options are presented as “standalone” estimates, but that the aggregate or total reduction of emissions will involve the removal of double counting and other interactions between individual options. He described how CCS analysts develop and present “integrated” estimates that account for overlap or double counting.

Tom then reviewed the targets in the Governor’s Executive Order. He noted that the options quantified so far appear to be able to meet that targets for 2012 and 2020 (or come close to meeting them) should they be fully adopted as final recommendations by the CCAG. He fielded various questions about these estimates.

One member asked for additional detail on the estimates, stating that it would be helpful to know, for example, how various options reduce MWh or gallons of fuel, in addition to reducing GHG emissions. Tom responded that CCS could make these data available given that these quantities are typically are always estimated as intermediate calculations in estimating GHG reductions of specific options.

Consideration of Draft Policy Option Descriptions

By way of introduction to CCAG consideration of the draft Policy Option Descriptions in each TWG area, Tom Peterson described the decision criteria to be applied, and how the CCAG should put each option in one of two categories: 1) final approved CCAG recommendations, subject to any “clean-up” of text and numbers; or 2) “needs more work” with guidance to the TWG for further development, and to be discussed further at the final CCAG meeting.

One member raised again the idea of prioritizing options. Another countered that the package should move as a whole. One asked if the Climate Action Council has preferences, and Jim said not at this time. Tom suggested that TWGs should handle prioritization of options as a part of the process of formulating recommendations for CCAG consideration, and pass these on to the CCAG at its final meeting.

Agriculture and Forestry

Tom Peterson then provided brief descriptions of the current draft Policy Options in the Agriculture and Forestry (AF) sector. For many options here, the TWG proposed that they revise this language to be less prescriptive then bring it to next CCAG for final approval. There was considerable discussion of corn-based vs. cellulosic ethanol production, and what is assumed in the policy analysis and quantification. After extended discussion, the CCAG concluded that all options would be sent back to the AF TWG for revision and clean up of the text to remove highly prescriptive language. This includes decisions on the following options:

- Option F-1: Forestland Protection from Developed Uses. This option was sent back to TWG for further review and analysis.
- Option F-2: Forest Health & Restoration - Residential Lands. This option was sent back to TWG for further review and analysis.
- Option F-2b: Forest Health & Restoration - Other Lands

- Option A-1: Manure Energy Utilization (dairies). This option was sent back to TWG for further review and analysis.
- Option A-1: Manure Energy Utilization (feedlots). This option was sent back to TWG for further review and analysis.
- Option A-2: Biomass Feedstocks for Electricity or Steam Production. This option was sent back to TWG for further review and analysis.
- Option A-3: Ethanol Production. This option was sent back to TWG for further review and analysis.
- Option A-4: Nutrient Management. This option was sent back to TWG for further review and analysis.
- Option A-5: Manure Management - Land Application. This option was sent back to TWG for further review and analysis.
- Option A-6: Conservation Tillage/No-Till. This option was sent back to TWG for further review and analysis.
- Option A-7: Convert Agricultural Land to Grassland or Forest. This option was sent back to TWG for further review and analysis.
- Option A-8: Reduce Permanent Conversion of Ag & Rangeland to Developed Uses. This option was sent back to TWG for further review and analysis.
- Option A-9 Programs to Support Organic Farming. This option was sent back to TWG for further review and analysis.
- Option A-10: Programs to Support Local Farming/Buy Local. This option was sent back to TWG for further review and analysis.
- Option A-11: Biodiesel Production. This option was sent back to TWG for further review and analysis.

Residential, Commercial and Industrial

David Von Hippel presented the results of TWG work to-date on Residential, Commercial, and Industrial (RCI) Policy Options, and answered questions regarding the content and analysis of specific options. Discussions and decisions by the CCAG included the following:

- Option RCI-1: Demand Side Management (DSM) Programs, Energy Efficiency Funds, and/or Energy Efficiency Requirements for Electricity. The CCAG was satisfied with the overall approach. Some specific language changes were presented by David and agreed upon. This option was approved by the CCAG with clarifications and without objections.
- Option RCI-2: Demand Side Management (DSM) Programs, Energy Efficiency Funds, and/or Energy Efficiency Requirements for Natural Gas and Other Fuel. The CCAG was satisfied with the overall approach. Some specific language changes were presented by David and agreed upon. Based on the concern of a CCAG member, this option was sent

back to the TWG for reevaluation due to concerns about whether the effectiveness with some question about gas DSM.

- Option RCI-3: Regional Market Transformation Alliance. The CCAG was satisfied with the overall approach. This option was approved by the CCAG without objection.
- Option RCI-4: State Appliance Standards. The CCAG was satisfied with the overall approach. Some specific language changes about the start date were presented by David and agreed upon. This option was approved by the CCAG without objection.
- Option RCI-5: Green Power Purchasing. The TWG recommended a combined target (Supply-side state renewable portfolio standard requirements plus additional green power purchase) of 30 percent of total power purchases for state funded entities. The overall approach was deemed appropriate by the CCAG, but the TWG wanted to review input estimates related to the fraction of commercial/institutional sector electricity use that is used in public buildings. This option was approved by the CCAG without objection.
- Option RCI-6: Rate Design (Including Time of Use Rates, Increasing Block Rates, and Seasonal Use Rates). A few editorial changes were suggested by the CCAG to broaden the scope of rate designs considered, and to stipulate that rate structures apply to “appropriate” rate classes. The overall approach to analysis was deemed appropriate by the CCAG. This option was approved by the CCAG without objection.
- Option RCI-7a: Improved Building Codes. Some members of the CCAG thought that savings results for this option would be higher than initial results indicated. -- David responded that the option applied to new and extensively renovated buildings only, and was evaluated in a manner consistent with analysis of similar code improvements included in a recent Western Governor’s Association report. This option was approved by the CCAG without objection, subject to TWG working out clarification on approved wording, and pending further TWG review of analysis to make sure that analytical assumptions match goals indicated in the option text.
- Option RCI-7b: Solar Hot Water and Solar-PV-ready Codes for New Buildings, added at the last CCAG meeting, requested by CCAG. A CCAG member argued that there is a need for solar hot water-promoting policies. The group discussed means and methods for adding requirements of solar codes for new buildings. The CCAG decided to send issue back to TWG for analysis and re-presentation to CCAG, with the following instructions: Break the existing RCI-7b into two options, and evaluate the options separately. The new RCI-7b would mandate that all new buildings in New Mexico have plumbing, electrical, and (as necessary) structural components allowing easy installation of solar photovoltaic power systems and of solar hot water systems (“solar PV and solar HW-ready”). The new RCI-7c – would require all new buildings have solar hot water heaters, but the option would allow builders to be excused from this requirement if certain requirements were met, such as lack of availability of cost-effective solar hot water equipment, or the use of alternative renewables-based water heating systems.

- Option RCI-8a: Building Energy Performance Requirements for State funded and Other Government Buildings (“Reach Codes”). The CCAG determined that there is a need to continue working on quantification, including a review by the TWG of initial estimates of key analytical parameters. This option was sent back to TWG for further review and analysis.
- Option RCI-8b: Building Energy Performance Promotion and Incentives for Energy Performance Enhancements (Attaining “Reach Codes”) in Non-Government Buildings (Including Existing Buildings). This option was sent back to TWG by the CCAG for further review and analysis.
- Option RCI-9: Government Agency Requirements and Goals (including procurement) – Focus on operations. This option was sent back to TWG by the CCAG for further review and analysis.
- Option RCI-10: Education and Outreach for Building Professionals. This option was approved by the CCAG without objection (not quantified).
- Option RCI-11: Consumer Education Programs. This option was approved by the CCAG without objection.
- Option RCI-12: Increased Emphasis on Energy and Environmental Consideration in Higher Education. This option was approved by the CCAG without objection.
- Option RCI-13: Incentives and Promotion for Renewable Energy and Clean Combined Heat and Power. The CCAG determined that there is a need to clear up joint language with the ES TWG.
- Option RCI-14: Regulatory/Legislative Grid, Pricing, and other Policies to Support Distributed Generation. The CCAG determined that there is a need to clear up joint language with the ES TWG.
- Option RCI-15: (no policy listed currently using this number).
- Option RCI-16: Participation in Regional (or National) Industry Emissions Cap and Trade Programs. The CCAG determined that there is a need to clear up joint language with the ES TWG.
- Option RCI-17: Voluntary Emissions Targets. The CCAG sent this option back to TWG for further analysis.
- Option RCI-18: Use of Alternative Gases (Non-Energy Emissions, Industrial Process Gases). The CCAG determined that there is a need to provide qualitative description of impacts. This option was approved by the CCAG without objection.
- Option RCI-19: Solid Waste Recycling, Source Reduction, and Composting. The CCAG sent this option back to the TWG for further analysis, and will bring it back to CCAG at its next meeting.

Energy Supply

Ken Colburn presented the Energy Supply (ES) Policy Options as prepared by the TWG. Based on TWG input, Ken suggested that all ES options be sent back to the TWG for further discussion and review with the exception of ES-7, where uprating and re-licensing would be described qualitatively and as in the existing policy description, and of ES-9, where the option is the same as RCI-1. In ES-16, the TWG realized that co-ops have already been quantified as a part of other options. Following extended discussion and several questions, the CCAG agreed to send all but ES-9 and ES-16 options back to the TWG for further development.

Tom clarified that the aggregated results for ES TWG options are midrange estimates of “either-or” options, plus conservative estimate of renewable options. For example, ES-1, -2 and -4 overlap significantly and thus were not double-counted.

It was noted that in the Farmington meeting summary, ES-7 as a re-licensing /uprating option is eliminated, but a new ES-7 is created. CCS will correct this mistake in text and the option template will include a narrative only, no quantification, and citation that the pros and cons of nuclear be explored fully before any steps in that direction are taken by the State.

The CCAG discussed the following options:

- Option ES-1: Mandate(s) for Renewable Energy (RPS, etc.). The CCAG agreed that the option be returned to the ES TWG for further development.
- Option ES-2: Financial Incentives for Distributed Renewables. The CCAG agreed that the option be returned to the ES TWG for further development.
- Option ES-3: Renewable Energy Transmission and Storage. The CCAG agreed that the option be returned to the ES TWG for further development.
- Option ES-4: Financial Incentives for Centralized Renewables. The CCAG agreed that the option be returned to the ES TWG for further development.
- Option ES-5: R&D including Energy Storage. The CCAG agreed that the option be returned to the ES TWG for further development.
- Option ES-6: Advanced Coal/Fossil Technologies (e.g., IGCC with carbon capture). This option was approved by the CCAG without objection.
- Option ES-7: Nuclear Relicensing & Uprating. The CCAG agreed that the option be returned to the ES TWG for further development following the approach agreed to at the previous CCAG meeting, including no quantification but with language addressing concerns about pros and cons.
- Option ES-8: Incentives and Barrier Reductions for Combined Heat & Power (CHP). The CCAG agreed that the option be returned to the ES TWG for further development.
- Option ES-9: Demand-Side Management, Energy Efficiency, and Integrated Resource Planning (IRP). The CCAG approved this option without objection as an identical option to already approved RCI-1.

- Option ES-10: Transmission Capacity and Corridors. The CCAG agreed that the option be returned to the ES TWG for further development.
- Option ES-11: CO2 Capture and Storage or Reuse (CCSR). The CCAG agreed that the option be returned to the ES TWG for further development.
- Option ES-12: Methane Reduction in Oil & Gas Operations: BMPs & PROs. The CCAG agreed that the option be returned to the ES TWG for further development.
- Option ES-13: CO2 Reduction from Fuel Combustion in Oil & Gas Operations. The CCAG agreed that the option be returned to the ES TWG for further development.
- Option ES-14: GHG Cap & Trade. The CCAG agreed that the option be returned to the ES TWG for further development.
- Option ES-15: Generation Performance Standard. The CCAG agreed that the option be returned to the ES TWG for further development.
- Option ES-16: Regulatory Reform for Electric Cooperatives. Regulatory reform of cooperatives. Following extended discussion, the CCAG agreed without objection to discontinue work on ES-16, but to keep it as an unquantified enabling policy with respect to coop generation affected by other policy options (wherever these other policies may affect coop generation).

Transportation and Land Use

Karl Hausker introduced the Transportation and Land Use (TLU) Policy Options. Karl Hausker notified the CCAG that the TWG suggested adding four additional options, including: TLU-2 Low Rolling Resistance Fuel Efficient Tires; TLU-4 Pay-As-You-Drive (PAYD) insurance; TLU-13 regarding Diesel retrofits; and TLU-16, lower speed limits for commercial trucks. Write-ups for these new options were included in CCAG meeting materials, and the CCAG was advised that it would need to approve these additions. Karl briefly reviewed the other TLU options that have been quantified and those requiring additional quantification and fleshing out by the TWG.

One member asked if CCS has more information on the new TLU-4. Karl Hausker described the option in more detail, noting pilots in Texas and the UK, and suggested deferring discussion until after written up in more detail by the TWG.

One CCAG member asked about where these new items came from and turned directly to technical questions, specifically about low rolling resistance tires. Lewison Lem elaborated on how such a significantly large GHG reduction number were derived, noting that fuel efficiency gains are 1.5-4.5 percent, and CCS's estimate used was about 3 percent, well in the range of those found by other analyses. This policy option would provide a "floor" for tires sold in NM through a rule development process. A member asked about the availability of such tires; Lewison indicated that they were broadly available because they're on most new cars.

A member asked if the tire companies had been consulted; Lewison indicated that they had been involved in that CA development.

A member inquired about truck-stop electrification and what modifications are necessary to trucks, and whether a market is already driving in this direction. Karl indicated that experience in PA for truckers has been very positive.

A member asked about TLU-13 (diesel retrofits), indicating that an understanding that the TWG was going to wrap that into the incentive bundle rather than recommending it as a separate option. Karl affirmed that that was correct.

A member asked about TLU-9 (smart growth) and how it would be implemented. Karl indicated that it was likely to be in parallel with the Governor's livability task force, and otherwise would include building codes, education, development density, etc.

Sandra Ely of NMED asked about freight sector emissions and what the TLU TWG had done to address it (e.g., long haul trucking). Karl indicated that relatively little has been done on this sub sector – mostly switch from truck to rail.

A member referred back to TLU-9 (smart growth) and problems encountered with it. Karl indicated that no mandates were included, but rather that tools for localities were what was contemplated, along with other incentives.

Based on extended discussion and questions, the CCAG took the following actions taken on TLU TWG options:

- Option TLU-1: State Clean Car Program – The CCAG approved this option without objection.
- Option TLU-2: Low Rolling Resistance Tires – The CCAG referred the option back to the TWG for further development.
- Option TLU-3: Procurement of Efficient Fleet Vehicles – The CCAG referred the option back to the TWG for further development.
- Option TLU-4: Pay-As-You-Drive Insurance – The CCAG referred the option back to the TWG for further development.
- Option TLU-5: Incentive/Disincentive Options Bundle – The CCAG referred the option back to the TWG for further development.
- Option TLU-6: Alternative Fuels Use – The CCAG approved this option without objection, subject to technical clean up.
- Option TLU-7: Infill, Brownfield Re-development – The CCAG referred the option back to the TWG for further development.
- Option TLU-8: Transit-Oriented Development – The CCAG referred the option back to the TWG for further development.
- Option TLU-9: Smart Growth Planning, Modeling, Tools – The CCAG referred the option back to the TWG for further development.
- Option TLU-10: Multimodal Transportation Bundle – The CCAG referred the option back to the TWG for further development.

- Option TLU-11: GHG Offset Requirements for Large Developments – The CCAG agreed to send this option back to the TWG for discussion.
- Option TLU-12: Targeted Open Space and Croplands Protection – The CCAG approved sending this option back to the both the TLU and AF TWGs for further discussion.
- Option TLU-13: Diesel Retrofits – The CCAG recommended without objection that this option be rolled into TLU-5.
- Option TLU-14: Truck Stop Electrification/Anti-Idling – The CCAG approved this option without objection, subject to technical clean up.
- Option TLU-15: Intermodal Freight Initiatives – The CCAG agreed to send this option back to the TWG for discussion.
- Option TLU-16: Lower Speed Limit for Commercial Trucks – The CCAG agreed to send this option back to the TWG for discussion. One member raised questions about safety (with differential speeds). Another asked about quantification of savings in the context of new biofuels, etc., And Karl indicated that the TWG would double-check the numbers.

Cross Cutting Issues

Ken Colburn introduced the Draft Policy Options prepared by the Cross-Cutting Issues (CC) TWG to date. Discussions of and decisions on options included:

- Option CC-1, GHG Reporting: The CCAG approved this option without objection.
- Option CC-2, GHG Registry: The CCAG approved this option without objection.
- Option CC-3: State Climate Public Education and Outreach. The CCAG agreed to refer this option back to the TWG based on a question regarding professional education by one CCAG member. TWG will also re-solicit input from other TWGs, particularly for the business & industry sector audience.

A question regarding the status of contributing issues also was raised, and Ken and Sandra agreed that a revised matrix would be forwarded to the CCAG.

Summary of CCAG Approved Policy Options

- Option RCI-1: Demand Side Management (DSM) Programs, Energy Efficiency Funds, and/or Energy Efficiency Requirements for Electricity.
- Option RCI-3: Regional Market Transformation Alliance.
- Option RCI-4: State Appliance Standards.
- Option RCI-5: Green Power Purchasing.
- Option RCI-6: Rate Design (Including Time of Use Rates, Increasing Block Rates, and Seasonal Use Rates).
- Option RCI-7a: Improved Building Codes.
- Option RCI-10: Education and Outreach for Building Professionals.

- Option RCI-11: Consumer Education Programs.
- Option RCI-12: Increased Emphasis on Energy and Environmental Consideration in Higher Education.
- Option RCI-18: Use of Alternative Gases (Non-Energy Emissions, Industrial Process Gases).
- Option ES-9: Demand-Side Management, Energy Efficiency, and Integrated Resource Planning (IRP).
- Option TLU-1: State Clean Car Program.
- Option TLU-6: Alternative Fuels Use.
- Option TLU-14: Truck Stop Electrification/Anti-Idling.
- Option CC-1: GHG Reporting.

Discussion of Date and Topic of Next CCAG Meeting

Sandra Ely opened discussion of proposed times for the next meeting. Following discussion, the group agreed to the following:

- The group affirmed the date and location of October 30 (all day) to October 31 (partial day) in Albuquerque as proposed for the next CCAG meeting by Sandra Ely of NMED.
- Based on Tom's proposal for the next meeting agenda, the CCAG agreed to focus the majority of the next meeting agenda and time on final consideration and approval of remaining draft policy options.

No additional final announcements were made prior to conclusion of the meeting at approximately 5:30 PM.