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**DRAFT MEETING SUMMARY
ES Policy Working Group (PWG)
Call #6, June 11, 2007**

PWG Members and Alternates Attending:

| | |
|----------------|----------------|
| Joe Broz | Brian Moeck |
| Vicki Card | Dianna Orf |
| Jack Ihle | Richard Smart |
| Chuck Kutscher | Chris Williams |
| Ron Lehr | Kate Zimmerman |
| Tom McKinnon | |

Governmental agency liaisons: Lori Bird

Rocky Mountain Climate Organization: Stephen Saunders, Tom Easley

Center for Climate Strategies: Ezra Hausman, Alice Napoleon, Geoff Keith, Kenji Takahashi

Members of the public: none

Agenda Item #1: Introductions and Roll Call

**Agenda Item #2: Review and approval of draft summary of Policy Work Group (PWG)
Call #5**

The summary of Call #5 was not made available until the morning of the teleconference. Approval of the meeting notes was deferred until Call #7 so that PWG members would have longer to review.

Agenda Item #3: Review Where We Are in the Ten Step Work Plan

Cumulative & individual results are to be presented at the next CAP meeting.

Agenda Item #4: Review CAP Input on Straw Proposals

Ezra Hausman described the changes the Climate Action Panel (CAP) made to the ES policy proposals.

Agenda Item #5: Discuss Methods for Analyzing the Draft Policy Options

Ezra described the goal for the meeting, which is to get PWG input into CCS's proposed methods for analyzing the emissions reduction benefits and costs of the draft policy options.

ES-1 – Renewable Energy Incentives including Waste to Energy
No comments.

ES-2 – Mandated Portfolio Standards

- Concern was expressed about the cost of the 15% non-wind carve-out. There would be a high break even point. It was asked how costs will be presented: \$/MWh or % increase to electricity bill? Costs will be presented in dollars per ton CO₂ avoided.
- Suggested sources: NREL for operational costs, Bolinger & Wiser for wind integration costs.
- Geothermal: Discussion on the 100 MW of geothermal in CO. Ormat (company out of Israel) hydro-thermal plants can use temperatures <300 degrees. MIT study used 6 KM depths, not based on water flow rates.

ES-2a – Clean Energy Portfolio Standards

- Xcel proposal is for a national policy, not state level.
- Quantitative methods: CCS proposes a literature review.
- Data sources: Xcel, NREL studies.

ES-3 – Transmission Infrastructure for Renewables

- Vicki Card: Colorado Springs doesn't build transmission. How are costs going to be quantified? Ezra said that the analysis does not consider cost allocation, just total costs to society. Allocation can be an implementation detail.
- Question on who has jurisdiction: is it a feasibility issue? How are transmission costs allocated now – license plate?
- What does this do aside from SB 100?
- Lori Bird suggested a colleague from TX PUCT as a contact
- Geoff Keith (CCS) recommended not quantifying this policy.

ES-4 – Cost for CO₂ Emissions (Cap and Trade or Tax)

- Suggested source – MIT study that is a couple of months old

ES-5 – PBC

- Lori Bird noted that funds can be used to fund incentives for high cost renewables in the RPS. Tom McKinnon – it is not clear how a PBC is redundant with the RPS.

ES-6

- Cost curve for CHP – Platt River looked into CHP. Potential is <1%. It was noted that ES-6 specifies CHP & DG = 2% total, so just 1% for CHP.

ES-7

- A member noted a feasibility problem, regarding regulatory authority over pore space. Concern was expressed over the permanence of CO₂ storage.

ES-9

- Does this policy overlap with the RPS? Ezra said that it doesn't. Lori noted that there is also no overlap with ES-5.

ES-10

- Diana Orf expressed need for an ongoing policy.
- Jack Ihle said he wants the IGCC proposal to go forward. He'd support broadening the language.
- It was noted that the capture rate usually includes a heat rate penalty.
- Suggested sources – MIT report “the Future of Coal”. Also, IPCC report, couple of years old.
- CCS proposed a literature review.

ES-11

- Can oversight be handed over to the state?
- Richard Smart noted that 50 MW was an arbitrary goal, “pulled out of the air.”
- Transmission issues will not be considered in the analysis.
- Richard did not have an update on the statewide mapping program.

ES-12

- Goal is to be a brief literature review on costs of nuclear plants and related issues.

ES-13

- Jack Ihle and Brian Moeck will send CCS numbers for reasonable percent improvements in efficiency of existing generators
- Add price of gas to uncertainties
- Standard to be based on average, not per unit efficiency

ES-14

- 35% goal is to be statewide, relative to 2004 levels

ES-15

- It was discussed whether nuclear plants count towards the standard? The conclusion was that this standard is not set on an average basis (like ES-13) but for individual plants, so adding nuclear would not change the requirement..
- Ron Lehr commented that in the future the system should not be built around conventional baseload plants

Agenda Item #6: Changes to the GHG Inventory and Forecast

No feedback was provided on legislative actions affecting the ES sector.

Agenda Item #7: Next Meeting for the PWG

Tentatively set for Jul 18, 1:00-4:00 PM

Agenda Item #8: Public Input and Announcements

None.