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**DRAFT TELECONFERENCE MEETING SUMMARY
ES Policy Working Group
Call #2, February 14, 2007**

Members Attending:

Lori Bird	Brian Moeck
Joe Broz	John Poate
Vicky Card	Diane Orf
Craig Cox	Barbara Roberts
Michael Dowling	Stuart Sanderson
Jack Ihle	Richard Smart
Chuck Kutscher	Wade Troxell
Ron Lehr	Randy Udall
Tom McKinnon	Kate Zimmerman

Governmental agency liaisons:

Rocky Mountain Climate Organization: Stephen Saunders

Center for Climate Strategies: Ezra Hausman, Ken Colburn, Tim Woolf, Alice Napoleon

Agenda Item#1: Introductions and Review of Agenda.

Michael Dowling reported difficulty accessing documents on the website.

Agenda Item#2: Approval of draft summary of Policy Work Group (PWG) Call #1.

1. Add Kate Zimmerman.
2. Stuart Sanderson emphasized that ES-6.1 (CO₂ tax) is a non-workable option.
3. Wade Troxell asked if ES-5 (including Smart Grid) could be coordinated with other groups. This will be discussed in the CAP meeting on Feb. 15, 2007.

Agenda Item#3: Review and discussion of the Catalog of States Actions.

(moved to #4 slot in meeting)

GENERAL NOTES:

1. Ezra Hausman summarized the comments provided to him since the previous meeting. These include:
 - a. Comment that voluntary standards have been ineffective in the past

- b. Under ES-1, Comment regarding the significant potential for developing small, undeveloped hydropower sites.
 - c. Under ES-1, Colorado could develop a more robust REC program, perhaps by participating in a regional tracking system such as WREGIS.
 - d. Under ES-2, Identify and assess the array of potential benefits of distributed generation for local communities (e.g., security, economic development, educational opportunities, environmental preservation and historical issues).
 - e. Under ES-7, Sponsor a series of statewide public forums to address the question of how the State might move forward to a “Climate Neutral” energy supply, i.e., an energy supply that produces no net greenhouse gas emissions.
 - f. Under ES-8, methane from coal mines an opportunity for low-cost reductions; also, future shale-oil production should be considered.
 - g. Skepticism on viability of cap-and-trade in Colorado.
2. PWG members were reminded that policy options and definitions are flexible and subject to PWG modification. The task for the present meeting is to add actions to the catalog. Options will not be removed, with the exception of some obvious errors in the initial compilation of the actions in the catalog (e.g., brownfield redevelopment). The level of detail of each action can be general or specific, as the PWG sees fit. Additional options and pertinent information should be emailed to Ezra Hausman (ehausman@synapse-energy.com). The amended catalog will be posted to the ES PWG website under the materials for the next ES PWG meeting.
 3. A participant pointed out that it is highly unlikely (“absurd”) that the group will be able to get through all of the material (and prioritize the actions for further analysis) within the 90 minutes allotted to the next meeting. It was suggested that someone organize an all-day meeting to “hash it out.”
 4. An ES PWG member noted that there is a need for a broad strategy for the entire state, and that such a strategy might not emerge from the menu-type approach (i.e., selecting actions from the catalog).
 5. An ES PWG member noted that Colorado’s actions will inevitably be compared to those by California, and that the PWG needs to keep the broader, regional context in mind when considering these actions.
 6. Ezra Hausman and Tim Woolf provided approximate notional rankings (high, medium and low) as to the potential GHG emissions reductions and potential cost or cost savings for each policy option, as shown in the 4th and 5th columns of the 2-14-07 version of the catalog. Feedback on these rough assessments was solicited (and provided!) in the meeting. Any additional feedback and pertinent information after the meeting is welcome and should be emailed to Ezra Hausman (ehausman@synapse-energy.com).
 7. A participant noted the need for coordination with the TLU PWG regarding the interaction between transportation and energy supply, specifically with regard to plug-in electric or hybrid vehicles.

8. A participant noted the importance of resource diversification as a means of reducing planning uncertainty and risk.

ES-1 RENEWABLE ENERGY

Recommended additions to the catalog:

- Promote the development of small, low impact hydro, especially at existing impoundments, and possibly including recovering energy from pressure releases in water systems.
- Lobby for a national clean energy portfolio standard, similar to ES-1.1. Xcel has proposed a 20% standard for RE, EE, & nuclear. It was suggested that all options for national advocacy should be put into a new category.
- State oversight of hydro below a certain capacity could reduce regulatory barriers to low-impact small and medium scale hydro. This would require FERC to turn over authority to state.

Recommended changes to catalog items:

- ES-1.1: include distribution additions and improvements as offsets.
- ES-1.1: break out into specific standards for energy efficiency, renewables and other fuels.
- ES-1.2, 1.3 and 1.6 should be combined.
- ES-1.9 should be clarified. Should this include mandates or incentives?
- ES-1 in general: policies should distinguish between cellulosic versus corn-based ethanol. California is currently sorting out this issue; Colorado could look to California for how to implement this distinction.

ES-2 DISTRIBUTED GENERATION (DG)

Recommended additions to the catalog:

- R&D for DG technologies.

Recommended changes to catalog items:

- ES-2.5: clarify meaning. If referring to TOU rates, the value for displacing emissions is questionable if people displace energy use to off-peak hours instead of reducing it.

Comments on potential GHG emissions reductions and potential cost or cost savings:

- ES-2.4: GHG reduction potential should be high, and cost should be low.
- ES-2.5: GHG reduction potential should be medium, and cost should be low.

ES-3 ADVANCED FOSSIL FUEL

Recommended additions to the catalog:

- Policies to promote enhanced sequestration.
- Colorado utilities commission should figure out a cost of carbon, because coal is an important resource to the state. Members discussed a policy of ex ante prudence determinations for IGCC and no agreement was reached, but several were supportive of generally removing barriers to IGCC by the PUC and perhaps prioritizing implementation of this technology in the state.
- Lobby the federal government for IGCC funding.
- Support the development of regional CO₂ transportation and sequestration infrastructure, including a Regional CO₂ Transportation and Sequestration Authority.

Recommended changes to catalog items:

- Participants noted that the issue of electricity storage is critical (as an element of ES-3.5, R&D, but also relating to ES-5.2).

Comments on potential GHG emissions reductions and potential cost or cost savings:

- ES-3.1: members discussed the cost of IGCC and cost savings from increased efficiency of combined cycle. The cost was initially labeled ‘U’ for unknown, because of issues with using PRB coal in IGCC. Concern was expressed that ‘U’ for costs would make IGCC look bad. Members noted the importance of the costs of advanced coal technologies, because coal is abundant in the Rockies.

ES-4 NUCLEAR

Recommended changes to catalog items:

- The group discussed striking nuclear, but participants voiced opinions on both sides of the issue. One participant raised a concern that it would undermine the credibility of the process if this option is ignored.

ES-5 OTHER ELECTRICITY MEASURES

Recommended additions to the catalog:

- Promote the development of better electricity storage systems, including all possible forms of storage, such as compressed air, pumped water and new technologies.
- Promote the application of “virtual storage”, using real-time coupling of different generation options (e.g., hydro and wind) and better use of information technology.

Recommended changes to catalog items:

- Promote the planning and development of transmission facilities to support the development of renewable generation, particularly those located in remote regions (e.g., Texas’s Competitive Renewable Energy Zones).

- Facilitate transmission infrastructure development for renewable energy.

ES-6 EMISSIONS POLICIES

Comments on potential GHG emissions reductions and potential cost or cost savings:

- ES-6.1 and ES-6.2: A participant noted that, putting politics aside, these (carbon tax and cap-and-trade regulations) are among the options with the highest GHG reduction potential and highest cost effectiveness. A cap & trade system can build off of UN-certified trading protocols and offsets. The group decided to change ES-6.2's emissions reduction potential to high (H) and its cost effectiveness to unknown (U).
- ES-6.4 and ES-6.5: Using Oregon as a model, the cost of these options would be low. The group decided to change ES-6.4 and ES-6.5's cost effectiveness to L/M.

ES-7 EDUCATION/AWARENESS

Recommended additions to the catalog:

- Climate neutral communities (may be best handled by the cross-cutting issues working group).

ES-8 OIL AND GAS OPERATIONS

Recommended changes to catalog items:

- ES-8.2 and 8.3: It was noted that water issues present a hurdle to coal to liquid applications.
- Methane venting from coal mining was discussed. Jurisdictional issues have prevented recovery of this resource.

Agenda Item#4: Review and discussion of the Colorado GHG Inventory and Forecast.

(moved to #3 slot in meeting)

A brief summary of the inventory was presented. The details are provided in the report, which can be accessed at http://www.coloradoclimate.org/Energy_Supply.cfm. Participants are asked to comment on the inventory. Pertinent information can be emailed to Ezra Hausman (ehausman@synapse-energy.com).

It was suggested that the IPCC CO₂ equivalence ratios (i.e., global warming potential of CO₂, relative to CH₄, N₂O, HFCs, and SF₆) are controversial.

Participants noted new & upcoming developments that could require adjustment to the inventory if they come to fruition during CCP process:

1. 7400 MW of new capacity has been proposed/is being built.
2. Colorado Bill # 1281 would increase RPS.

3. Table 4 of the inventory does not necessarily include all of the existing and proposed wind generation facilities in the region.

Agenda Item#5: Next Steps of Policy Work Groups.

Next meeting, the PWG will begin to prioritize actions for further analysis.

Agenda Item#6: Agenda, Time and Date for Next Meeting.

Next meeting will be via conference call. The time & date are to be determined.

Agenda Item#7: Public Input and Announcements.

None.