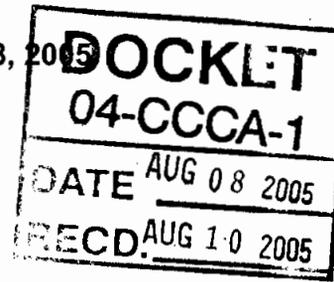


August 8, 2005

**CLIMATE CHANGE ADVISORY COMMITTEE TO THE ENERGY
COMMISSION
FINAL DRAFT POWER SECTOR POLICY RECOMMENDATIONS**



These recommendations represent the views of the Power Sector Subcommittee of the Energy Commission's Climate Change Advisory Committee, with additional views included at the end of this statement. This statement does not necessarily represent the views of the full Climate Change Advisory Committee or the California Energy Commission.

1. Given increasing concern over and interest in reducing global warming emissions, and the increasing likelihood of national regulatory action, it is appropriate now, as one element of an economy-wide program, for all California utility managers, independent power producers, other load serving entities (LSE), and regulators to take the financial risks of greenhouse gas regulation explicitly into account in long-term resource planning and procurement decisions, along with the potential for reducing emissions.

2. One such approach, which includes the assignment of dollar values to GHG emissions when comparing projected costs of alternative resource investments, has been developed and is being implemented by the California Public Utilities Commissions and the Advisory Committee commends the CPUC actions and foresight. If adopted by all retail service providers, this precaution will help minimize the exposure of all California households and businesses to increasingly obvious financial and reliability risks from long-term financial commitments to generation with high greenhouse gas emissions.

3. The Advisory Committee supports further cost-effective actions to reduce greenhouse gas emissions and financial risks and to deliver additional economic and environmental benefits to California. Each investor-owned and publicly-owned utility (or joint powers agency as an appropriate alternative), and all other LSE(s), should develop an action plan to meet the Governor's greenhouse-gas reduction goals (established in Executive Order S-3-05). The action plans should include the following elements and information as applicable, and such plans should be made publicly available, with copies provided to the California Energy Commission and the California EPA, which should monitor this activity (alternatively, at the request of a utility(utilities) or LSE(s), the California Energy Commission may develop an action plan for those entities):

- a. The impact of global warming on each entity's service or planning area, including impacts on hydro resources, peak load, air quality, and other environmental and financial impacts;
- b. Current and projected greenhouse gas emissions from each entity's service or planning area based on current trends;

c. Policy options for each entity's service or planning area to reduce greenhouse gas emissions at least cost to customers, including utilization of energy efficiency investments to ensure that all cost-effective opportunities that reduce GHG emissions are pursued (such as the policy recently adopted by the CPUC), establishing and meeting renewable energy targets and accelerated retirement or re-powering of older, less efficient fossil-fueled power plants.

4. The State of California should actively pursue the development of a program for determining and tracking GHG emissions throughout the Western Electricity Coordinating Council (WECC) region, in cooperation with the Western Governors Association and the Renewable Energy Generation Information System (REGIS).

5. The Advisory Committee believes that, should a mandatory GHG emissions reduction program be enacted, greenhouse gas reductions can be achieved faster, better and more cheaply through a market-based program. Thus, in the context of reviewing options for establishing greenhouse gas mitigation obligations, the Advisory Committee supports consideration of a well designed multi-sector cap and trade program, and offers its assistance to the Governor's Climate Action Team as it begins an inquiry into such a program. The Advisory Committee has no consensus position on the specific issue of a load-based cap-and-trade program for the power sector.

6. As the California PUC has recognized already, any policies addressing greenhouse gases from electric generation should treat in-state and out-of-state sources in a nondiscriminatory fashion.

7. The State of California should seek appropriate credit for its early actions to reduce greenhouse gas emissions in any future federal statutory or regulatory system addressing such emissions.

8. The State of California should take a leadership role in research and development of low-carbon-emitting energy technology and options for reducing greenhouse-gas emissions.

9. Environmental Justice must be a consideration of public policies and investments in California's response to the challenge of global climate change. The state should foster a level of cooperation among state agencies, industry, local government and residents to maximize the public health, safety and security of the residents immediately adjacent to proposed sites, re-powered sites and plant closings. The development of future generation must endeavor to match benefits with risks and impacts to the residents adjacent these facilities.

Subcommittee members:

Ralph Cavanagh, Natural Resources Defense Council (Co-Chair)

Peggy Duxbury, Calpine

Mike Hertel, Southern California Edison

Wendy Pulling, Pacific Gas and Electric Company

Jan Schori, Sacramento Municipal Utility District (Co-Chair)

ADDITIONAL VIEWS AND COMMENTS OF COMMITTEE MEMBERS:

Southern California Edison's Comments on the Power Sector Subcommittee Report

Southern California Edison (SCE) appreciates the opportunity to participate in the work of the CEC Advisory Committee on Climate Change Policy. However, SCE does not share in all of the views expressed in the draft "power sector subcommittee" report. We respectfully offer our dissenting views. We provide both this comment letter and a markup of the draft report with interlineated supporting explanations.

SCE agrees that global warming is occurring and that there is a potential for significant harm to the climate system. We agree that actions to address global warming are necessary. SCE believes that action to address global warming will be most effective if taken at the international and national level. We support the federal government's extensive program to address climate change. We supported enactment of a federal renewable portfolio standard in the recent Senate consideration of the National Energy Bill..

If California chooses to enact mandatory greenhouse gas emission (GHG) reduction programs, in particular with respect to the electricity sector, it should work in concert with the electrically interconnected western states represented in the Western Electricity Coordinating Council. SCE is concerned that unilateral mandates by California, particularly with respect to GHG emissions associated with the generation of electricity, will not be effective due to the likelihood that mandates to reduce emissions here will shift carbon emissions to generators in other states with which California is linked electrically, thus eliminating any overall reduction in emissions. Unilateral California mandates will likely result in higher prices to California customers and threatens reliability of the state's electric supply.

California's electricity supply system is carbon efficient. The carbon intensity of the electricity consumed in California is about 25% less than the nation as a whole, and significantly less than that of our neighboring western states. California is in this positive position because of existing ozone-reduction policies, which led to early reliance on natural gas fired generation, and existing energy-efficiency programs, which require investor owned electric utilities to implement extensive

end use energy efficiency and conservation programs and to meet an aggressive renewable portfolio standard. (SCE leads the nation in procurement of renewable energy.

At present, 19% of the electricity we distribute to our customers comes from renewable sources as defined in the RPS statute.) SCE supports continued reasonable efforts to improve electric end use efficiency. On June 1, 2005 SCE filed an Application with the CPUC for over \$728 million in energy efficiency funding for the years 2006-2008, nearly triple the previous annual levels of investment in energy efficiency programs. We will continue our aggressive effort to procure renewable energy and believe California should enact legislation to require all load serving entities (LSEs), including municipally owned electric utilities, to meet the same RPS standards presently required of investor owned electric utilities. Individual RPS commitments by such entities are not sufficient, nor is it equitable to require one standard of the private sector utilities and another of the municipal utilities.

SCE respects the Governor's decision to address the climate change issue through Executive Order S-3-05. However, for the reasons stated above, we believe it is critical to assess the feasibility and cost of meeting the GHG emission reduction targets and timetables detailed in Executive Order S-2-05 before imposing mandates to meet those targets.

In compliance with the CPUC decision in its long term procurement plan, SCE is taking GHG emissions into account in its electric power procurement process by employing the "GHG adder" as directed by the CPUC. Since municipal utilities in California supply a significant amount of the electricity consumed in the state, municipal utilities should be required to employ the same GHG adder in their procurement activities.

Addressing climate change is a decades-long global problem. As the Intergovernmental Panel on Climate Change Third Assessment Report indicates that effectively stabilizing greenhouse gas concentrations in the atmosphere will likely require reduction of global GHG to levels below 1990. It is not yet clear how much time global society has to make this change, but it is reasonable to conclude that it will take at least several decades to achieve such dramatic change. Early, dramatic reductions in GHG emissions will be expensive and may be unnecessary if we can make a transition to lower or zero carbon intensive energy supply over a longer time frame. In the near term, California and the nation should take reasonable and cost-effective steps to increase the efficiency of energy production and to develop renewable power. If California acts unilaterally, it should include in its policy an open GHG offset program without restriction and a price limit on cost per ton of carbon dioxide equivalent reduced.

Finally, because the nation as a whole and California will need to continue to rely on coal for some portion of its electric energy supply, it behooves the federal and

state government to provide leadership to advance policies to develop technology to capture and store carbon dioxide produced in the course of using coal.

Submitted by Michael Hertel, Southern California Edison; August 1, 2004. In addition, Appendix A outlines an alternative to the language in the subcommittee statement provided by SCE.

Appendix A
Proposed Alternative Language from Michael Hertel

Deleted: Draft---Not for Public Distribution

Formatted: Left

Deleted: July 26, 2005

**CLIMATE CHANGE ADVISORY COMMITTEE TO THE ENERGY COMMISSION
POWER SECTOR POLICY RECOMMENDATIONS**

These preliminary recommendations represent the views of the Power Sector subcommittee of the Energy Commission's Climate Change Advisory Committee. Unless ratified by the full Committee, this advisory statement does not necessarily represent the views of the full Advisory Committee or the California Energy Commission.

1. Given increasing concern over and interest in reducing global warming emissions, it is appropriate now, as one element of an economy-wide program, for all California utility managers, independent power producers, other load serving entities (LSEs), and regulators to take the potential for reducing greenhouse gas emissions explicitly into account in long-term resource planning and procurement decisions.

2. One such approach, which includes the assignment of dollar values to GHG emissions when comparing projected costs of alternative resource investments, has been developed and is being implemented by the California Public Utilities Commissions and the Advisory Committee commends the CPUC actions and foresight. The greenhouse gas adder approach should be applied to all retail service providers, including publicly owned municipal utilities. In addition, all retail service providers including municipal utilities should be held to the same Renewable Portfolio Standards required of investor owned utilities. These steps will advance the state's effort to address reduction in greenhouse gas emissions and provide an equitable competitive structure for the state's electric utilities and the other LSEs.

3. The Advisory Committee supports further cost-effective actions to reduce greenhouse gas emissions and financial risks and to deliver additional economic and environmental benefits to California. Each investor-owned and publicly-owned utility (or joint powers agency as an appropriate alternative), and all other LSEs, should develop an action plan to assess the cost and feasibility of meeting the Governor's greenhouse-gas reduction goals (established in Executive Order S-3-05). The action plans should include the following elements and information as applicable, and such plans should be made publicly available, with copies provided to the California Energy Commission and the California EPA, which should monitor this activity (alternatively, at the request of a utility(ies) or LSE(s), the California Energy Commission may develop an action plan for those entities),

- a. The impact of global warming on each LSE, including impacts on hydro resources, peak load, air quality, and other environmental and financial impacts;
- b. Current and projected greenhouse gas emissions from electricity supplied from each LSE based on current trends;
- c. Policy options for each LSE to reduce greenhouse gas emissions at least cost to customers, including utilization of energy efficiency investments to ensure that all cost-effective opportunities that reduce GHG emissions are pursued (such as the policy recently adopted by the CPUC), establishing and meeting renewable energy targets, and accelerated retirement or repowering of older, less efficient fossil-fueled power plants.

Deleted: .

Deleted: and the increasing likelihood of national regulatory action,

Deleted: financial risks of greenhouse gas regulation

Comment: The CPUC's decision in its Long Term Procurement Proceeding addressed the financial risk question for Investor Owned Utilities through the adoption of a greenhouse gas adder. We believe concern about GHG emissions should compel all California private and public utilities to address the GHG emission issue in their procurement decisions. As discussed in paragraph 2, two means of doing this are to apply the GHG adder to procurement decisions and require that all meet the same RPS standards as required of IOUs.

Deleted: , along with the potential for reducing emissions.

Deleted: ¶

Deleted: If adopted by

Comment: Again, we believe concern about GHG emissions should compel all California private and public utilities to address the GHG emission issue in their procurement decisions.

Deleted: this precaution will help minimize the exposure of all California households and businesses to increasingly obvious financial and reliability risks from long-term financial commitments to generation with high greenhouse gas emissions.¶

Comment: We need to insure that the targets and timetables enunciated in the executive order can be met without significant impact to the state's economy in general, and the reliability of the electric supply system and the price of electricity to California consumers. It is important that all sectors of the economy (not just the power sector) particip[... [1]

Deleted: ¶

Deleted: ¶

Deleted: entity's

Deleted: service or planning area

Deleted: each entity's service or planning area

Deleted: entity's service or planning area

Appendix A
Proposed Alternative Language from Michael Hertel

4. The State of California should actively pursue the development of a program for determining and tracking GHG emissions throughout the Western Electricity Coordinating Council (WECC) region, in cooperation with the Western Governors Association and the Renewable Energy Generation Information System (REGIS).

5. The Advisory Committee believes that, should a mandatory GHG emissions reduction program be enacted, greenhouse gas reductions can be achieved faster, better and more cheaply through a market-based program at the national level or, at a minimum, among the 14 electrically interconnected western states. To the extent that any greenhouse gas mitigation obligation is enacted such obligation should be: economy wide; provide protection of state's economy through provision of a limit to the cost per ton of emissions reduced; allow offsets that are cost effective without geographic or other restriction; and allocate emissions credits, if part of such a mitigation program, on the basis of historic emissions. These conditions would be particularly important if the obligation was enacted in California alone. ~~the Advisory Committee offers its assistance to the Governor's Climate Action Team as it begins an inquiry into such a program. SCE has serious concerns about the wisdom and practicality of a load-based cap-and-trade program for the power sector and opposes such an approach.~~

6. As the California PUC has recognized already, any policies addressing greenhouse gases from electric generation should treat in-state and out-of-state sources in a nondiscriminatory fashion.

7. The State of California should seek appropriate credit for its early actions to reduce greenhouse gas emissions in any future federal statutory or regulatory system addressing such emissions.
8. The State of California should take a leadership role in research and development of low-carbon-emitting energy technology and options ~~For capturing and storing greenhouse gas emissions.~~

Deleted: Draft---Not for Public Distribution

Formatted: Left

Deleted: Thus, in the context of reviewing options for establishing greenhouse gas mitigation obligations

Deleted: supports consideration of a well designed multi-sector cap and trade program, and

Deleted: The Advisory Committee

Deleted: has no consensus position

Deleted: on the specific issue

Comment: We believe the climate change issue must be addressed at the national rather than state level or at minimum (and especially in the context of the power sector) at the level of the 14 electrically interconnected states. Unilateral action by California carries with it the very real problem of "CO2 leakage" and the potential for substantial increases in the price of electricity without commensurate benefit to the people of California. In the event that California should, nevertheless, decide to enact additional GHG measures, we believe certain practical, protective features must be included to protect California's competitive position in the national and global economy and minimize impact on consumers of power. We are especially concerned about the wisdom of the so called "demand cap" proposal offered before the Advisory Committee and the CEC. We have already submitted significant oral testimony on our concerns for the Commission's concerns. We caution that any fuel-based restrictions on the ability of IOUs and other LSEs to obtain power from out-of-state generators could endanger reliability and impose higher costs on California households and businesses.

Deleted: for reducing greenhouse-gas emissions.

Comment: The climate change issue is a decades long problem. The US possesses and is likely to rely upon the consumption of extensive domestic coal supplies and other fossil fuels to meet its continuing energy demand. California should address the problem of using coal based energy by leading in the development of cost effective tech ... [2]

Deleted: ADDITIONAL VIEWS AND COMMENTS OF COMMITTEE MEMBERS [to be added]¶

¶
¶

(... [3])

We need to insure that the targets and timetables enunciated in the executive order can be met without significant impact to the state's economy in general, and the reliability of the electric supply system and the price of electricity to California consumers. It is important that all sectors of the economy (not just the power sector) participate in a dialogue with policy makers on this important issue. We understand that is the intent of the Climate Action Team. Therefore, we suggest engagement of all parties in a responsible dialogue rather than concluding that our task is merely to implement the targets and timetables.

The climate change issue is a decades long problem. The US possesses and is likely to rely upon the consumption of extensive domestic coal supplies and other fossil fuels to meet its continuing energy demand. California should address the problem of using coal based energy by leading in the development of cost effective technology to capture and store the GHG emission inherent in its use.

ADDITIONAL VIEWS AND COMMENTS OF COMMITTEE MEMBERS [to be added]

Subcommittee members:

Wendy Pulling, Pacific Gas and Electric Company

Mike Hertel, Southern California Edison

Jan Schori, Sacramento Municipal Utility District (Co-Chair)

Ralph Cavanagh, Natural Resources Defense Council (Co-Chair)

Peggy Duxbury, Calpine