California Energy Commission
Dockets Office, MS-4
Re: Docket No. 09-IEP-1A
1516 Ninth Street
Sacramento, CA 95814-5512

COMMENTS ON INTEGRATED ENERGY POLICY REPORT OF 2009 BY THE CALIFORNIA ENERGY COMMISSION (CEC)

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General

The plan is an obvious effort at denigrating the potential contribution of nuclear energy and exaggerating that of renewable energy. This runs counter to the world-wide awareness both of the limitations of renewable energy and that nuclear energy is essential for preserving our level of civilization. The state cannot afford to wait until the pain of this misguided policy is manifest. At such a time the lead time for correcting the ill-advised decisions will prevent us from averting the severe hardships of an energy shortfall. It is probably too late already.

The $half-billion annual budget of the CEC has been totally misspent. It has diminished rather than enhanced California's energy production capability as well as its energy future.

Renewable Energy

The effectiveness of renewable energy is grossly overestimated, both as to its effectiveness in emission reduction and in its ability to replace fossil fuels. Denmark and Germany who lead the world in deployed wind and solar energy (both of which are less than twenty percent) are discovering that it is far less effective in reducing emissions and in displacing fossil fuels than was initially predicted. Denmark has reported no significant decrease of carbon dioxide emissions. The country has encountered so many problems from the low capacity factor and the capriciousness of the availability of wind that it does not rely on it for domestic use, preferring to export it. In 2002 there were 54 full days of no wind power at all. Of course, biomass and bio-fuels produce at least as many emissions as fossil fuel. Solar power has proven even less desirable than wind. Hydropower and geothermal are limited by site availability.

California's legal mandate for thirty percent renewable energy by 2020 is completely unrealistic. Previous goals for smaller growth rates in deployment of renewable sources have not even been approached. Conventional wisdom has decreed that there is a practical limit of twenty percent and the German and Danish experience certainly verifies this wisdom. Beyond this limit renewable energy additions are counter productive. The CEC should

determine what this limit is for California based on wind, insolation and demand cycles before committing to a percentage that could be harmful.

Nuclear Energy

For expanding nuclear energy, the report denies its possibility based the Legislature's 1976 amendment of Warren-Alquist Act to outlaw further nuclear deployment until a permanent licensed waste repository is available and nuclear reprocessing is established. The amendment was ill-advised when it was enacted over thirty years ago and it is unconscionable today. The federal government has never considered these two considerations to be a reason for stopping nuclear deployment. It has recently determined that a permanent repository is not even essential and it has blocked reprocessing and even reprocessing development for over thirty years. Those states that allowed nuclear expansion at the time California denied it have an extreme advantage over this state both in assuring future energy supplies and in controlling their costs. The amended Warren-Alquist act has been an enormous impediment to California's energy future. It needs to be overturned as quickly as possible. The CEC position on that is that it is "out of their hands" because it is a legislative mandate. But the CEC's charter calls for it to advise the legislature on energy matters and it has never presented this much-needed advice.

The CEC has dealt another unnecessary blow to nuclear energy in this state. It has imposed many requirements on state nuclear plants over and above what is required by the NRC. Most energy analysts consider the NRC requirements to be more than adequate for safety assurance. One of these CEC requirements is the replacement of once-through cooling by cooling towers. The basis for this requirement is a questionable assumption that local aquatic life will benefit. Power plants have always chosen once-through cooling when it was available for efficiency reasons. Without establishing its overall benefit, this replacement should not be mandated.

Classification of Hydro Power

The report classifies small hydro (less than 30 MW) as renewable, but not large hydro. This is not a significant factor but the reasons for it are puzzling. The renewable classification is not dependent on size. Since large hydro produces as much electricity as all those classified as renewable by the CEC, its effect is to halve the indicated contribution of hydro and double the indicated contribution of all the others.