Mr. Chairman I appreciate the opportunity to testify before the Subcommittee in my role as Chairman of the California Energy Commission on energy policy. I serve as vice-chairman of the National Association of State Energy Officials (NASEO), and I am also representing them today. The views I express here and in my oral testimony are my own and not necessarily the views of the Davis Administration or the State as a whole.

In many ways we have a set of state and federal energy policies today. However, they originate from the actions of the federal government and individual states to meet their respective needs. In recent years, many of the issues that separated states have become blurred and increasingly overlapping. This calls out for a renewed effort by the federal government to develop policies and strategies for action based more on commonality than on individual state needs.

For example, since 1996 states have been restructuring the electric industry, as has the federal government through orders 888, 889, and 2000 of the Federal Energy Regulatory Commission (FERC). Twenty-six states have begun to move forward through legislative or administrative action.

Those changes have been wrenching. Early last year the Energy Commission reported on the vulnerability of California’s electricity system. We projected an increasing inability to meet summer peak demand caused by the combination of “heat storms” and inadequate supplies of electricity. These
predictions are now a reality in California and we expect these electricity shortages to continue through 2004.

The steadily increasing demand for electricity in California has created severe reliability problems resulting in rolling blackouts and significant economic impacts. The electricity shortages that occurred in California on June 14 and 15 increased costs by $1 billion for energy and ancillary services. These dramatic short-term price increases have resulted in electric bills in the San Diego area, for example, that are at least double what were paid by consumers in the prior year. The California Independent System Operator (Cal ISO) has since lowered price caps somewhat to limit payments to generators during periods of peak electricity demand.

To improve the system’s reliability we will need to address supply adequacy and security, as well as power quality.

We need more generation capacity in California. For more than a decade no major power plant was constructed in California. Now, the Energy Commission is reviewing 14 applications totaling 8,065 megawatts (MW). Four of the five new power plants the Energy Commission has licensed in the past year are currently under construction. This capacity, however, will not come online soon enough to meet near-term summer peak demands.

We believe that in order for the restructured electricity market to function competitively, mechanisms must be in place that encourage demand responsiveness. California Power Exchange data suggest that a three percent decrease in demand at peak hours can reduce market clearing prices by 25 percent. This means it is more cost-effective to reduce peak demand for electricity than to build power plants to meet peak demand.

The California Public Utilities Commission (CPUC) recently issued a $68 million solicitation for immediate delivery of electricity demand and energy use reductions. The results of this solicitation will be known later this fall.

In the long run, however, it is my view that consumers need to be able to respond to changes in electricity prices on an hourly basis. The basic framework to provide incentives to end-users including interval pricing and interval data recording (IDR) meters are critical elements of a robust competitive market. In a recent decision, the CPUC determined that customers with IDR meters will be charged hourly commodity energy prices. Legislation is pending in California that
would implement a broader pilot program for these IDR meters. In addition, consumers need expanded education about the implications of hourly commodity energy pricing and easy-to-use, programmable appliance controllers to respond to price signals. No one expects consumers or businesses to constantly monitor market prices and manually adjust consumption.

Our current transmission system was not constructed to handle an open wholesale market and it will take time to implement needed upgrades. We are currently funding a $7.2 million contract with the Consortium for Electric Reliability Solutions to determine what solutions might exist to improve the reliability of the electric grid. DOE is providing approximately $10 million in additional funding.

New transmission lines, however, do not represent a quick fix as they take 5 to 7 years to construct. In California they may not necessarily be the appropriate fix as there is sufficient transmission from out of state. System security issues usually arise at the local level. Problems at the substation level during periods of peak demand create choke points in California’s grid system that result in significant localized outages and rolling blackouts. We are taking steps to augment the capability at specific points in our grid.

However, the interrelated nature of electricity supply and transmission makes this a western grid system problem, not just a California issue. The events of June 14 and 15, though local in nature, jeopardized the entire western grid system.

Congress can help by passing national reliability legislation. Electric system reliability is a problem that must be addressed at a larger level than state and provincial governments can provide. The creation of higher level institutions to provide that oversight when necessary would need to recognize appropriate state authority and provide a framework such that decisions regarding reliability could be made at the lowest possible level adverse consequences to other entities.

I believe legislation allowing for the creation of state advisory bodies on an interconnection basis is important. We have participated in the formation of the Western Interconnection Organization which will have state and provincial representatives on its Board of Directors.

California’s transportation system is no less vulnerable to price volatility. California consumers, like those in many parts of the nation, have been hit by
sharp price increases for gasoline and diesel fuels. The underlying reasons can be traced to skyrocketing demand, a very tenuous balance between in-state refining capacity and demand, and unplanned supply disruptions.

California’s on-road transportation system is nearly 100 percent dependent on petroleum. Our demand for transportation fuels is growing. Every year Californians use more than 14.6 billion gallons gasoline and nearly 3 billion gallons of diesel. By 2020, the Energy Commission forecasts that this daily demand will grow to more than 20 billion gallons of gasoline and 3.4 billion gallons of diesel.

In contrast, refinery capacity has dropped due to closures and the need for existing refineries to renovate their facilities to provide new formulations of gasoline and diesel. Instate refining capacity currently is only about 13.5 billion gallons per year of both gasoline and diesel fuels. While this capacity is sufficient to meet winter demand, California must import fuel supplies to meet summer demand.

The Corporate Average Fuel Economy (CAFÉ) standard has been the single most important catalyst for increasing transportation energy efficiency over the last 25 years. Since 1988, however, there has been a gradual decline in fleet fuel economy. Consumers are purchasing greater numbers of light-duty trucks relative to automobiles and the automakers do not perceive a benefit from producing vehicles with fuel economy ratings greater than the current maximum of 27.5 miles per gallon (MPG). Congress could consider raising the CAFÉ standard to match more recent technological advancements. I believe a combination of both mandates and market-based incentives is the most effective approach to achieve higher economy levels.

Also, while I believe the incentives contained in the Alternative Motor Fuels Act of 1988 that encourage the production of flexible fuel vehicles are important, the federal government must now take steps to accelerate the development of the necessary fueling infrastructure. By providing incentives to establish the necessary infrastructure, Congress can ensure that the environmental and diversity benefits of using alternative fuels in FFVs are realized. Congress also should consider legislation that would allow the credit to be applied to a variable range of gasoline/alcohol blends.
I believe California should continue to pursue actions that balance energy and environmental policy. These issues are inextricably linked. I encourage the federal government to continue its support in a meaningful way in assisting California and other states to achieve the balanced objectives of appropriate use of the automobile, achieving maximum efficient use of our present petroleum-based system and moving to non-petroleum fuels.

How can Congress address critical energy and environmental concerns? The immediate step would be to provide appropriate funding to programs already authorized. I encourage this subcommittee to show strong support for energy conservation funding, sustained funding for environmentally friendly fossil energy programs, and strong funding for the Energy Information Agency (EIA). While we recognize you are placed under severe constraints by your 302(b) allocations, in light of urgent energy needs, Congress should increase the allocation and you should increase funding.

Congress should reauthorize the Energy Policy and Conservation Act. It allows use of the Strategic Petroleum Reserve, as well as authorizing a variety of other programs.

The State Energy Program is the critical state-federal cooperative program. It is under-funded at the $37 million house-passed level. The combined SECP/ICP program received $53 million in Fiscal year 1995. Therefore, I would encourage an increase in funding.

In a broader sense, it is important to recognize the critical balance of energy research, development and demonstration (RD&D) and deployment programs for the transportation, electricity generation and end-use sectors. Two and one-half years ago you asked Bill Valentino of NYSERDA, Sara Ward of Ohio, and me to testify on federal-state coordination on RD&D programs. Since then we have initiated a series of Memoranda of Understanding to cooperate with DOE. While we are now moving forward, it has been slow going.

For example, just this spring we were able to work out a contract between the Energy Commission, DOE and Lawrence Berkeley National Laboratories (LBNL) to permit LBNL to implement important programs for the Energy Commission. This took a great deal of time, but we hope it will be a template for future state-federal-laboratory cooperation. We have also started a process of joint planning to identify state/federal budget priorities. The point is, it is the right
thing to do, but changing a governmental culture and thinking “out of the box” is a hard thing to do.

Also this year you initiated a small crosscutting RD&D program to help implement state RD&D plans that resulted from the MOUs. We are encouraged with the idea, though we had significant problems with the solicitation. This program is a step in the right direction, even at a funding level of only $6 million.

But, please recognize that California alone will be soliciting more than $250 million in RD&D projects with ratepayer funds over 4 years. The $6 million contribution from DOE to all the states is quite small. We are hopeful that DOE can implement a simpler process and a larger funding base to support collaborative RD&D projects with the states.

NASEO and DOE, with the Energy Commission’s support, have begun an aggressive effort to better coordinate energy and environmental policies, programs, and regulations. State energy, air, environmental, and utility commission officials met this March in Washington, DC to discuss coordination and share ideas. In this effort we have cooperation from DOE, EPA, and the White House. We will be having a larger national meeting in September. Your counterparts on the House VA-HUD Independent Agencies Appropriations Subcommittee have endorsed this effort in their Fiscal Year 2001 report. We hope we can count on your support as well.

At the federal level, increased cooperation between DOE, EPA and FERC is critical to a reasonable energy future. These efforts have begun and should be encouraged.

Finally, from an energy policy perspective, we must work to expand energy efficiency, renewable energy and clean-burning fossil fuels. And, we must address the significant environmental issues associated with greenhouse gas emissions and global climate change. We must also coordinate federal and state activities to allow for enhanced electric transmission and distribution networks and to build new generation. We need to consider siting of new gas pipelines where appropriate.

I look forward to answering your questions.