STATEMENT ON FUSION AND ENERGY POLICY FEBRUARY 2001

Today, our nation is urgently searching for solutions to the power shortfall in the Pacific Coast region. While the immediate problem has many contributing causes, energy supply is essentially a long-term issue. We must not only react to recurring crises but also prepare for the future. In addition to acting to ameliorate the immediate problems, we urge you to address the nation's long-term energy needs through creation and funding of a focused R&D effort to expand our future commercial energy options.

We advocate an expanded, sustained energy R&D effort to provide the United States and the world with the energy it will need for the 21st century. The focus of this effort should be to provide new economic and environmentally acceptable energy technologies as soon as practical. The options that present themselves for mid-term application include advanced technologies for improving energy end-use efficiency, cleaner burning of fossil fuels, improvements in nuclear fission technologies, and less costly and more efficient renewable energy options. For the long term, we urge an accelerated effort to develop fusion energy.

Fusion power plants, when developed, offer a number of specific advantages, including an abundant fuel supply, no air pollution and much reduced risk from hazardous radioactive materials. At present, the United States has an excellent but underfunded scientific research program on fusion. Other nations, notably Japan and the European Union, pursue both scientific research and also a focused development strategy aimed at eventual commercialization.

We urge the United States to strengthen greatly its research into the fundamental science and advanced technology of fusion energy and to prepare a strategic plan for the realization of practical fusion energy as an important element in a long-term, environmentally responsible energy development strategy.

On August 9, 1999, the Fusion Energy Task Force of the Secretary of Energy's Advisory Board (SEAB) completed and delivered its Final Report: "Realizing the Promise of Fusion Energy." This report concludes: "the threshold scientific question — namely, whether a fusion system producing sufficient net energy gain to be attractive as a commercial power source can be sustained and controlled — can and will be solved." The report also noted that U.S. funding for fusion energy research is "subcritical" at this time.

We very much appreciate your efforts to establish a responsible energy research and development policy for both the near and long term, to prevent recurrence of our present energy supply difficulties.

Attachment: List of Signatories [Institutional affiliations are provided for identification purposes only and do not denote institutional concurrence in this letter.]

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