



February 27, 2006

Representative Edward Markey
United States House of Representatives
Washington, D.C. 20515

Dear Representative Markey:

I am writing on behalf of the Natural Resources Defense Council, and our more than one million members and activists, to express our deep concern about the Administration's proposal for extensive civilian nuclear cooperation with India.

We know that the Congress has already heard from a broad range of arms control experts and organizations regarding the nuclear proliferation risks associated with this proposal. Our objective here is to address another danger to U.S. and international security posed by the Administration's approach to energy cooperation with India – global warming.

India now has over a billion people. Recently the nation was the second fastest growing major economy in the world, with a GDP growth rate of 8.1%. India will need to increase its energy production over the coming decades. In an interconnected world, India's energy choices will have a major potential impact on the global environment and our own nation's economic and security issues.

The overarching threat is global warming. This last year was one of the warmest on record; and there is growing evidence that significant warming is already occurring in the polar region. For more than fifteen years, the international scientific community has been warning us about global warming and now their concerns are being realized. It is imperative that the United States cooperate with India and other nations of the world to reduce emissions of greenhouse gases.

We strongly believe that renewed U.S. nuclear cooperation with India cannot be justified as a rational economic response to global warming. We would urge the Administration to give much more emphasis to other cooperative ventures which would be more efficient and effective in addressing both India's energy needs and the protection of the global environment.

Even in a best case, nuclear power will not appreciably reduce India's greenhouse gas emissions. Currently, India's nuclear plants now account for less than 2 percent of India's power production. The Worldwatch Institute projects that even if India realizes its very ambitious plans to build up to 30 nuclear plants in the next two decades, nuclear will still only account for 2 percent of the nation's energy production. Moreover, India already has a large nuclear research establishment, owned and operated by its government for both military and civilian purposes. With or without U.S. nuclear cooperation, India is likely to continue using its rapidly improving technological skills to pursue reactor designs and nuclear fuel cycles that it has developed indigenously. It does not need US cooperation to continue its programs for developing nuclear energy for civilian purposes, and some of these programs have an explicit dual-use function in India's projected military program. Because India is not one of the original five nuclear weapons states, the US is obliged under Article I of the Nuclear Nonproliferation Treaty "not in any way to assist" India's efforts "to manufacture nuclear weapons."

So any U.S. - Indian effort to boost cooperation in the nuclear sector is fraught with ambiguities and complexities that are likely to slow it down, if not derail it entirely. More reliable, timely, and cost-effective opportunities for U.S.-India energy cooperation lie outside the nuclear sector. In this respect, India's situation is hardly unique. There are very few countries in the world today - many economists would argue there are presently none - where new nuclear power plants represent an economically plausible investment when all the internal and external life cycle costs and risks are factored into the calculation of net total return on invested capital.

What makes nuclear power plausible in a small number of states is both the willingness and capacity of the state itself to assume most of the external costs and risks, such as nuclear waste storage and insurance against catastrophic losses due to accidents. Worldwide, nuclear power represents a particularly entrenched form of state-socialism, and thus a peculiar form of energy development for self-professed free-market conservatives to be promoting. Even in the U.S., nuclear power's development continues to be subsidized by the federal government, with little prospect of becoming self-sustaining in the market place despite the \$65 billion expended to date.

The best way to meet India's rapidly growing demand for energy is through improved infrastructure, increased efficiency, more use of clean energy technologies and coal gasification with carbon capture and geologic storage. These technologies can be deployed faster, more cheaply, and on a much wider scale than nuclear power.

There is also ample opportunity for the U.S. to increase Indian energy efficiency. India's energy intensity (energy consumption per unit of GDP) is substantially higher than in other countries at a similar development stage. The Confederation of Indian Industry points out that the nation's industry could save as much as 20-30 percent of its total energy consumption, conserving more energy than the total nuclear capacity planned for 2020.

The United States also should support strongly India's efforts to boost production of renewable energy. India is emerging as a leader in wind and other renewable energy technologies and is

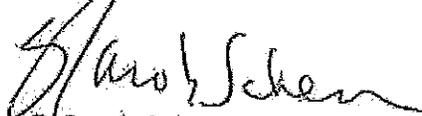
pursuing an aggressive goal of a 10 percent share for renewable energy by 2012. Renewable energy sources, including hydroelectric, already provide the country with more energy than India's nuclear industry.

The United States must also accelerate its cooperation with India to address the expected major growth in the use of coal there. India has the world's third-largest hard coal reserves, but its coal is particularly dirty, high in ash, and low in calorific value. Today coal accounts for more than half of India's primary commercial energy. In just eight years, India intends to add 213 coal-fired plants. Indian coal consumption has been growing at about 4.8% per year, and this growth rate is projected to increase, as will carbon dioxide emissions. India's urban air quality already ranks among the worst in the world due in part to pollution from coal power plants. The World Bank estimates that India suffers 460,000 premature deaths annually due to air pollution in its major cities.

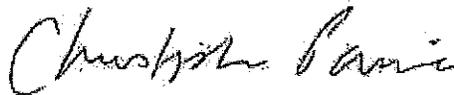
It would be in the best interests of both nations to put advanced coal technology with geologic carbon storage much higher on their cooperative agenda. The United States should move quickly beyond discussion of carbon gasification and storage to commercial demonstrations of their feasibility. The urgency of this issue certainly dwarfs anything that might plausibly be achieved by President Bush's long-term vision of recycling plutonium as fuel for new versions of very costly, fire-prone fast reactors that have had terrible operating histories to date and can be easily adapted to "breed" large amounts of weapons-grade plutonium.

From our preliminary review of U.S. cooperation on energy with India, we are concerned that the Administration's current approach and program may add not only to the risk of nuclear proliferation, but also of global warming, while not really addressing India's most pressing energy needs. We urge the House of Representatives to expand its consideration of nuclear cooperation with India to examine the entire range of cooperative energy activities, and then act to refocus US-India energy cooperation on cost-effective measures to address global climate concerns without weakening US support for the international nuclear nonproliferation norms and treaties.

Sincerely,



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