



March 25, 2011

The Honorable Barack Obama President of the United States The White House 1600 Pennsylvania Ave. NW Washington, DC 20500

Dear Mr. President:

I am writing on behalf of the members of the Natural Resources Defense Council to commend you for your response to the tragedy in Japan by providing assistance to the Japanese people and helping to address the ongoing threat at the Fukushima Daiichi Nuclear Power Station. Our thoughts and prayers are with you and the people of Japan. I am also writing because the severe accident at this power plant, involving a simultaneous loss of control over six nuclear units, demonstrates the grave risks posed by nuclear power, and how little we still know about anticipating and mitigating those risks. Therefore, we strongly endorse your call for a comprehensive review of nuclear reactor safety in the United States.

We further call on you to add an independent review of key safety issues, which we believe must then be followed by prompt implementation of necessary corrective actions to reduce the chance of any such nuclear incident occurring in the United States.

Your continued leadership is needed at this critical moment to move the nation to a safer energy future that will phase out reliance on older nuclear technology with known design weaknesses, responsibly manage and dispose of spent nuclear fuel, and reassess emergency preparedness requirements for all operating and planned nuclear power reactors in the United States. It is because of the need for a full vetting of these issues that we urge you to commission an independent inquiry which will help to ensure the adequacy of, and increase public confidence in, the measures to be taken in response to Japan's nuclear crisis and to promptly take corrective actions to further nuclear safety in the U.S.

The top priority for now remains assisting Japan in bringing its reactors under control, and providing resources and humanitarian relief to Japan for the radiological consequences of the accident and its aftermath. Yet we must also learn from this tragedy. Nuclear reactor siting, regulation, and licensing – for both the 104 operating nuclear power plants in the United States and any new plants that may be built – need to be thoroughly reviewed and reconsidered in light of the serious events at Fukushima. Of

particular and urgent concern are the Boiling Water Reactors in the United States with Mark 1 and 2 containments, which are similar in design to the Fukushima units. Indeed, by building upon the lessons drawn from this national review, the U.S. could lead a renewed effort to work with other countries to integrate these findings into the safety strategies for their existing and future nuclear plants.

With that in mind, we recommend the following steps to address the safety of the nation's nuclear power plants:

- 1. The administration should appoint a truly independent commission, similar to the Kemeny Commission that investigated the Three Mile Island accident in 1979, that can help to engender public confidence by thoroughly examining nuclear safety issues, including assessing the conclusions and proposed corrective actions arrived at by both the nuclear industry and the NRC in its "90-day safety review".
- 2. The NRC should suspend the granting of nuclear power plant license renewals in high seismic hazard areas until the findings of the NRC's 90-day review are finalized and vetted by the independent commission.
- 3. The NRC should consider on a case-by-case basis the rescission of license renewals already granted for nuclear power plants located in high seismic hazard areas that were built to standards that no longer conform to our modern understanding of the full extent of the earthquake threat to the facility.
- 4. The NRC should direct the licensees of Boiling Water Reactors with elevated spent fuel storage pools to remove all spent fuel from wet pools as soon as it has cooled sufficiently to be stored in dry casks. We estimate that currently 60 thousand tons of spent fuel are stored nearby U.S. reactors, much of it in poorly protected and overloaded pools; and for 31 reactors these pools are located above and outside the containment, as they are at the Fukushima Daiichi plant.
- 5. The NRC should ensure that no emergency generator at a reactor is located where it is subject to flooding or other forms of potentially crippling damage.

We believe it is important that you now establish an independent commission to explore the root causes and consequences of the still unfolding disaster at Fukushima Daiichi in light of the renewed public concern regarding the serious hazards to public safety. This includes threats that may be triggered by so-called "beyond design basis" events—both natural and man-made—that could occur at U.S. nuclear power plants. Review of the implications of this disaster should not be limited to the NRC assessing the adequacy of its own previous rules and decisions. This would be problematic for any entity, but is particularly the case for the NRC, which has long been seen as a weak regulator with insufficient independence from the industry it oversees. Thus an independent commission can help objectively determine national and global ramifications for the siting and safe operation of nuclear power plants and provide a credible assessment of

the adequacy of what the NRC and the nuclear power industry will recommend as the appropriate responses to the accident.

We believe the best model is the Kemeny Commission, which was appointed by President Carter, chaired by the then President of Dartmouth College, and involved individuals with diverse opinions and backgrounds. Such a commission must be primarily comprised of independent experts and other knowledgeable, fair-minded persons of wide experience and good judgment whose current and future livelihoods do not depend on staying in the good graces of either the nuclear industry or the regulatory agency whose past and prospective courses of conduct will be under review. The commission should also hold public hearings, and hear from a wide range of witnesses and perspectives before reaching its own independent determination of the best path forward to improved nuclear safety.

The investigation should include but not be limited to the following issues:

- The causal factors in Japan's nuclear accident;
- Whether the design basis of existing and future designs should cover more severe accident precursors, including earthquakes, flooding and extended loss of off-site power;
- How such accidents can be anticipated and prevented in the future given similar U.S. reactor designs;
- The management of excess hydrogen produced by a loss of coolant and partial fuel melt in the core;
- The safety design and permissible loading limits of spent fuel storage pools;
- Provisions for supplying emergency backup power for longer periods of time;
- The adequacy of the nation's emergency preparedness for reactor accidents; and
- The implications of these findings for locating nuclear plants near large population centers, along seacoasts, and in areas at risk of being subjected to powerful earthquakes or other natural and man-made events, such as terrorism, tornadoes, and fires potentially capable of triggering a prolonged and potentially disastrous "station blackout" as occurred at the Fukushima Daichi plant.

While the situation at Fukushima remains dire and the full extent of the damage to life and property unknown, it is already clear that clinging to the status quo offers inadequate insurance against the occurrence of such a catastrophic nuclear event in the U.S. By taking these steps, your administration would help ensure that the lessons of this disaster can be used to strengthen the regulation of nuclear power generation in the U.S. and worldwide, and contribute to charting a rigorously careful path for the appropriate deployment of this technology in support of our nation's and the world's energy future.

Sincerely,

Frances Beinecke

Chances Bureda

President

cc: The Honorable Nancy Sutley, Chair of the White House Council on

Environmental Quality

The Honorable John Holdren, Assistant to the President for Science and

Technology

The Honorable Heather Zichal, Deputy Assistant to the President for Energy and

Climate Change Policy

The Honorable Steven Chu, Secretary of Energy

The Honorable Lisa Jackson, Administrator of the Environmental Protection

Agency

The Honorable Gregory Jaczko, Chairman of the Nuclear Regulatory Commission