United States Senate
WASHINGTON, DC 20510

March 18, 2011

The Honorable Barack Obama
President
The White House
1600 Pennsylvania Avenue
Washington, D.C. 20510

Dear Mr. President:

It is out of serious concern for the safety of our nation, in light of the ongoing disaster in Japan, that I write to you today. The people of Japan have suffered from multiple calamities, including an earthquake, a tsunami, and now a crisis with several of their nuclear reactors. Our thoughts are with the Japanese people who are struggling to recover, and those who lost their lives. I fully support you in your efforts to provide aid and assistance to Japan at this critical time.

I also believe that the disaster in Japan has implications for us here at home. As you are aware, the Fukushima nuclear plant, which has six nuclear reactors, has experienced several hydrogen explosions and directly vented radioactive gases into the environment. Reports indicate that several reactors are in a partial meltdown, containment systems may be breached, and there are now confirmed cases of radiation poisoning at the plant. Nuclear Regulatory Chairman (NRC) Gregory Jaczko testified to Congress this week that in the No. 4 reactor, the "secondary containment has been destroyed and there is no water in the spent fuel pool, and we believe that radiation levels are extremely high, which could possibly impact the ability to take corrective measures."

What is most disturbing from a domestic perspective is that five of the reactors and containment systems at the Fukushima plant are General Electric Boiling Water Mark 1 models, a design shared by 23 reactors in the United States. ABC News quoted Dale Bridenbaugh, an engineer who quit General Electric in 1975 over concerns about the plant design, as saying the design "did not take into account the dynamic loads that could be experienced with a loss of coolant." The New York Times reported that the Mark 1 design has been criticized by federal safety officials since the early 1970's. "The warnings were stark and issued repeatedly as far back as 1972: If the cooling systems ever failed at a 'Mark 1' nuclear reactor, the primary containment vessel surrounding the reactor would probably burst as the fuel rods inside overheated. Dangerous radiation would spew into the environment." The article went on to state that Harold Denton, then a top safety official at the NRC, asserted in 1986 that "Mark 1 reactors had a 90 percent probability of bursting should the fuel rods overheat and melt in an accident."

What is clear is that top safety experts knew the Mark 1 plant design was susceptible to major damage in the event of a significant accident. Catastrophes like we have seen in Japan are always treated as unthinkable, until they happen. The reality with nuclear reactors is that it is not enough to be 99 percent safe, because a single incident can have far-reaching and devastating consequences.

In light of these recent tragic events that continue to unfold, I firmly believe that it is both sensible and necessary to conduct a comprehensive re-evaluation of the safety of all of our

nuclear plants and waste storage facilities and, more broadly, our policy on nuclear power in general. Therefore, I respectfully request that you take five important steps toward this end.

First, I call on you to immediately establish a Presidential Commission on Nuclear Safety. While you have already requested that the NRC conduct a complete review of nuclear safety in the United States, I respectfully suggest that it is not good enough. While I have a great deal of respect for the knowledge and hard work of the NRC commissioners and their staff, the record is very clear that the NRC has never denied an extension requested by a nuclear operator. In fact, to the best of my knowledge, there have been 62 requests for extensions and the NRC has granted every single one of them. Frankly, when 62 out of 62 requests for extending the life of a nuclear power plant have been granted by the NRC, it does not instill confidence on the part of the American people toward the objectivity of its process.

I believe that the American people want an independent review. In order for the results of the Commission's inquiry to be meaningful, the Commission must include as members independent scientists and experts, not just industry representatives or government regulators. The Presidential Commission should have broad authority and a mandate to independently review the safety of every existing nuclear reactor and waste site in the United States, in light of the lessons that may be learned from the situation in Japan.

Second, it is my strong view that there should be a complete moratorium on all licensing and re-licensing decisions by the NRC until the Presidential Commission is able to issue its report, and Congress has an opportunity to consider any legislative changes necessary to ensure safety at nuclear facilities in light of the report. Internationally, China is already conducting a full review of safety at its nuclear plants and has issued a moratorium for new nuclear construction. Germany is closing seven reactors to review safety, and governments in Italy and Israel have expressed concerns about moving forward with nuclear projects. Here at home, as you know, New York Governor Andrew Cuomo has called for the Indian Point nuclear plant to shut down. He is rightfully concerned about the impact that a nuclear disaster there would have on the highly populated areas surrounding that plant. It would be timely and wise for us as a nation to implement a nationwide moratorium on licensing and relicensing decisions while we seek to grasp the significance and implications of the events in Japan.

Third, I would urge the Administration to revisit the Price-Anderson statute, which provides taxpayer-subsidized insurance to the nuclear industry. In the event of a nuclear tragedy in the United States, should the taxpayers of this country be asked to provide billions of dollars in compensation to the victims of such a tragedy or, in a free enterprise society such as ours, should the nuclear industry itself take full responsibility to secure insurance in the private market for all consequences of such an unthinkable tragedy?

Fourth, with all the questions surrounding nuclear safety, the extraordinarily high cost of building new plants, and the unsolved problem of storing extremely hazardous radioactive waste for the long term, I strongly urge you to reconsider the wisdom of providing government-backed loans to new nuclear power plants. The federal government has $18.5 billion in existing loan guarantee authority for new nuclear power plants and has requested an additional $36 billion for an anticipated expansion of the nuclear power sector.

The disaster in Japan reminds us that nuclear power involves major risks. Independent analysis suggests that new nuclear power is more expensive than nearly every other energy source,

including solar, wind, biomass, and geothermal energy. Given that reality, I cannot understand why we would continue to pour massive taxpayer subsidies into nuclear power. As you know, because of all of the problems associated with nuclear power, major Wall Street banks refuse to even consider lending money to build them. It seems to me to be much more sensible to cease issuing new nuclear loan guarantees, to withdraw the request for a further $36 billion in such authority, and to instead reallocate the existing unobligated nuclear loan guarantee funds to energy efficiency and safer, more cost effective forms of energy production such as solar, wind, biomass, and geothermal. I applaud the steps you have already taken to move our nation to sustainable energy, and I believe we now have an opportunity to do even more.

Finally, I believe that it is wrong that the federal government has completely preempted state regulation of nuclear power plants with respect to safety. In the final analysis, it will be people who live in the vicinity of nuclear power plants who will have to bear the burden of any tragedy that might occur, and for this reason alone they should play a meaningful role in deciding whether or not the safety risk is acceptable. Some states, including my own state of Vermont, are expressing concern about extending licenses for aging plants based on considerations other than safety. The Vermont Senate voted last year in an overwhelming, bi-partisan 26-4 vote to shut down the Vermont Yankee nuclear power plant when its license expires next year after 40 years of operation. However, while states retain such authority to regulate nuclear plants based on economic and reliability considerations, it is unacceptable in light of this ongoing tragedy that states and communities would continue to be denied approval authority based on safety considerations. I propose that we enact legislation providing that the NRC can only issue or extend a license for a reactor or nuclear waste site if the state in which the site is located, and states within a reasonable proximity thereof, authorize the approval or extension through affirmative acts of their legislatures and governors. I seek your support for this proposal.

In conclusion, thank you for the assistance you are providing the people of Japan as they grapple with the short and long term consequences of the natural disaster and nuclear crisis they face. It is clear that at the same time we do everything we can to provide such assistance, we have an obligation to learn from this catastrophe and respond accordingly. The proposals I have put forward would ensure that the United States begins a long-needed, thoughtful and critical reconsideration of the safety of our nuclear reactors, and the wisdom of moving forward with a spate of new reactors. I stand ready to work with you to move legislation forward that would effectuate these proposals.

Sincerely,

Bernard Sanders

BERNARD SANDERS
United States Senator