March 16, 2011

The Honorable Gregory B. Jaczko  
Chairman  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Dear Chairman Jaczko:

As the situation in Japan forces us to reconsider our definition of “unlikely,” I am writing to request a detailed description of the specific actions the NRC will take to ensure measures are taken to provide a level of protection of public health and the environment for all Americans that exceeds the level of protection provided at the failing Japanese nuclear power plants like Fukushima Daiichi. A briefing to Members of Congress in which you explain the actions should accompany the report.

Specific safety issues addressed should include, but not be limited to a history of plant operator malfeasance and/or ineptitude; the flaws in the Mark I reactor design; the risks posed by earthquakes and tsunamis, floods, power outages, fires and intentional aircraft crashes; and the specific criteria for revoking or denying a license to operate.

As the Ranking Member of the Subcommittee on Regulatory Affairs, Stimulus Oversight and Government Spending of the Committee on Oversight and Government Reform, I look forward to hearing how the NRC will act swiftly to learn important lessons from the tragedy in Japan.

Operators of nuclear power plants with demonstrated poor safety records should not be allowed to continue to put the public at risk. Though there are several examples of companies whose past performance has shown that they should not be operating a nuclear power plant, the story of Davis-Besse, operated by FirstEnergy Nuclear Operating Company (FirstEnergy) is instructive.

On June 9, 1985, FirstEnergy allowed a 12-minute interruption in the feedwater flow to the steam generators, which was cited as a “potential catastrophe.” In 2002, Davis-Besse’s reactor head corroded nearly all the way through because it was “weakened by years of neglect.” A former NRC top safety official, Harold Denton, stated in 2004 that these two incidents represent the nuclear “industry’s second and third-lowest points after Three Mile Island.”

FirstEnergy’s employees tried to conceal the truth about the 2002 incident from the NRC using “tricks, schemes, or devices . . . to deliberately mislead” the agency. David Uhlmann, chief of the Justice Department’s environmental crimes section, said that FirstEnergy showed “brazen
arrogance” and “breached the public trust” by withholding information about the reactor head incident. Federal prosecutors described the reactor head incident “as one of the biggest cover-ups in U.S. nuclear history.”

FirstEnergy paid a record fine of $33.45 million as a result of its actions. Of that amount, a record $28 million was the fine that First Energy paid “to avoid being criminally prosecuted for lying to the government about the dangerous condition of Davis-Besse’s old reactor head,” according to then-U.S. Attorney Greg White in 2006.

The total fine was merely 1% of FirstEnergy’s profits in 2004. While these may have been record fines, they were a mere slap on the wrist for FirstEnergy, creating little incentive to protect the public. This conduct is the product of an inveterate, corrupt culture of long standing deceit and corner-cutting on safety. With such an abysmal record, they, and other nuclear power plant operating companies with poor performance records should not be allowed to continue to operate nuclear power plants.

As you know, I have repeatedly called for the denial of FirstEnergy’s application to continue to operate Davis-Besse beyond its designed life span. Until there is adequate accountability, incentives to place profits before safety will persist.

The Fukushima Daiichi plant that is currently considered to pose the greatest threat to human health uses the General Electric Mark I reactor design. The Mark I has been criticized by NRC staff and others for failing to perform one of its primary functions: containing radiation in the event of a problem with the reactor.

The three explosions at Daiichi reactors 1, 2 and 3 that released radioactive substances have illuminated this design flaw. The U.S. has nuclear power plants with the Mark I design in Alabama, Georgia, Illinois, Iowa, Michigan, Minnesota, Nebraska, New Jersey, New York, North Carolina, Pennsylvania, and Vermont. Most are operating at or past their design life and most have recently received 20-year extensions of their operating license.

The Fukushima Daiichi power plant was supposedly designed to withstand extreme events such as earthquakes and tsunamis. It failed, and the success of efforts to prevent meltdowns at Fukushima Daini power plant, Tokai nuclear power plant, and Onagawa power plant have yet to be determined.

The NRC must review the ability of all nuclear power plants in the U.S. to withstand multiple simultaneous events that could wipe out entire redundancy systems. Plants on or near earthquake faults like San Onofre in Southern California and Perry on Lake Erie in Ohio are particularly vulnerable.

In the New York Times Monday, Michael W. Golay, professor of nuclear science and engineering at Massachusetts Institute of Technology, said, “Utilizing cost-benefit judgments, every nation with nuclear power has set the strongest earthquake that its nuclear plants must survive intact considerably below the level of the Japanese earthquake.” We must do better than
to rely on a safety standard which has demonstrated that it would bring us to the brink of a nuclear catastrophe.

Other ongoing safety issues at nuclear power plants in the U.S. pose risks similar to those at the Japanese nuclear power plants. Power outages or floods could cripple primary and secondary core cooling systems. Widespread fire protection deficiencies have not been rectified. Most nuclear power plants in the U.S. remain vulnerable to an intentional aircraft crash. Each of these vulnerabilities merits serious scrutiny.

Bringing our nuclear power plants up to a more suitable safety standard will be expensive. The new reality created by the Japanese nuclear reactors will force us to re-imagine what is possible and, therefore, what must be done. Professor Golay summarized the false choice that exists in the prevailing attitude about nuclear power safety options:

In considering the nuclear hazards of strong earthquakes, it’s useful to note the results of a study, which I led from 2001 to 2004, for Tokyo Electric Power Company. The study addressed whether to devote resources to provide robust public protection from nuclear risks that could arise in the event of strong earthquakes or to focus such efforts and researches on the direct effects of the earthquake.

We concluded that any earthquake strong enough to damage the reactor, and thus expose the public to harmful radiation, would be much more dangerous to the public in its direct effects, and that it would be more beneficial to devote efforts and resources to general preparedness.

When the choice is between building a reactor that can survive a major earthquake and preparing the public for a major release, the latter wins. This a false choice about ways to direct scarce resources that facilitates profit for a select few, while placing enormous risks on the rest of us. If the citizens of the U.S. and the world cannot be adequately protected from the risks of nuclear power, then nuclear power should not continue to exist and we should turn to cleaner, safer alternatives.

If you have questions, please do not hesitate to contact me.

Sincerely,

Dennis J. Kucinich
Member of Congress