



Talking Points on NRC's "Waste Confidence" Policy

Because there is no national nuclear waste dump, federal courts have ordered the Nuclear Regulatory Commission (NRC) to set aside its current "Waste Confidence" policy—and stop licensing and relicensing nuclear power stations—until it develops a valid, realistic assessment of the environmental impacts of radioactive waste. The danger of leaks and fires involving this highly radioactive "spent" nuclear fuel can be even greater than a meltdown of the nuclear reactor that produces it and will continue long after the reactor shuts down. Technical issues, including long term stability of the waste, security vulnerability, deterioration of storage systems, and accidents have continued for over 50 years with no real solutions.

Now is the first time the general public has had an opportunity to be heard on the most basic issue of nuclear power:

"Should we continue making nuclear waste?"

Come out and be heard! Tell NRC it must abandon its so-called "Waste Confidence" policy and stop licensing nuclear reactors when there is no proven solution to the waste problem.

What is Nuclear Waste?

The waste at issue is the used fuel assemblies that power a nuclear reactor. Fuel assemblies consist of dozens to hundreds of pencil-thin rods containing uranium oxide that

has been “enriched” to increase the concentration of the main uranium isotope that generates a nuclear fission reaction. After up to six years in the reactor core, the irradiated fuel rods are about one million times more radioactive than before they were put in, and they remain hot enough to burn and overheat storage containers. As a result, irradiated fuel must be stored under water for several years. It is often mislabeled “spent” nuclear fuel, not because its radioactivity has decreased (exactly the opposite), but because it is not safe to use as fuel anymore.

What is “Waste Confidence”?

The Waste Confidence Determination is a NRC policy that streamlines the process of licensing (and relicensing) nuclear reactors by preventing radioactive waste issues from even being considered. NRC created the Waste Confidence policy in the 1980s after Congress enacted a law stating the federal government is responsible for the ultimate disposal of irradiated fuel. Waste Confidence is NRC’s policy that the nation can be “confident” that the waste generated by nuclear reactors will be managed safely regardless of how much of it there is, because the law says it must be so. In 2012, the court threw out the Waste Confidence rule because the government has failed to demonstrate that in fact it will be managed safely, and NRC has not adequately considered the environmental impacts of the waste that new and relicensed reactors would generate.

The Nuclear Waste Problem

Radioactive waste cannot be safe, secure, clean or green. It is deadly, very long-lasting, toxic stuff that irradiates cells and damages DNA—causing cancer, birth defects, heart problems, infertility, immune deficiencies, and more. There is no safe dose of radiation, but “spent” or irradiated nuclear fuel is so radioactive a person near it would receive a lethal dose of radiation in just a few minutes.

Nationwide, there is now over 80,000 tons of spent nuclear fuel, with plutonium that will remain toxic for 240,000 years; other elements in irradiated fuel will be dangerously radioactive for even longer. No storage facility has yet been designed that can contain radioactive waste for such periods of time. Since “spent” nuclear fuel contains large quantities of fissile material that can be used to make nuclear weapons, it also must be safeguarded to prevent theft.

Radioactivity from atomic power will pose a threat to life on Earth for the next million years or more. We are confident that NRC and the waste generators can never contain this waste for as long as it poses a hazard. But to continue making more of it is not just unsafe; it is irresponsible and should be illegal. NRC must abandon its Waste Confidence policy and stop using it to license nuclear power plants.

Points to Consider for Your Comments

- 1. Stop Making Nuclear Waste.** Without a scientifically proven solution for safely disposing of nuclear waste, we must stop making it. Clean, renewable sources of electricity are readily available and affordable, so there is no excuse for continuing to rely on nuclear power.

- 2. Nuclear Waste is Still a Problem Without a Solution.** No technology has yet been proven capable of containing radioactive waste for the hundreds of thousands of years necessary to protect the environment. Debates continue over whether it is even possible to do so, but unfortunately the U.S. has failed even to identify a viable site for a nuclear waste repository despite two decades, billions of dollars, and a federal mandate to do so.
- 3. Waste Confidence Is a Radioactive ConGame.** The purpose of NRC's Waste Confidence rule is to streamline nuclear plant licensing by ignoring the million-year, multi-billion dollar problem of what to do with radioactive waste. The only problem Waste Confidence solves is how to permit nuclear plants to continue making this waste when there is no solution for it.
- 4. We Don't Even Have One Solution—and We Already Need Two.** Federal law has only authorized the siting of one nuclear waste repository. As of 2010, nuclear power plants had already generated 70,000 tons of spent fuel, enough to fill that repository. That means a second repository would have to be built to hold all the waste nuclear reactors are continuing to generate, but there is no plan or Act of Congress on the table for where to do it.
- 5. Consolidated Storage Creates More Problems, Not Solutions.** In order to justify its Waste Confidence policy, NRC is relying on the federal government's Plan B: to hide the waste problem by transporting spent fuel away from nuclear reactors to "temporary" storage sites around the country. This means more communities would be at risk from radioactive waste, more nuclear sites would have to be safeguarded, and reactor owners could continue making waste without responsibility for managing it. Temporary storage sites easily could become *de facto* permanent dumps if it is not politically feasible to site enough repositories to handle the waste.
- 6. Mass Transportation of Nuclear Waste is Unsafe and Unnecessary.** The sheer volume of nuclear waste will require thousands of shipments on our roads, rails, and waterways. Due to the risk involved in mass nuclear waste transportation, it should only be undertaken once—and when we know there is a viable solution.
- 7. New Fuels Create New Waste Problems that Can't Just be "Confidenced" Away.** NRC's Waste Confidence policy assumes that all nuclear waste is the same. This is far from the truth. The industry is moving toward new fuel types, such as MOX and high-burnup fuels, which are more radioactive, dangerous, thermally hot and difficult to store and transport safely.
- 8. NRC Still Ignores the Real Risks of Nuclear Waste at Reactor Sites.** Spent fuel is highly flammable as well as radioactive, yet is primarily stored in densely packed pools of water that contain several times more fuel than the nuclear reactor itself. If a fuel pool is damaged or loses its cooling system, fuel rods could be exposed, overheat, and catch fire, releasing massive quantities of radioactive material. NRC refuses to address the incredible risks these facilities pose, pretending the low likelihood of an accident makes the extreme consequences irrelevant. Hardened On-

Site Storage systems (HOSS) should be used to store spent fuel more safely and securely at or near nuclear plants. HOSS solves the immediate dangers nuclear waste poses, without creating unnecessary risks.

9. The Only Real Confidence Is in Real Solutions. NRC is treating nuclear waste not as a major environmental problem, but as a public relations issue. The U.S. has no solution for nuclear waste, and NRC refuses to address the immediate risks it poses. Waste Confidence is simply a policy of false promises, used to promote the industry by pretending its real problems don't exist.

10. Obey the Court's Ban on Licensing Nuclear Reactors. There is no safe storage solution for nuclear waste, and NRC's new Waste Confidence policy is no more credible than the one the courts threw out. There is no safe dose of radiation, and to pursue licensing on the base of Waste Confidence is illegal and immoral.

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