

2013 - 9- 03 The State of the Nuclear Regulatory Commission's Waste Confidence Act, as of September 2013

The NRC has failed for decades to come up with a realistic long-term plan for what to do with radioactive wastes from nuclear reactors. And now a federal court has ordered the agency to study the environmental impacts of storing spent fuel indefinitely in the event that no permanent nuclear waste repository comes to fruition.

Background and Summary

The challenge of permanent and safe storage of high-level radioactive waste from nuclear power plants has long been the Achilles' heel of the industry. The Nuclear Regulatory Commission (NRC) has long reiterated that it has "confidence" that a solution will be forthcoming.

In June of 2012, however, the U.S. Court of Appeals in D.C. challenged this "confidence" and has required the NRC to study the environmental impacts of storing spent fuel indefinitely in either pools or dry casks. The NRC has responded with a "hurry-up" two-year timeframe for environmental review. The NRC's own staff has estimated that the data collecting and analysis would require seven years.

Hence, twenty-four environmental organizations – including the San Luis Obispo Mothers for Peace – joined together and filed a legal challenge. In their filings, the groups have demanded a full and thorough review of the three risks outlined in the June 2012 ruling: long-term storage for spent nuclear fuel, spent fuel pool fires, and spent fuel pool leakage.

Details

In June 2012, the U.S. Court of Appeals for the D.C. Circuit ordered the NRC to revise its 2010 Waste Confidence Decision and Temporary Storage Rule. The NRC had failed to study the environmental impacts of storing spent fuel indefinitely in the event that no permanent nuclear waste repository is licensed or if licensing of a repository is substantially delayed. Spent nuclear fuel contains long-lived radioactive materials that can seriously contaminate the environment and harm public health if released. It also contains plutonium-239, which can be used to make nuclear weapons and which remains toxic for 240,000 years.

In documents filed on January 3, 2013 with the NRC, the 24 environmental groups asserted that it would be impossible for the NRC to adequately conduct the court-ordered assessment of the environmental implications of long-term storage of spent nuclear fuel in only two years, as the federal agency proposes.

The groups' comments and related declarations by experts are available online at <http://www.psr.org/resources/nrc-rushing-nuclear-waste-confidence-process.html>

Summary of Comments by the 24 groups:

The group comments say that a full review of the issues would take at least seven years. Federal law requires that the NRC conduct a comprehensive environmental impact statement (EIS) study before issuing a revised Waste Confidence Decision.

Until the completion of the EIS review required by the federal court, the NRC has “no choice but to continue to suspend all licensing and re-licensing actions” for U.S. nuclear reactors, according to the 24 organizations.

Highlights of the 24-group filings include the following:

- The “hurry-up” two-year timeframe for environmental review falls far short of the 2019 estimate of NRC’s own technical staff for data collecting and analysis of the impacts of long-term storage of spent nuclear fuel.
- The short timeframe provided for environmental review will also not permit post-Fukushima information about U.S. reactors to be fully collected and evaluated. “Given the significant role played by seismic events in accidents ranging from spent fuel pool leaks to pool fires and their potential effects on long-term storage sites, this information is crucial to the NRC’s ability to take a ‘hard look’ at all three topics remanded by the Court.”
- Despite the Court’s order to consider impacts associated with the failure to ever establish a permanent repository for spent nuclear fuel, the NRC proposed only to consider the impacts associated with failing to secure a repository by the end of this century. Dr. Makhijani and Dr. Thompson argue that the NRC should consider the environmental impacts of failing to establish a repository until 2250, requiring approximately 300 years of onsite storage.
- The NRC should consider alternatives to minimize the risks of storage of spent nuclear fuel and high level waste, including placement below ground level, elimination of the current practice of high-density storage of spent fuel in pools, and more robust designs for storage casks.
- The environmental impact statement should assess the radiological risk arising from a range of conventional accidents or attacks, including those conducted by terrorists.

Opportunities for Public Involvement

The NRC website has a section on Waste Confidence that includes information on phone conferences and public meetings at <http://www.nrc.gov/waste/spent-fuel-storage/wcd/pub-involve.html>

Currently there is a listing of 10 cities in different regions of the country where the NRC will hold public meetings. The list includes unspecified cities in “Central California” and in “Southern California.” San Luis Obispo Mothers for Peace expects those meetings to be near the two nuclear plants – Diablo Canyon near San Luis Obispo being the only operating nuclear plant in the state, and San Onofre near San Diego, which recently closed. Decommissioning of nuclear plants usually takes about 60 years, and there is as yet no clear plan for what to do with the high level wastes at San Onofre. Most of the spent fuel rods – which are more radioactive than those same rods when they are inserted into the reactor core – are still sitting in vulnerable spent fuel pools sandwiched between the 405 freeway and the Pacific Ocean.

Mothers for Peace will fully participate in the “Central California” meeting, and will encourage others to also attend, ask questions, and express opinions. There are several organizations near San Diego which are also making plans to participate in the “Southern California” meeting.

Mothers for Peace, legal intervenor in cases pertaining to the operation of the Diablo Canyon nuclear plant for 40 years, will press the NRC to make public safety a priority over the economic interests of the nuclear industry. But the track record of the “regulator” of nuclear facilities thus far merits a vote of NO CONFIDENCE. Mothers for Peace is working with other organizations for the purpose of bringing together several strategies to demand the NRC fulfill its responsibilities to public safety:

- Legal intervention
- Informed public opinion
- Urging elected officials on the federal and local levels to push the NRC to order acceleration of the schedule to move radioactive wastes out of densely packed pools and into more protective dry casks.

For a press release explaining the January filing in more detail, see <http://mothersforpeace.org/data/2013-items/january-3-2013-mothers-for-peace-legal-challenge-to-nrc-regarding-waste-confidence-process>

The press release includes a link to the complete Comments, plus supporting documents by Dr. Arjun Makhijani, Dr. Gordon R. Thompson, and Phillip Musegaas. The document is in pdf format and is 151 pages in length.