**Three Mile Island: The Beginning of America’s Nuclear Power “Problems”**

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According to the U.S Energy Information Administration, the first commercial power plant opened near Pittsburgh in 1957. By 1979, 69 nuclear reactors were operational in the United States. The steady increase of nuclear reactors being built was not a trend that continued, though. 1979 marked the year of a pivotal moment in the American nuclear power industry. The Three Mile Island crisis (TMI) occurred in March 1979 in Dauphin County, Pennsylvania. The accident resulted in a partial nuclear meltdown. A series of both human error and mechanical failures led to the overheating of the one of the nuclear reactors found at the TMI plant, which caused the reactor to melt and release radioactive gases into the surrounding environment. Dr. George K. Tokuhata, Director of the Division of Epidemiology of the Pennsylvania Department of Health, commented on the effects of the meltdown, “‘The Three Mile island accident, unlike natural disasters such as floods, hurricanes, earthquakes, or major fires, left no immediate physical alterations in the surrounding environment’” (qtd. in Houts et al. vii) In other words, the TMI left no visible evidence of a disaster. *Not a single living person or animal in Three Mile Island died as a direct result of the accident.*

Yet, TMI is universally considered to be the most significant nuclear power plant accident in the history of the United States. Why? For the first time in the history of the United States, nuclear power had an immediate, personal effect on American citizens. TMI prompted an immediate national response; within 5 hours on the accident, Governor Thornburgh of Pennsylvania and the current United States president Jimmy Carter were both notified, and the Associated Press released a national bulletin declaring a general emergency at TMI (Houts et al. 2-3). The public was assured that no radiation had been released and that they were in no danger. However, this statement was contradicted two days later, when above-normal radiation levels were recorded, and Governor Thornburgh issued a statement advising schools within a five-mile radius to close and for pregnant women and young children to evacuate the area. This statement resulted in widespread panic, and in the days following TMI, “66% of the households within five miles of TMI had at least one person evacuate” (Houts et al. 13). This percentage is based on surveys conducted by both the Nuclear Regulatory Commission (NRC) and the Pennsylvania Department of Health, and these surveys also reported that “perceived danger was the reason most respondents gave for evacuating, but about 80% of respondents cited confusing information as a reason for leaving” (Houts et al. 13). The source of fear and perceived danger was indeed marked by confusion. With the slew of contradictory statements being issued by the government, the NRC, and the media in the days following TMI, the public did not know which way was up. Initially, no one was sure how much radiation had been released or what the exact effects of this unknown amount of radiation would have on the surrounding population. Naturally, people responded to this uncertain threat of danger with fear, and many fled the area.

Since TMI the NRC, the U.S. Department of Energy, the Environmental Protection Agency, and countless independent organizations have done countless studies on TMI. They came to the nearly unanimous conclusion, “the approximately 2 million people around TMI-2 during the accident are estimated to have received an average radiation dose of only about 1 millirem above the usual background dose. To put this into context, exposure from a chest X-ray is about 6 millirem” (U.S. NRC). Despite the insignificantly low amount of radiation released by the accident, TMI was not easily forgotten by the American people. Cleanup from the accident lasted nearly 14 years, and officially ended in 1993. Cleanup involved dismantling the Unit 2 reactor that had caused the accident, removing and disposing of the nuclear waste that was in the reactor, and decontaminating the immediate environment around the site of the accident, and cost the United States hundreds of millions of dollars (U.S. NRC). In 1985, the undamaged Unit 1 reactor, which had not been involved in the accident, but which had been shut down shortly after TMI, was restarted and began operating normally again (Houts et al. 85). The long-term cleanup and the controversial restarting of the Unit 1 reactor at TMI meant that the accident never really left the limelight, and “many residents in the vicinity of Three Mile Island perceived a continuing threat association with the reactor, even after the crisis was declared over” (Houts et al. 67).

In conclusion, the United States’ most “devastating” nuclear power plant accident did not significantly injure or kill anyone and had almost no observable effect on the surrounding environment. Despite nuclear power’s practically spotless record of producing reliable and clean energy in our country, we have decided to reject the technology on the grounds that it is “not safe,” a sentiment rooted in the confusing aftermath of TMI. Instead, we continue to rely on fossil fuels to supply our growing energy demands, despite the overwhelming evidence that they are causing irreversible damage to our climate and that their pollution is linked to widespread human health concerns. Today, fossil fuels supply 80-85% of energy produced worldwide, and sustainable alternatives are desperately needed. Currently, the best option for an alternative power source is nuclear power. It has a high energy density compared to other alternative energy sources, is a reliable source of energy that can be produced 24/7, and it generates relatively negligible amounts of pollutants (Brook and Bradshaw). Currently, nuclear energy meets about 20% of the U.S.’s electricity demands, though it can supply much more if we let it. Looking back on the Three Mile Island accident, our fears of nuclear meltdowns and radiation are unwarranted, especially given nuclear power’s incredible safety track record in the U.S. We must give nuclear energy a second chance if we want to transition away from our fossil fuel dependency and combat climate change.

**Works Cited**

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