

Meltdown: Three Mile Island – A valuable reconstruction of the 1979 nuclear disaster and its aftermath

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Meltdown: Three Mile Island is a well made and intelligent review of the 1979 nuclear accident, the worst in US history, which resulted in a partial meltdown of the reactor core and came within 30 minutes of a catastrophe that would have killed thousands and left much of the American Northeast uninhabitable for centuries.

The four-part television documentary, directed by Kief Davidson, was released last month on Netflix. The mini-series traces the disaster and its aftermath, mainly through the experience of three residents of Middletown, the small Pennsylvania city where the reactor was located, on the banks of the Susquehanna River, and the account of whistleblower Rick Parks, a leader of the clean-up crew tasked with removing the debris four years after the accident.

There is an ample documentary record of the aftermath of the accident, including various investigations and public hearings, and protests by residents of Middletown. This is skillfully combined with a dramatized reenactment of the events in the reactor control room on the day of the accident and of the experience of Parks during the clean-up in 1983. Many of the participants in these events are shown in news video footage in 1979 and 1983 and then interviewed four decades later, adding a human element that is emotionally compelling and actually adds to the audience's understanding of the disaster.

Others are interviewed on the government side of the events, including the insufferably smug Lake Barrett, the top official of the Nuclear Regulatory Committee at the Three Mile Island site during the clean-up, who brushed aside Rick Parks' concerns about the dangers of the procedures employed by Bechtel Corp., the giant construction firm that was contracted to carry it out.

The events of March 1979 have entered into history, although they may be less familiar to the current generation than to those who lived through them. In the early hours of March 28, 1979, alarms went off in the control room of Unit Two at the Three Mile Island nuclear power generating station, which had only been brought on line a few months before.

Instruments showed the temperature of the reactor core was rising, and at the same time, the level of water in the cooling chamber was also rising. The operators, poorly trained for such an emergency, could not make sense of such contradictory results. The decision was taken to shut down the pumps, which sent water into the cooling chamber, to avoid overflowing. This, of course, led to the reactor core overheating even more.

It was later determined that a release valve in the coolant chamber had stuck in the open position, leading to a reduced flow of water through the chamber and a dangerous rise in the core temperature, which was headed towards meltdown. Eventually, the mistake in shutting off the pumps was recognized, water flow was restored and the reactor core began to cool but not before half the core had melted down, and a significant release of

radioactive material took place.

Both the event itself and the cover-up which followed were driven by the profit concerns of Metropolitan Edison (MetEd), the company owning the site and the main utility in south central Pennsylvania. MetEd and its parent company General Public Utilities (GPU) have since been swallowed up in a series of corporate mergers and acquisitions. (First Energy, headquartered in Akron, Ohio, with \$11 billion in revenue and \$1.1 billion in profits, is the current incarnation.)

MetEd concealed the accident from state authorities for hours, until radioactive iodine was detected near the plant, inciting widespread—and entirely justified—fears among residents of Middletown and the broader public. The corporate media descended on the area, along with top state and federal officials, including several days later President Jimmy Carter, a Democrat and former officer of a nuclear-powered submarine.

Their goal, expressed through the operations of the Nuclear Regulatory Commission, was to safeguard the nuclear power industry and corporate America as a whole. There was a specific interest on the part of President Carter, since nuclear power played a key role in his energy policy under conditions of a mounting crisis over the supply of gasoline and diesel because of cutbacks in production by the OPEC countries—a crisis that would contribute significantly to Carter's defeat in his reelection bid in 1980.

The first two episodes of *Meltdown* deal with the events of March 28 and the weeks which followed, as the impact is felt in the lives of Joyce Corradi and Paula Kinney, two young women with small children, and local school child Nicole Remsburg, herself only six years old, who has a family connection to the Three Mile Island facility that is only revealed much later.

Corradi and Kinney are seen in news reports of contemporary protests against the effort by Metropolitan Edison to resume power generation at Three Mile Island. The company claimed that since Unit One was undamaged, it could safely be restarted even while the struggle continued to contain and suppress the ongoing crisis at Unit Two. Then both are interviewed, more than 40 years later, reflecting back on their experiences. Remsburg adds the perspective of an adult, looking back on what she understood as a child.

The interviews are intercut with excerpts of news footage showing the major events, including the corporate announcement of the release of radioactive material, a subsequent announcement of the emergence of a "hydrogen bubble" inside the reactor—which led to a further release of radioactive gasses—hearings before the NRC and President Carter's visit to the site, where he sought to reassure the American public that there was no real danger in nuclear power.

The documentary cites the conclusion of expert analysis of the near disaster: Unit Two came within 30 minutes of a full-scale meltdown,

which would have resulted in an explosion and ejection of radioactive material on the scale of Chernobyl, the catastrophe in Ukraine seven years later, or even worse.

Thousands would have died, either from the blast itself or from the immediate effects of radiation. Thousands more would have died of cancer over many years. The area downwind of the plant would have been rendered uninhabitable for decades, if not centuries. Given the prevailing westerly winds, Philadelphia, New Jersey and the New York City metropolitan area would likely have experienced the worst consequences.

The third and fourth parts of *Meltdown* concern the events of 1983, when Bechtel came in to conduct the clean-up of Unit Two, based on the conception that the damaged reactor had sufficiently cooled and that it was safe to do so. Rick Parks was one of the clean-up supervisors, hired because of his expertise—he was trained in nuclear reactors in the Navy—and his fervent belief in the viability and necessity of nuclear power generation.

Bechtel was an extremely well-connected corporation, with two of its top executives joining the administration of President Ronald Reagan (1981-1989): Secretary of State George Shultz and Secretary of Defense Caspar Weinberger. And it was absolutely ruthless in its pursuit of its corporate objectives, responding to the objections of Parks and others with demotions, transfers and ultimately firings, as well as more heavy-handed and criminal methods.

Parks is ultimately forced to contact the Government Accountability Project (GAP), an organization with extensive experience in assisting whistleblowers, particularly in the nuclear industry. (Executive producer Carla Shamborg first met GAP and learned of Rick Parks during her work on *Erin Brockovich* (2000), an exposure of the impact of chemical dumping in California by Pacific Gas & Electric.)

GAP and Parks appeal to the NRC to halt the scheduled use of the polar crane, so-called because it is positioned directly above the reactor core, to lift the molten top half of the reactor and allow it to be safely removed, so work could go forward on the presumably undamaged lower half. Parks and his colleagues were concerned that the polar crane, built hastily after the accident, had not undergone safety checks. If it failed, dropping the molten top half into the bottom half, the result would be the same catastrophe narrowly escaped in 1979—an uncontrolled explosion and massive radioactive release, with mass death and widespread contamination.

Some of these events are dramatized in *Meltdown*, while others are described dispassionately by Parks today, who is a competent and convincing narrator. A survivor of throat cancer (the result either of his exposure to radiation at Three Mile Island, or his longtime smoking habit, or as he says, more likely both), the technician has made many sacrifices, some of them shown in the program.

Parks is only one of many cases of cancer from Middletown, none of them directly traceable to the Three Mile Island disaster, but occurring at a disproportionate rate, two to three times what would have been expected.

After his long battle with two giant corporations, Bechtel and MetEd, and the government agencies which served their interests, it is Parks who draws the final conclusion in the documentary: “We’ll never have a viable nuclear industry in this country until we take the profit motive out of it.”

The director and producer do not draw such sweeping conclusions, but they allow Parks to do so, and the case they make over four hours is absolutely unanswerable.

Meltdown vindicates the contemporary analysis of the disaster made in the pages of the *Bulletin*, the US forerunner of the *World Socialist Web Site*. The first issue of the *Bulletin* published after the accident at Three Mile Island was made public devoted its front page to the subject, under the headline, “Gov’t Lies on Nuclear Disaster.”

We described the event as a “class crime,” for which the capitalist class

and its state were responsible:

The profit-bloated nuclear industry has, with the blessing of the capitalist state, cynically transformed millions of people into guinea pigs. Every section of the ruling class and above all the Government are implicated in this monstrous crime. They are the ones who have introduced the terms “meltdown” and “hydrogen gas bubble” into everyday vocabulary—with millions of lives hanging in the balance. At last report, 200,000 people have either already fled or are preparing to flee the area.

We explained that under capitalism, nuclear power had been developed for only two purposes: to use the power of the atom to incinerate millions in a new imperialist war, and as a source of profit for giant energy companies and Wall Street.

A later commentary in the *Bulletin* denounced the claims of the corporate media and political pundits that the growing protests against the development of nuclear power reactors were based on “popular ignorance” and even “superstition.” We argued:

Never in history has there been a working class as wedded to the most modern technology as is the American working class today. The grave danger, however, is that the forces of production remain in the hands of the capitalist class which uses every single development in science to better prosecute its drive for profits and to prepare for new imperialist wars.

Subsequent coverage in the *Bulletin* documented the insignificant penalties imposed on Metropolitan Edison, the cover-up carried out by the Nuclear Regulatory Commission and the Carter administration as a whole, and the continued dangers for the working class population from mismanagement and corruption of the nuclear power industry. In 1983, we headlined the firing of Rick Parks by Bechtel after he exposed the dangers in the clean-up operation, and quoted one of his more pungent responses to the company, in which he accused it of “Gestapo-like tactics.”

Meltdown is well worth seeing, both for its exposure of corporate and government criminality that came close to producing a major catastrophe, and for its depiction of the powerful resistance from working-class residents of Middletown and a concerned and principled technical expert. Under conditions of a worldwide pandemic where the ruling elite overrides the concerns of science and public health to impose a policy of “let it rip,” these issues have enormous contemporary relevance.



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