As the government considers restarting the Three Mile Island Unit 1 reactor, local opposition remains strong. This case raises fundamental questions about democratic decision making in the age of high technology.

Three Mile Island: meltdown of democracy?

Four years have elapsed since the beginning of the accident in March 1979 when tens of thousands of Three Mile Island residents fled their homes. The interactions among federal agencies, private corporations, the courts, public officials, and local citizens over that period provide an object lesson in understanding democracy in an age of high technology.

In the first few weeks after Island residents began returning home, citizen groups in Middletown, Newberry Township, Lancaster and York organized in opposition to General Public Utilities, the owner of the Three Mile Island nuclear facility Harrisburg. Already, there had been a citizen group which served as an important catalyst for at least 12 other communities outside that city. The dual goals of each protest group were to monitor Unit 2 cleanup operations and to prevent the restart of Unit 1. The residents' early terror changed into open hostility—first toward General Public Utilities and then toward the Nuclear Regulatory Commission. Within a few months, the majority of residents in this scattering of self contained and relatively apolitical conservative central Pennsylvania communities were transformed into a loosely knit network of anti-Three Mile Island citizen groups.

The utility's credibility had been seriously damaged because of its handling of the accident. The company was accused of withholding important information from both the Commission and the media during the early days of the crisis. Lancaster residents went to civil court to prevent the utility from dumping hundreds of thousands of gallons of radioactive water from Unit 2 into the Susquehanna River, nine miles above the city's drinking water intake.

Citizen groups pressured Governor Thornburgh who in turn insisted that federal authorities delay the restart until certain health and safety issues were resolved. By August 1979, the Commission had ordered hearings to determine the preconditions for a Unit 1 restart. Although community activists were distrustful of the Commission as well as of the utility, they were legally constrained to deal with this federal agency established by Congress to regulate commercial nuclear power.

The Nuclear Regulatory Commission is a direct descendant of the Atomic Energy Commission which was disbanded by Congress in the early 1970s because of its excesses in promoting nuclear power and its deficiencies in acting as an even-handed regulator of that industry. Three Mile Island area newspapers in June 1979 gave front-page coverage to stories about Atomic Energy Commission coverups of radiation damage to soldiers and civilians during the bomb tests of the 1950s and 1960s. In July, Ralph Nader's *Critical Mass* published data showing that the Nuclear Regulatory Commission had obtained radiation measurements during the critical accident period from a company partly funded and owned by General Public Utilities.

The report of the President's Commission to Investigate the Three Mile Island Accident, headed by John Kemeny of Dartmouth, was released in October 1979. Strongly critical of the Nuclear Regulatory Commission, it further undermined residents' confidence in the federal agency which was to make the final decisions on both the Unit 2 cleanup and Unit 1 restart issues. In October 1979, the Commission levied the largest fine in its history—$155,000—on the utility for 17 violations associated with the accident. But many area activists interpreted this step as an attempt by the agency to regain some of its lost credibility.

Because neither the Commission nor the nuclear industry ever seriously considered the possibility of a core meltdown, General Public Utilities insurance was only $300 million for the cleanup of an accident with cost estimates in the billions. Citizen groups feared that the company would take shortcuts in the cleanup process, further endangering local residents. When the utility announced its intention to vent the large volume of accident-generated radioactive krypton gas into the atmosphere—a plan also favored by the Commission—many area residents became alarmed. Hostile audiences challenged the plan at public forums the most widely publicized of which was the assembly in March 1980 of more than 500 citizens to meet with the Commission at a fire hall in Middletown. The Commission eventually overrode these protests, as well as the recommendations of the Union of Concerned Scientists, it permitted the utility to vent the krypton in June 1980. (As a small concession to local concern, the venting took place during the summer vacation so that residents wishing to

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An editorial in the Harrisburg Patriot on March 19, 1980 summarizes many residents' feelings at that time:

We have seen the worth of government assurances and its regard for the health of citizens in the victims of the small Utah towns downwind from the atomic testing sites and among the shipworkers of our atomic submarine fleet. The cause of these unnecessary deaths is known even though it took 20 years to manifest. TMI again has the government saying 'trust me' on an activity the full ramifications of which are unknown. Will the assurances still ring true two decades hence or will we too be victims?

In an attempt to improve the federal government's credibility with people in the area prior to the venting the Environmental Protection Agency in March 1980 recruited a number of local residents and taught them to measure radiation levels. Critics insisted however that the personnel who trained these citizens did not themselves know enough about radiation and its effects to inspire confidence in their interpretation of the measurements.

Before the actual venting of the krypton in June 1980 the Commission refused a request by local citizens for public hearings in the wake of a report by German scientists from the University of Heidelberg suggesting that the agency's estimates of citizen radiation exposure were 50 times too low. Hundreds of families in the area left for a second time to avoid whatever unknown harmful effects the krypton might have. A Federal Appeals Court in November 1980 ruled unanimously that the Commission had acted illegally in refusing to hold the requested public hearings.

Hundreds of these posters were displayed by area citizens at a November 9, 1982 public hearing attended by all five Nuclear Regulatory Commission members in Harrisburg.

The consequences of the accident became increasingly clear to Three Mile Island residents throughout 1980. General Public Utilities raised its estimate of the cost to $3.1 billion and predicted a five to seven year cleanup time. The report of the Special Inquiry Group established by the Commission and headed by private attorney Mitchell Rogovin concluded that the reactor had come within 30 to 60 minutes of a meltdown. Local officials as well as citizen activists insisted that evacuation plans for such a populous area were virtually impossible. Community newspapers carried reports that infant hypothyroidism around Three Mile Island was above average in the months after the accident and area farmers said that abnormalities as well as stillbirths in animals had increased significantly. These and other allegations were challenged by state and federal officials who cited the results of their own radiation monitors and various scientists.
It is impossible to obtain homeowners' insurance against a nuclear accident from any company, including Lloyds of London

The utility refused to accept full responsibility for the accident, holding that the reactor manufacturer and the federal government were also at fault. The company filed a $500 million damage suit against the manufacturers Babcock and Wilcox in March 1980 and a $4 billion negligence suit against the Commission in December 1980. The company also asked a federal court to overturn a Public Utilities Commission ruling barring the use of customer revenues for Unit 2 cleanup costs.

While arguing against the restart of Unit 1, groups of local residents have also been monitoring the Unit 2 cleanup operations. The utility has insisted that it cannot continue the process without massive outside help. The Pennsylvania Public Utilities Commission argues that a major portion of that help should come from the federal government which has fostered the nuclear industry for decades. Various U.S. representatives and senators on the other hand consider the Unit 2 cleanup a Pennsylvania problem. The nuclear industry, although seriously hurt by the stalled cleanup operations, has not come forward with financial aid. Meanwhile, the company's credit was cut by the banks, and there has been public discussion of a possible bankruptcy. The health and safety dangers deriving from this delay have been nothing to alleviate the psychological stress of area residents.

Further evidence undermining the credibility of both the utility and federal officials continued to appear throughout 1981 and 1982. A Congressional Committee reported in February 1981 that officials at the Three Mile Island facility intentionally withheld vital information which would have prompted the Nuclear Regulatory Commission to call for a general evacuation on March 28, 1979—two days before most residents left. In July 1981, the Restart Hearings had to be reopened when the Commission discovered evidence of cheating during operator license examinations. A year later, a Commission member Victor Gilinsky told the press that the General Public Utility officials were unfit to run nuclear power plants.

Recent documentation of the federal government's bomb test coverups during the 1950s and 1960s as well as the Commission's acknowledgement of serious safety miscalculations foreseeable the accident served to increase public opposition to a Unit 1 restart. And one more cause to oppose the restart arose when in July 1982 the Commission radically revised its own earlier estimates of accident probabilities, saying that serious nuclear accidents such as the one at Three Mile Island should have been expected every 10 to 15 years rather than every 200 to 300 years as previously predicted in its Rasmussen Report.

The accident has forced area residents to confront many hitherto unfamiliar aspects of the structure of economic and political power. Average citizens and their neighborhood protest organizations have found themselves lining up against General Public Utilities, other major utility companies, reactor suppliers, large banks and the Nuclear Regulatory Commission. They have also found that the majority of the U.S. Congress do not want to reconsider this nation's commitment to commercial nuclear power. Another disturbing discovery was that it is impossible to obtain homeowners insurance against a nuclear accident from any company including Lloyds of London only after the accident. Most people become aware of the "nuclear exclusion clause." Citizen groups are currently pressuring Pennsylvania lawmakers to force insurance companies to offer such coverage.

Opponents of the Unit 1 restart have had three recent signals in their favor:

- The U.S. Court of Appeals for the District of Columbia ruled in Jan...
January 1982 in favor of People Against Nuclear Energy (PANE) an anti Three Mile Island group of citizens from Middletown Pennsylvania ordering the Commission to consider local residents fears as one of the environmental impacts of restarting Unit 1 The Commission had previously refused to allow the group to argue its case on the grounds that popular fears about nuclear energy were irrelevant (The Utility and the Commission have appealed the case to the U S Supreme Court )

- This legal victory for PANE came only a few weeks before the utility company discovered over 15,000 defective steam tubes within the Unit 1 reactor Observers consider this the most serious threat to the facility's continuing operation since the March 1979 accident
- The third signal was the overwhelming vote against any restart by voters in three counties around Three Mile Island—Dauphin, Cumberland and Lebanon—when a non binding referendum was put before the voters in the May 1982 state elections. The referendum appeared on the ballot in spite of opposition by President Reagan and Governor Thornburgh who had stated that the issue was too complex to be decided by the lay public But letters in local newspapers suggested that the opinions of such people were at least as reliable as those of 'experts' who had economic and political interests in the continued use of nuclear power Area newspapers religious leaders and union officials joined citizen activists in leading the opposition and the final vote was approximately two to one against a restart

A further event in support of restart opponents was a surprising statement by Admiral Hyman Rickover so-called 'Father of the Nuclear Navy' On the television show 'Sixty Minutes in March 1982 he suggested that nuclear power plants should be phased out and made illegal

Protesters hold that the past record of General Public Utilities the dangers posed by the Unit 2 cleanup operations and the impossibility of a realistic evacuation plan make the restart of Unit 1 unreasonable. And the fact that interested homeowners cannot purchase insurance against a nuclear plant accident regardless of price indicates that insurance companies regard commercial nuclear power as too risky

Some citizens in the area are training for nonviolent civil disobedience in preparation for a massive protest against the reopening of Unit 1. Affinity groups have formed in which people have identified those who will allow themselves to be arrested and those who will offer support from outside jail. The majority will just come more bitter and cynical of authority. Most restart opponents however are not looking to a nonviolent approach. A few are talking about using pick up trucks, tractors, chains and even rifles

The other side of the story of course is that General Public Utilities and perhaps the entire nuclear power industry are fighting for their corporate lives at Three Mile Island From the industry's perspective allowing a completed reactor to remain unused is economically absurd. Many creditors the nuclear industry and related corporate interests support the utility's position. And indications are that the bulk of opinion within the Commission also strongly favors this view.

What arguments can the U S government use to persuade local citizens of the legitimacy of a restart decision? The Reagan Administration has frequently advocated the autonomy of states and local communities. Many nationally prominent scientists oppose the restart on health and safety grounds. Area residents have voted overwhelmingly against it. How can a Unit 1 restart decision be reconciled with democratic theory?