

# Three Mile Island: A breach of faith not yet repaired

By Neil T. Proto

Early dawn, March 28, 1979, Harrisburg, Pa.: The accident began in a remote part of the plant. It was 4 a.m.; Goldsboro and Middletown, Pa., lay quiet. Harrisburg, the state capital, was a few hours from bursting forth with legislators, government employees and those engaged in the daily tasks typical of many towns throughout the nation.

Looming large along the dank shoals of the Susquehanna River was the concave-shaped cooling tower of the 850-megawatt nuclear power plant at Three Mile Island. One hundred tons of uranium, held deep in the power plant's core, was on the verge of going haywire.

Within seconds, two lights flashed on the reactors' control room panel, indicating a malfunction. No one saw them. As the official government report stated: "One light was covered by a yellow maintenance tag. No one knows why the second light was missed."

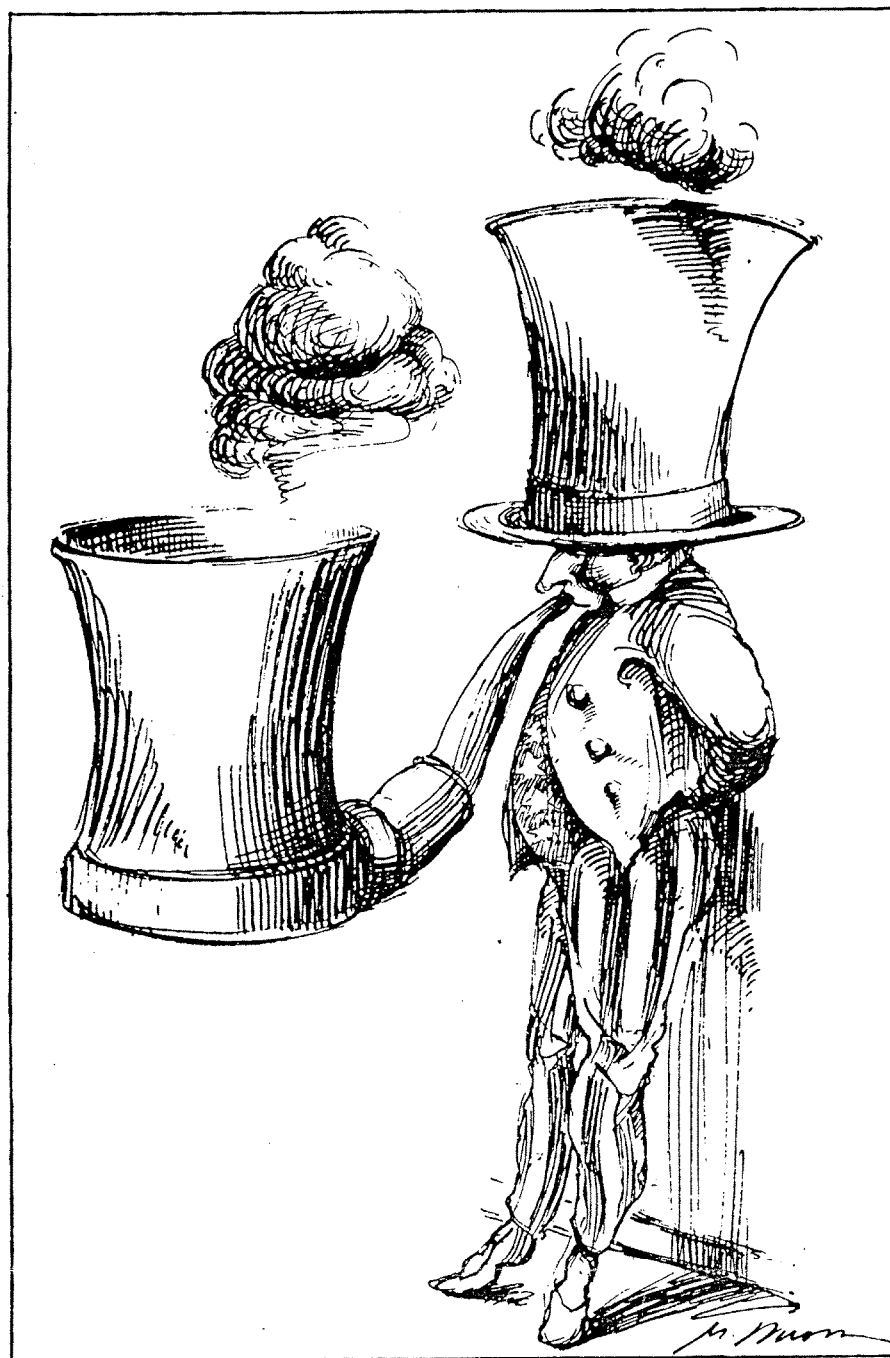
By 8:25 a.m., a Harrisburg radio station broke the story. There was no official public statement by the utility or a government agency. Fear grasped thousands of people: children preparing for school, the infirm, elderly or handicapped confined to homes or hospitals, adults uncertain of who or what to protect. "Never before," one local resident said, "have people been asked to live with such ambiguity." It was "an accident we cannot see or taste or smell." It created a "sense of uncertainty and fright" that went "beyond the reality of the accident itself."

The result was predictable. According to the President's Commission on the Accident at TMI, "the response to the emergency was dominated by an atmosphere of almost total confusion. There was lack of communication at all levels. Many key recommendations were made by individuals who were not in possession of accurate information."

It is often hard to measure "disaster." At TMI, no immediate deaths occurred; property destruction, albeit irreversible, seemed confined largely to the power plant.

The Carter administration, sensing the broader implications, sought to reassure the nation. The president toured the plant on April 1, 1979. "Improving the safety of nuclear reactors," Stuart Eisenstat, his domestic policy adviser, said in 1980, "is essential so that nuclear power can continue to play its role in our nation's energy security." Carter and his adviser were in good company: Every president since Harry Truman had supported the use of the atom as a source of electricity.

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This time, however, the nation was not buying it. Faith with the public had been breached. Reassurance, without more, was not enough.

The unsettling consequences of the accident lingered and then grew pervasive. Despite immediate assessments to the contrary, the TMI reactor's radioactive core did, in fact, sustain a partial meltdown: a modified "China Syndrome." With the passage of time, the psychological and physiological trauma of the accident manifested itself among TMI's rural neighbors: an apparently unusual incidence of cancers, birth abnormalities and identifiable unease.

More fundamental criticism also emerged. Atomic power plants were

being operated by utilities that had neither the safety-consciousness nor the economic capability to be in the business; the light water reactor technology, pioneered by General Electric and Westinghouse and the basis for our first atomic-powered submarine, may have been a misused or misunderstood technology for generating electricity; and the federal government, primarily the Nuclear Regulatory Commission, had developed a promotional inertia—still evident—that assured it would never meet a power plant proposal it was unwilling to license.

The result was ominous for a nation of such creative technological tradition, passionately seeking a beneficial use for

the destructive power of the atom. An American utility has not ordered an atomic power plant in 10 years. Notwithstanding the support of nine presidents, including George Bush, and the public and private investment of hundreds of billions of dollars, we have not yet mastered the technology or assured the public that safety is paramount in its regulation. TMI's effect on the fate of the "peaceful" atom was a disaster of historic proportion.

The burning of Brazilian rain forests, with its release of carbon dioxide, has become the tangible, telegenic symbol of the "greenhouse effect." In fact, global warming is caused primarily by the burning of fossil fuels. Its portentous effect has given rise, 10 years after the TMI accident, to a public dialogue on the possible rebirth of atomic power.

In the National Energy Policy Act of 1989, Sen. Timothy Wirth and others have proposed a broad range of programs to confront, if not to dissipate, global warming, including a demonstration project to develop new "technologies for the generation of commercial electric power through nuclear fission." Even some environmental organizations have expressed a realistic recognition of the need for such a hard look.

Convincing Brazil that its rain forest constitutes a global environmental sanctuary, however, will require more than moral suasion and the effective presentation of troublesome facts. Brazil's livelihood and future are at stake. Convincing America that it should accept atomic power again will be no less difficult. An approach that focuses on "new technologies" alone will not do it.

Taking a hard look at atomic power, after TMI, will require an examination of who we should entrust with the construction and operation of atomic power plants, who should regulate their safety and whether we as a nation are prepared to accept the moral and practical consequences of generating yet more radioactive waste, however modest in amount.

The difficulty in the end, however, will be repairing the breach of faith. Following the bombing of Nagasaki, a generation of Americans, some with the most thoughtful of motives, sought to make a blessing of the atom. It largely failed: A young adult today has witnessed a legacy of the TMI disaster, the revelations about toxic waste at the Department of Energy's atomic reactors, the accident at Chernobyl, the continued uncertainty of storing radioactive wastes from commercial atomic reactors, the existence of two fully constructed, multibillion-dollar reactors (Shoreham and Seabrook) that remain unopened and the absence, in a decade, of any utility ordering a new plant.

The nation confronts a daunting task. So far, it is not clear we are up to meeting it.