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DOI:10.1063/PT.6.4.20200505a

5 May 2020 in People & History

Three Mile Island and lessons in crisis communication

Serious public communication blunders by Metropolitan Edison, the power company that owned the infamous nuclear facility, created mistrust and allowed misinformation to flourish.



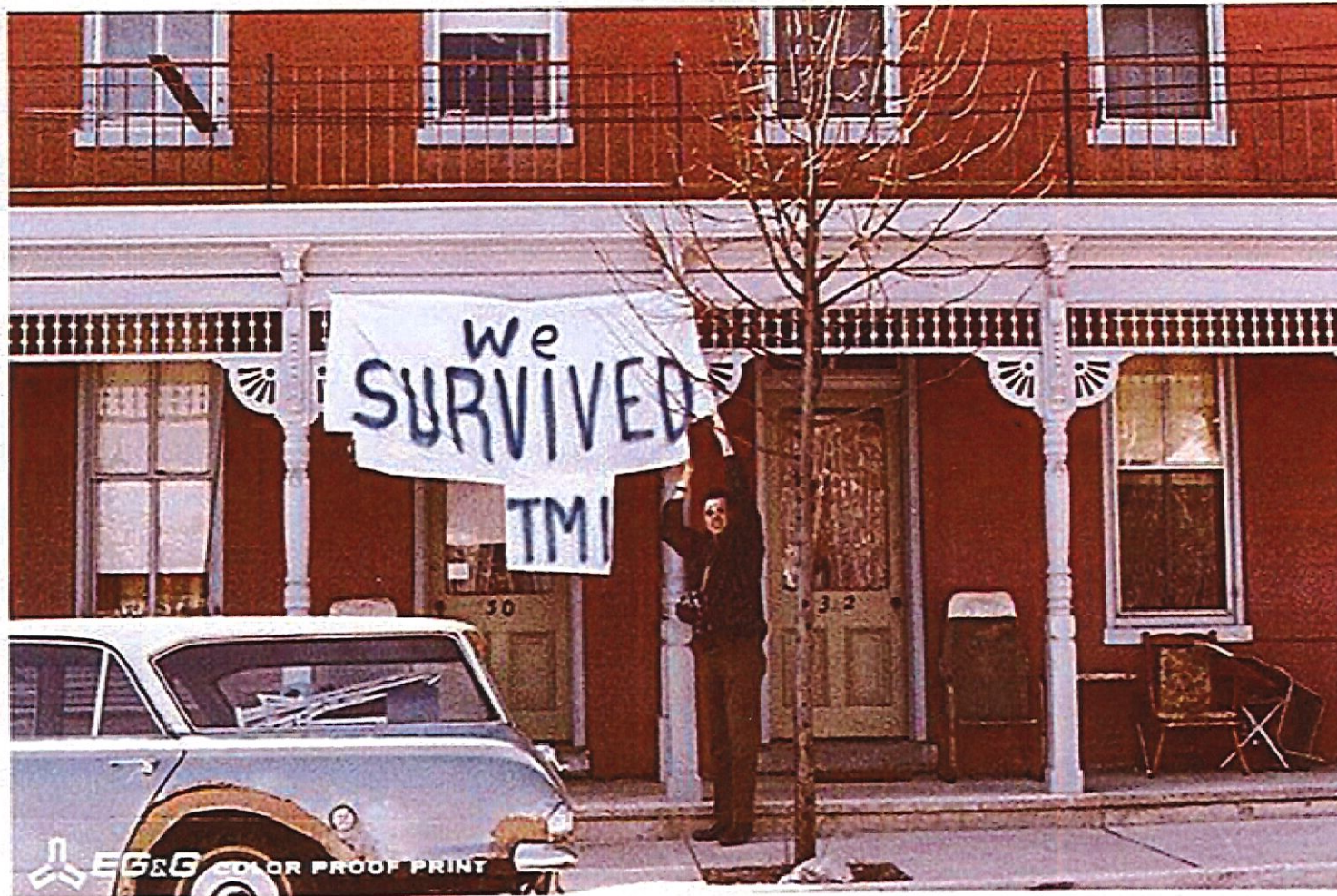
unfamiliar we all were with nuclear power, and how in a time of crisis, the value of trust in our elected and appointed leaders matters as much as anything else.” Another local recalled, “No one within my earshot, at least, was talking about anything other than TMI, and whether or not we could or should trust anybody to tell us the truth.”

Lessons for today

It is difficult for me to reconcile nuclear energy’s potential for destruction, as nearly demonstrated by the partial meltdown at TMI, with the fact that I am a direct beneficiary of the nuclear power industry’s success. My father started as a security guard at the plant several months after the accident; he went on to earn radiation safety and instrumentation controls certifications and became an instrumentation and controls technician over the course of his 30-plus years there. Until its closure in September 2019, the plant provided my family and many others with clean, reliable electricity and—perhaps more important—livelihoods, for decades. Londonderry Township and Dauphin County rely on the significant contributions to local property taxes made by Exelon, which bought TMI-1 in 2000, as well as on income taxes paid by TMI employees to help support schools and public services. Now that the decommissioning process for



TMI has begun, nearly 575 full-time jobs tied to about \$30 million in wages per year will be gradually eliminated. The local economic impact, I believe, should not be overlooked in broader debates about nuclear energy.



A Middletown, Pennsylvania, local poses aside a sign on 6 April 1979. Credit: President's Commission on the Accident at Three Mile Island



P What can we learn from TMI about effective communication during a public health crisis? First, amplify one consistent message with many voices. Margaret Reilly, a health physicist at the Pennsylvania Bureau of Radiation Protection at the time of the accident, offered these recommendations: plan your initial response, “protect your information flow pattern described in the plan, . . . get about twice as much communications capability as you think you’ll need, and use it regularly.” That strategy is difficult to accomplish when there are multiple competing streams of information, as was the case in the days after the TMI accident, during which private, municipal, state, and federal agencies were simultaneously offering conflicting updates and recommendations. Today, given our instant access to an enormous network of information sources, amplifying a consistent message is even more critical to reducing the spread of misinformation.

P Second, scientific experts and other officials should offer full transparency regarding both knowns and unknowns. Although it may seem as if communicating uncertainty would diminish perceived scientific authority, a recent study in *Proceedings of the National Academy of Sciences* finds that doing so has little effect, in the eye of the public, on the trustworthiness of the information source. The study notes that more research is needed on the topic.



But the findings suggest that communicating uncertainties around the evidence can provide important context without hurting public confidence.

P Finally, it's important to acknowledge people's justified fears and anxieties during a public health threat. Jessica Wieder, director of the Center for Radiation Information and Outreach at the Environmental Protection Agency, has pointed out that "the best tools for reducing high stress, doubt, and fear are compassion, validation, and commitment: compassion for the audience as individuals, validation of their feelings, and commitment to their cause." Met-Ed's frequent dismissal of public concerns significantly damaged its credibility and, consequently, caused feelings of doubt and a lowering of public confidence in the nuclear industry that have lingered for more than four decades.

P The events at TMI remain an important case study for anyone in crisis communications and management, and they demonstrate the need to take public perception and understanding of scientific endeavors very seriously. As we navigate the COVID-19 pandemic—another uncertain, invisible threat to public health—we are reminded that accurate and consistent communication of risk during a crisis is intimately tied to maintaining the confidence of the general public in the institutions designed to protect them. As we see scientific institutions doubted and their credibility challenged today, building trust with



the broader public through effective communication and outreach is of heightened importance.

COVID-19

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