

# NUCLEAR POWER AND THE SECURITY IMPERATIVE†

STUART DIAMOND\*

## I

### INTRODUCTION

Energy is familiar. Early humans warmed themselves on cold nights by their wood fires. Residents of ancient Carthage built simple solar collectors, heating water for public baths. Nineteenth century American farmers pumped water for their fields with multiblade windmills. Early in this century, homeowners shoveled their own coal for heat and poured their own kerosene for light.

Even with the rise of electric utilities, the production of energy remained familiar to people. Fuels, coal and oil, could be, and were, touched by workers. Natural gas was as common as the kitchen stove. The electric generators were only larger, more complicated versions of the models built for high school science fairs. The screening of the people who ran them was no more complicated than that of an auto mechanic or of a construction worker.

But nuclear power is different. It was introduced to the world in 1945 as a weapon of unparalleled destructive capacity, killing more than 100,000 people and incinerating two Japanese cities. The production of the atomic bomb was shrouded in secrecy for reasons of national security. Those working on the Manhattan Project were investigated by the FBI before gaining security clearance. Paradoxically, the nuclear weapons program gave birth to the Atoms for Peace program. The same officials who produced atomic bombs began to regulate commercial nuclear power production. Unlike producers of traditional energy, they kept secrets from the consumers who paid for this power. Even research for peaceful electricity has the overtones of secrecy and national security, as the June 1981 Israeli raid on an Iraqi research reactor demonstrated.

Just as in nuclear weapons production, security is central to the safe commercialization of the peaceful atom. Federal regulation of commercial nuclear power is based on the idea that only strict security and safeguards can prevent the misuse of nuclear material.<sup>1</sup> This federal regulatory regime tightly restricts access to and control over special nuclear material through rigorous security clearances,<sup>2</sup> closely controls information regarding nuclear energy,<sup>3</sup> and requires elaborate measures to protect nuclear facilities and

---

† © 1981, Stuart Diamond.

\* Energy and environment reporter, *Newsday*.

1. See Atomic Energy Act of 1954, 42 U.S.C. §§ 2011-2296 (1976 & Supp. IV 1980).

2. See *id.* § 2165; 10 C.F.R. § 11.21 (1981).

3. See 42 U.S.C. §§ 2162, 2163 (1976); 10 C.F.R. §§ 10.1-.11 (1981).

materials,<sup>4</sup> including physical barriers,<sup>5</sup> detection, surveillance and alarm systems,<sup>6</sup> and deadly force when necessary.<sup>7</sup>

Such policies have raised far-reaching civil liberties questions. For example, if nuclear power is to become the major energy source of the future, as many government and industry officials hope, nearly everyone associated with it will be scrutinized far more closely than they would in the course of producing conventional power. The magnitude of the problem is apparent if one imagines what it would be like if such scrutiny of workers occurred in an industry producing a widely available commodity such as water. Such concerns make the alternatives to nuclear power more attractive because they do not demand such security.

The purpose of this paper is to survey governmental and private policies and practices intended to ensure the physical security of the commercial nuclear industry. To this end, this paper will first summarize the unique nature of nuclear power production, which demands intensive protection. Then this paper will highlight the public and private response to the imperative of nuclear security: the character and extent of governmental and private security activity, surveillance and infiltration, the use of deadly force, and the expansion of police powers.

## II

### THE UNIQUE CHARACTER OF NUCLEAR POWER

Because nuclear power has the capacity for far greater destruction than other forms of energy, nuclear facilities are more likely targets for terrorists than are conventional facilities. Rarely, if ever, for example, has the possibility of bombing the local coal plant received serious attention. Furthermore, because material for the future nuclear economy, such as plutonium in breeder reactors, can be used almost directly for bombs, and because nuclear power plants represent huge accumulations of capital, commercial facilities are considered to be targets for terrorists. Against this background both governmental and industry responses have evolved.

Brian Jenkins, a noted specialist on terrorism, has said: "Terrorists want a lot of people watching . . . not a lot of people dead."<sup>8</sup> Thus, nuclear blackmail provides a nearly ideal weapon for saboteurs. Unlike poisoning the local water supply, which is immediate and irreversible, nuclear terrorism provides a strong, open-ended bargaining position. Biological warfare could be a better tool, but access to amounts of lethal germs

---

4. See 10 C.F.R. §§ 73.10-.80.

5. *Id.* § 73.46(c).

6. *Id.* § 73.46(e).

7. *Id.* § 73.55(h)(4)(iii)(B).

8. *Quoted in* Address by Commissioner Victor Gilinsky, Atomic Industrial Forum Conference on Government Regulation of Nuclear Power 3 (Sept. 8, 1975) (on file in the office of the *Review of Law and Social Change*) [hereinafter cited as Gilinsky Address].

sufficient to exact maximum fear in a wide area appears almost impossible. The atom, with all the attendant fears it engenders, is different. A terrorist can cause a great deal of havoc by seizing a commercial nuclear power plant, threatening to spread stolen nuclear material in populated areas, or fashioning a crude weapon.

The potential effects of a nuclear accident are far greater than those of any other energy-related mishaps. A terrorist who threatens to manually override plant systems and cause a meltdown or steal nuclear material from a power plant or a fuel storage facility raises a grim picture. No threats of the same magnitude face the coal, oil, or liquefied natural gas industries. Moreover, deaths from an in-plant accident could number in the hundreds, and deaths from a crude explosion could number in the thousands. Finally, the destruction of property, loss of commerce, and cost of replacement power all have substantial economic effects on a utility and its customers.

Responsible officials do not take such possibilities lightly. A 1977 study by the Congressional Office of Technology Assessment, *Nuclear Proliferation and Safeguards*, found: "There are probably groups at large in the world today that possess or could acquire the resources necessary to become nuclear adversaries if they wanted to. That is, they would be able to sabotage a reactor, steal fissionable material, build a dispersal or possibly even a crude nuclear explosive device."<sup>9</sup> That same year, a General Accounting Office study concluded that security at nuclear power plants was "[a]t best, inadequate."<sup>10</sup>

### III

#### THE INTERESTS AND ACTORS

The government and business interests in commercial nuclear power are enormous. The Atomic Energy Act of 1954 identifies nuclear power "for military and for all other purposes" with national security.<sup>11</sup> Since the Arab Oil Embargo, energy has been identified as a national security issue, because the disruption of energy supplies affects the nation's economic well-being. A government which already considers energy a major national security issue will identify nuclear power even more closely with national security. Civil liberties intrusions may arise in the wake of governmental efforts to safeguard nuclear power in the interest of national security. Utility companies' interests, on the other hand, lie in protecting their investments and guaranteeing the flow of electricity to consumers.

---

9. U.S. CONGRESS, OFFICE OF TECHNOLOGY ASSESSMENT, *NUCLEAR PROLIFERATION AND SAFEGUARDS* IV-26 (1977).

10. U.S. GENERAL ACCOUNTING OFFICE, *SECURITY AT NUCLEAR POWERPLANTS—AT BEST, INADEQUATE*, EMD-77-32 (Apr. 7, 1977).

11. Atomic Energy Act of 1954, 42 U.S.C. § 2012(a) (1976).

## *A. Federal Actors*

### *1. The Secrecy Problem*

The officials who regulate commercial nuclear power are accustomed to keeping secrets from the public. The Atomic Energy Commission was born to help protect national security,<sup>12</sup> and it has emphasized secrecy.<sup>13</sup> The staffs of its two successor agencies, the Nuclear Regulatory Commission and the Department of Energy, include many of the same people trained professionally to keep secrets.

For example, it was recently disclosed that the Atomic Energy Commission knew that from 1951 to 1962 atmospheric bomb tests were dumping high levels of radiation on some western communities.<sup>14</sup> Although by 1965 medical tests found that two Utah communities had statistically higher levels of leukemia, the residents were not informed. In 1965, the AEC suppressed these studies and decided not to conduct any more studies. As 1979 congressional testimony revealed, Dwight A. Ink, then assistant general manager of the AEC, told his superiors in 1965 that "performance of the . . . studies will pose potential problems to the commission: adverse public reaction, lawsuits, and jeopardizing the programs at the Nevada Test Site."<sup>15</sup>

Similarly, a 1964 Brookhaven National Laboratory report concluded that 45,000 deaths could occur from a major accident at a nuclear power plant.<sup>16</sup> The data was not released by federal officials for more than seven years.<sup>17</sup> The AEC argued that uncertainties in the study militated against its release,<sup>18</sup> but the fact remains that the study could have contributed to national discussion on the future of nuclear power.

### *2. Agency Failure*

Recognizing that the AEC could not function in the public interest as both a promoter and regulator of nuclear power,<sup>19</sup> Congress disbanded it in 1974 and created the Nuclear Regulatory Commission to assume the AEC's regulatory functions.<sup>20</sup> But the problems with regulating in the public

12. See, e.g., S. REP. NO. 1211, 79th Cong., 2d Sess., *reprinted in* 1946 U.S. CODE CONG. & AD. NEWS 1327.

13. See, e.g., S. REP. NO. 1699, 83d Cong., 2d Sess., *reprinted in* 1954 U.S. CODE CONG. & AD. NEWS 345, 3478.

14. See Wash. Post, Apr. 14, 1979, § A, at 4, col. 1.

15. *Id.*

16. See N.Y. Times, Nov. 10, 1974, § A, at 1, col. 1.

17. *Id.*

18. *Id.*

19. See S. REP. NO. 980, 93d Cong., 2d Sess. 1, *reprinted in* 1974 U.S. CODE CONG. & AD. NEWS 5470, 5471.

20. Energy Reorganization Act of 1974, Pub. L. No. 93-438, 88 Stat. 1233 (1974) (codified as amended in 42 U.S.C. §§ 5801-5891 (1976 & Supp. III 1979)).

interest have continued, as the President's Commission on the Accident at Three Mile Island (the Kemeny Commission) concluded.<sup>21</sup> The emergency response performance during the Three Mile Island crisis was dismal. The quality of information given to the public was usually confusing and often conflicting. Moreover, the Kemeny Commission's task force on the public's right to information on the accident found that representatives of the utility operating the reactor and NRC officials decided in meetings held during the crisis that "bad news was not something the public ought to hear."<sup>22</sup>

The problem lies partially in the regulators' refusal to recognize certain problems. In licensing hearings during the 1970's, federal regulators refused to anticipate the kind of serious nuclear accident that occurred at TMI,<sup>23</sup> even though, according to former AEC official John O'Leary, the agency's staff knew at the time that such an accident was inevitable.<sup>24</sup> Critics' concerns about such an accident, withheld information, emergency response, and other matters were dismissed as baseless. NRC Commissioner Peter Bradford has noted that one characteristic of a regulatory system that reassures more than it regulates is its treatment of critics' concerns. He characterized that treatment as:

repressive tolerance, the extending exquisite procedural courtesy to participants who are never, in fact, allowed to get their hands on anything vital. This can be expected to frustrate critics to a point at which they become obsessed or shrill or demagogic or a little crazy. Then, of course, their arguments can be dismissed as obsessed, shrill, demagogic or crazy.<sup>25</sup>

### 3. *Internal Agency Discipline: The Whistleblower Problem*

Under the guise of national security and promotion of atomic power, the government has, according to some of its former employees, enforced strict demands of uncritical loyalty from its staff.<sup>26</sup> Congress in 1974 amended the Atomic Energy Act, authorizing the NRC to conduct its own investigations of employees for character, association, and loyalty as defined by the NRC.<sup>27</sup> This reflects the traditional attitude taken by military

21. PRESIDENT'S COMMISSION ON THE ACCIDENT AT THREE MILE ISLAND, *THE NEED FOR CHANGE: THE LEGACY OF THREE MILE ISLAND 19-22, 51-56* (1979) [hereinafter cited as *KEMENY COMMISSION REPORT*].

22. N.Y. Times, Nov. 5, 1979, § A, at 16, col. 1.

23. See, e.g., U.S. Nuclear Regulatory Commission Press Release, 80-172 (Oct. 2, 1980) (on file in the office of the *Review of Law and Social Change*).

24. See *What Price Nuclear Power?* [1979] 1 *EDITORIAL RESEARCH REPORTS*, May 22, 1979.

25. Remarks of Commissioner Peter Bradford, *The Nuclear Option: Did It Jump or Was It Pushed?*, NARUC Annual Regulatory Studies Program 3 (Aug. 2, 1979) (on file in the office of the *Review of Law and Social Change*) [hereinafter cited as *Bradford Remarks*].

26. See, e.g., R. JUNGK, *THE NEW TYRANNY* 92-94, 101 (1979).

27. Act of Aug. 17, 1974, Pub. L. No. 93-377, § 7, 88 Stat. 475 (1974) (codified at 42 U.S.C. § 2201(i) (1976)).

authorities toward their troops. In 1976, for example, the Navy demoted and transferred Petty Officer Alex Williams, who refused to restart a nuclear reactor which he considered unsafe at the National Reactor Testing Station in Idaho Falls, Idaho.<sup>28</sup>

But in an agency charged with protecting health and safety, such demands for loyalty can harm the common good. For example, well before the TMI accident, NRC inspector James Creswell tried to warn his superiors of a general problem involving leaking pressure relief valves and misleading pressurizer water level indicators. His concern was based on an accident at Ohio's Davis-Bessie nuclear plant which had occurred eighteen months before the TMI incident. Creswell informed Kemeny Commission investigators that his superiors told him it was unimportant and that he was spending too much time on the subject.<sup>29</sup>

### B. Private Actors: The Utilities

Together with federal authorities, utility companies are responsible for certain strict security measures. As the TMI investigations and other inquiries concluded, however, utilities have not done particularly well in their management of critical public information and in their security systems.<sup>30</sup> For instance, Commonwealth Edison employees were indicted by a federal grand jury for falsifying security data and then attempting to conceal their actions.<sup>31</sup> At Virginia Electric & Power Company's (VEPCO) Surry nuclear power plant, two workers were fired for sabotaging unused nuclear fuel rods to demonstrate the lack of security.<sup>32</sup>

Despite their poor internal security records, utilities have sought to acquire police powers to protect themselves against external threats. In 1975, VEPCO asked the Virginia legislature to give it broad power to arrest, as well as access to citizens' criminal records and other confidential records. It was able to obtain arrest powers on its property and a pledge that authorities would work with it on inquiries about local agitators.

## IV

### THE SECURITY IMPERATIVE

To protect against the threat of nuclear terrorism, governments and industries the world over have gradually increased the level of security surrounding all aspects of nuclear power. Many of these measures have been copied from military and secret police tactics. In Britain, for example, the only police force that is armed with automatic weapons and whose chief

---

28. Chicago Tribune, Dec. 5, 1976, § 1, at 4, col. 3.

29. Washington Post, Aug. 23, 1979, § A, at 2, col. 5.

30. *E.g.*, KEMENY COMMISSION REPORT, *supra* note 21, at 18.

31. N.Y. Times, Mar. 27, 1980, § A, at 1, col. 1.

32. Washington Post, June 20, 1979, § B, at 5, col. 1.

does not answer to any elected assembly is the special constabulary of that nation's atomic energy commission. The size of its force increased by 50 percent, from 400 to 600, between 1976 and 1979.<sup>33</sup>

In the United States, the NRC has long stressed security at various stages of the nuclear fuel cycle. It has, for instance, required armed guards and other measures to repel and immobilize people judged to be potential threats.<sup>34</sup> During the past few years the agency has sought to strengthen the security systems at nuclear reactors. It has ordered physical searches of all people at such facilities<sup>35</sup> and has considered requiring metal detectors at points of entry,<sup>36</sup> devices to generate sound above the level of human tolerance,<sup>37</sup> and the fingerprinting of visitors.<sup>38</sup> The NRC has even suggested the formation of a federal security force.<sup>39</sup> The federal government has also considered a variety of computer monitoring services and a satellite communications system to protect nuclear materials in transit.<sup>40</sup>

The Palisades nuclear power plant's security system illustrates the trend. Entering the plant in Midland, Michigan, one sees uniformed security guards armed with pistols. An electronic sniffer so sensitive that it has gone off at the scent of perfume, checks visitors for explosives. A metal detector checks for guns. An x-ray machine scans briefcases and tool boxes. A security guard tugs on each visitor's waistband to check for hidden weapons. And all of this is before the plant is finished, before there is any nuclear fuel on site. When the plant is finished and nuclear fuel is loaded into the reactor, the public will be barred from the site. Midland's security hardware costs \$12 million. Its 100-person police force will cost \$4.5 million a year when the plant opens.

In their quest for appropriate deterrents, world governments have sought to raise nuclear theft to the status of a violation of international law. In October 1979, after two years of negotiation coordinated by the International Atomic Energy Agency, fifty-eight nations agreed on the text of the first international convention on the physical protection of nuclear materials.<sup>41</sup> Twenty-one more nations must ratify it before it will become effective. One of its objectives is to classify nuclear theft as an "international crime."<sup>42</sup> Such crimes now include wartime atrocities, genocide, piracy on the high seas, aircraft hijacking, and the kidnapping of diplomats.

---

33. Grove-White, *Nuclear Power: The Threat to Personal Freedom*, 282 NATURE 775 (1979).

34. U.S. NUCLEAR REGULATORY COMM'N., IV FINAL GENERIC ENVIRONMENTAL STATEMENT ON THE USE OF RECYCLED PLUTONIUM IN MIXED OXIDE FUEL IN LIGHT WATER COOLED REACTORS, NUREG-0002, V-14, V-41 (1976).

35. *Id.* at V-14.

36. *Id.* at V-37.

37. *Id.* at V-40.

38. *Id.* at V-41.

39. *Id.* at V-14, V-41.

40. *Id.* at V-38.

41. Convention on the Physical Protection of Nuclear Material, *opened for signature* Oct. 26, 1979, 18 I.L.M. 1419 (1979).

42. *Id.*, art. 7.

Both legally and technologically the protection of the public from nuclear power is being advanced. But as they have attempted to secure the benefits of nuclear power for the public, the people in charge of increased security have harmed the public in other ways.

## V

### GOVERNMENTAL CULPABILITY

In many respects the civil liberties dangers inherent in nuclear power have been hastened by the United States government's own ineptness. Beginning in the early 1950's, President Eisenhower's Atoms for Peace program supplied uranium and sophisticated nuclear technology to nations throughout the world. The rationale was that nations using the technology for research and electricity would not use it for war. The term "good will" surfaced often.<sup>43</sup>

Clearly, the atom's potential as an energy source is great. Nevertheless, many now severely criticize the wisdom of the federal program to spread nuclear technology abroad without real guarantees that the research would not be used for war. Frequently, there was not even any indigenous need for the technology. "It was outrageous," said George Rathjens, a professor at the Massachusetts Institute of Technology and a top nonproliferation official during the Carter administration. "We were shoving this technology down people's throats. We shipped a research reactor to the Congo, which needed more elementary school rooms."<sup>44</sup> Moreover, even the Atomic Energy Commission staff at the time believed the light water reactor design was premature. It was not the most efficient design, more research and development was needed, and there was little need from an energy standpoint in the 1950's and 1960's to push a particular nuclear technology.

While some argue that nuclear technology would have proliferated anyway, they concede that the Atoms for Peace program put knowledge and atomic material in the hands of unstable nations years before they would otherwise have acquired it. The United States trained people in extracting bomb-grade plutonium from spent reactor fuel, but only now that the genie is out of the bottle are strong safeguards being implemented. These safeguards, many of which became necessary only because of American actions, include the kind of rigorous screening that has raised substantial civil liberties questions.

Early United States decisions about the construction and location of reactors also increased the need for strict security measures. In the early

---

43. See, e.g., Address by President Dwight D. Eisenhower before U.N. General Assembly: Peaceful Uses of Atomic Energy (Dec. 8, 1953), 8. U.N. GAOR (470th meeting) par. 79, U.N. Doc. A/PY.470 (1953).

44. *Newsday*, June 21, 1981, at 7, col. 1.

1950's, a number of nuclear experts urged that atomic plants be built underground. The earth, of course, would be a natural security barrier. The proposal has recently been raised again,<sup>45</sup> but "[t]here was absolutely zero interest on the part of anybody anywhere in doing so," according to MIT's Carroll Wilson, the AEC's first general manager.<sup>46</sup> The concern of governments and industry was that putting future reactors underground would imply that reactors currently operating were unsafe.

Experts such as Alvin Weinberg, former director of Oak Ridge National Laboratory, have suggested clustering groups of reactors, fuel production facilities, and reprocessing facilities in "nuclear parks." This would minimize the need to transport nuclear materials on roads that would be vulnerable to terrorists. Individual utilities and other firms, however, have set up their own facilities within their own commercial fiefdoms. As a result, police security measures have been extended to protect nuclear material in transit. This security system would be largely unnecessary if there were nuclear parks.

The government has aided would-be saboteurs directly by making available documents analyzing how to gain access to a nuclear plant. The documents were prepared to help nuclear plant operators test their security systems, but they were made available to the public and were sold through the Government Printing Office.<sup>47</sup> One document details "the best tools and techniques needed to cut, chop or blast through the thirty-two types of security barriers most commonly used at the nation's nuclear facilities."<sup>48</sup> Michael V. Annast, a former NRC security inspector, said a saboteur armed with such information could break into a nuclear facility, destroy vital components, and cause a radioactivity release in as little as 10 minutes.<sup>49</sup>

Officials at Los Alamos Scientific Laboratory mistakenly put on the shelves of the facility's public library more than 100 classified documents,<sup>50</sup> some of which concern thermonuclear weapons. Theodore Taylor, one of the United States' foremost weapons experts, told a Senate subcommittee that the declassification of one of those documents was "the most serious breach of security . . . in this country's post-World War II nuclear weapons development programs."<sup>51</sup> Ironically, because it has made such information available to the public, the government has responded with far stricter screening and security measures to prevent acts of nuclear terrorism.

---

45. See, e.g., Wilson, *A Plan for Energy Independence*, 51 FOREIGN AFFAIRS 657, 664 (1973).

46. Wilson, *Nuclear Energy: What Went Wrong?*, 35 BULL. ATOM. SCI. June 1979, at 13, 17.

47. N.Y. Times, Nov. 29, 1979, § B, at 16, col. 3.

48. *Id.*

49. *Id.*

50. N.Y. Times, Apr. 7, 1980, § A, at 16, col. 2.

51. N.Y. Times, May 24, 1979, § A, at 16, col. 1.

## VI

## JOB CLEARANCE, SURVEILLANCE, AND INFILTRATION

In 1977, the NRC said its clearance program for plant employees was intended "to minimize both the impact on the rights of privacy and association of individuals affected, and the number of individuals affected."<sup>52</sup> But some of the conduct of utility companies and states since then has raised questions of fidelity to that philosophy. Investigations of prospective employees who will have access either to protected areas or to special nuclear materials are painstakingly thorough, and include checks on political associations.<sup>53</sup> Such an intensive security clearance policy has a severe chilling effect on workers' freedoms of expression and association. As the use of nuclear power increases, displacing other forms of energy, the number of workers subject to that job clearance regimen will increase proportionately.

Even more ominous from a civil liberties standpoint is the growing use of surveillance and infiltration against legitimate groups which oppose the development of nuclear energy. Some of the best documented instances of abuse have occurred in California. Starting in 1977, for example, the Los Angeles Police Department infiltrated several anti-nuclear groups in the Alliance for Survival.<sup>54</sup> One police infiltrator helped plan rallies and demonstrations. Another became president of its committee on nuclear information. In 1978, two members of the Los Angeles Police Department tried to videotape a city council meeting where nuclear opponents were speaking. The agents were discovered and ejected by city officials.<sup>55</sup> In 1979, the California Supreme Court dismissed trespassing charges against fifty people who had demonstrated at Pacific Gas & Electric's unfinished Diablo Canyon nuclear power plant after it was revealed that police had infiltrated and provoked the group.<sup>56</sup> And this past summer, the state Attorney General's office assigned twenty agents from its Bureau of Investigation to gather information on anti-nuclear activists.<sup>57</sup>

California utilities have also been collecting dossiers on nuclear opponents. During the 1970's Pacific Gas & Electric paid Research West, an Emeryville, California detective firm, \$214,000 to monitor what it called "terrorist groups."<sup>58</sup> In 1971, the company tried to discredit film maker Don Widener, who produced a television documentary highly critical of the

52. 42 Fed. Reg. 14,881 (1977).

53. See 10 C.F.R. §§ 10.11, 11.21 (1980). See generally R. JUNGK, *THE NEW TYRANNY* 67-74 (1979).

54. J. Peterzell, *Nuclear Power and Political Surveillance*, Center for National Security Studies, Rep. No. 106, 26-27 (1981) [hereinafter cited as CNSS Report].

55. *Id.*

56. *Id.*

57. L.A. Times, Aug. 6, 1981, § 2, at 7, col. 1.

58. *Id.*

nuclear industry's safety record. Widener filed a libel suit against the utility and was awarded \$300,000 in damages.<sup>59</sup> In 1978 San Diego Gas & Electric Company disclosed that it had paid a consulting firm more than \$200,000 for information on anti-nuclear groups.<sup>60</sup>

Similar abuses have occurred in a number of other states. In Texas, state police have maintained files of nuclear opponents and have tried to justify the practice with explanations that nuclear critics might conspire to commit sabotage.<sup>61</sup> In Georgia, the Georgia Power Company admitted to the *Atlanta Journal* in September 1977 that it operates an intelligence program in Atlanta with an annual budget of \$750,000 and nine full-time investigators.<sup>62</sup> In Virginia, it was disclosed that a senior security official of the engineering firm building VEPCO's North Anna nuclear power plant had infiltrated the anti-nuclear Piedmont Alliance for Safe Energy and the Virginia Sunshine Alliance in 1969, when the groups were planning demonstrations at the North Anna plant.<sup>63</sup> In Oklahoma, a jury awarded over \$10 million in May 1979 to the family of Karen Silkwood, a plutonium worker who died in an automobile accident while driving to meet a *New York Times* reporter.<sup>64</sup> Ms. Silkwood allegedly had information about health and safety violations at the Kerr-McGee plutonium reprocessing plant in Crescent, Oklahoma.<sup>65</sup> During the trial, it was alleged that the FBI had interfered with, and apparently had tried to discredit, a congressional investigation into the case.<sup>66</sup>

This past year, Mark Dowie of *Mother Jones* magazine turned the tables and infiltrated a Miami meeting of utility officials who were discussing strategies to thwart the opponents of nuclear power. The information collected there squares with the historic pattern. A communications manager from Rochester Gas & Electric was quoted as saying that the company was ready for a demonstration by opponents because it had infiltrated their ranks and had secured information beforehand.<sup>67</sup> A security training specialist for Georgia Power, the magazine said, lamented that his force could carry only .38 calibre revolvers and 12-gauge shotguns; he preferred magnum handguns and automatic weapons such as M-16s.<sup>68</sup>

---

59. *Id.*

60. *Id.*

61. CNSS Report, *supra* note 54, at 36-37.

62. *Id.* at 67-69.

63. *Id.* at 76.

64. N.Y. Times, May 18, 1979, § A, at 1, col. 1. See *Silkwood v. Kerr-McGee*, 485 F. Supp. 566, 568 (W.D. Okla. 1979) *rev'd in part* 667 F.2d 909 (10th Cir. 1981) (no punitive damages).

65. See N.Y. Times, May 18, 1979, § A, at 1, col. 2.

66. L.A. Times, Aug. 6, 1981, § 2, at 7, col. 1.

67. *Atomic Psyche-Out*, 6 MOTHER JONES 21 (May 1981).

68. *Id.* at 23.

## VII

## THE USE OF LETHAL FORCE

The authorization of use of lethal force to protect nuclear power poses significant civil liberties questions. In 1977, the General Accounting Office (GAO) noted that the Energy Research and Development Administration's rules authorized guards to discharge firearms and to kill if necessary to prevent the theft of special nuclear material.<sup>69</sup> The GAO recommended that the Nuclear Regulatory Commission seek authority to allow guards to use firearms to prevent nuclear theft if such action is the minimum amount of force necessary.<sup>70</sup> The GAO said, however, that "[i]t is difficult to predict the exact dimensions, nature and level of sophistication of the terrorist threat to nuclear facilities."<sup>71</sup> The report did not define precisely how utility officials should judge when a theft is serious enough to shoot to kill. The NRC has subsequently enacted regulations in an attempt to define a shoot-to-kill situation.<sup>72</sup>

The problems inherent in such a policy are clear. As NRC Commissioner Gilinsky has said, "The question of what constitutes a plausible threat is a highly speculative one."<sup>73</sup> And the NRC's ambiguous guidelines are, of course, subject to the interpretations which security personnel in the field give them in a crisis context. Taken together, these variables could lead to ugly results.

The problem from a first amendment perspective is that innocent people are trapped in the net of heightened security which is likely to chill protected speech. According to the utilities, most of the protesters at nuclear plant demonstrations are subversives and terrorists who pose an actual threat to a plant. Most protesters, however, are young people, largely college and high school students and recent graduates, joined by older people such as housewives and activist professionals, exercising their free speech rights. Experts generally acknowledge that it is a well-trained cadre of terrorists, not anti-nuclear protesters, who pose a serious danger to plant security. But this former group is the least likely to be affected by increased security measures because nuclear saboteurs are apt to be highly sophisticated.

The irony is painfully obvious. Increased security measures are considered justifiable because they allegedly protect against terrorists. The people most affected by them, however, are ordinary citizen protesters. Robert

---

69. U.S. General Accounting Office, *Commercial Nuclear Fuel Facilities Need Better Security*, EMD-77-40a, v (May 2, 1977) (unclassified digest).

70. *Id.*

71. *Id.* at iv.

72. 10 C.F.R. §§ 73.1, 73.55(h) (1981).

73. Gilinsky Address, *supra* note 8, at 2.

Jungk, author of *The New Tyranny*, recognized this when he wrote: "Even if we turn nuclear industrial states into the equivalent of concentration camps we can never be sure of avoiding nuclear blackmail and violence."<sup>74</sup>

## VIII

### THE EXTENSION OF POLICE POWERS

There are some who believe it impossible to move toward a nuclear economy without a concomitant transition to a police state. Denis Hayes, formerly of World Watch Institute and director of the Solar Energy Research Institute, says that "[r]eliance upon nuclear power as the principal source of energy is probably possible only in a totalitarian state."<sup>75</sup> He noted that already, with only a small amount of nuclear material in commerce, the federal government has been unable to account for 8,000 pounds of bomb-grade material. With a larger amount of material in use, more people would have access to reactors, fuel transportation, fuel inventories, and reprocessing plants, increasing the potential for sabotage or theft of nuclear material. A necessary consequence of this increase in threat potential would be even stricter security measures.

In the United States more than thirty federal agencies are involved in planning for and coping with a nuclear emergency.<sup>76</sup> After the Three Mile Island emergency, there have been many calls for a better coordinated, stronger response to nuclear incidents. In the event of a nuclear theft and potential sabotage, Jungk contends that contingency plans call for a mobilization of police and armed forces on a scale hitherto imaginable only in the event of a full-scale insurrection.<sup>77</sup> In "Intensified Nuclear Safeguards and Civil Liberties," a study prepared for the NRC in 1975, John H. Barton, professor of law at Stanford, predicted that in the event of an incident or threatened incident entire regions of the country would have to be occupied by what he called "response forces."<sup>78</sup> Tanks would patrol the streets and helicopters would hover overhead. Troops would undertake warrantless, house-to-house searches in entire sections of cities. He added: "Dissidents might be seized and detained after a plutonium theft. Detention might be justified as a way to isolate and immobilize persons capable of fashioning the material into an explosive device . . . ."<sup>79</sup>

74. R. JUNGK, *THE NEW TYRANNY* 3 (1979).

75. *Newsday*, June 15, 1976, at 45, col. 3.

76. See R. JUNGK, *THE NEW TYRANNY* 167 (1979).

77. *Id.* at 143.

78. J. Barton, *Intensified Nuclear Safeguards and Civil Liberties* (Oct. 31, 1975) (prepared under NRC contract no. AT(49-24)-0190) (on file in the office of the *Review of Law and Social Change*).

79. *Id.*

## IX

## CONCLUSION

The relationship between civil liberties and heightened security is one of the many unanswered questions that has plagued the thirty-five year history of atomic power. Other troublesome questions include the long-term storage of nuclear waste, the resolution of various safety problems general to many reactors, better management of reactor construction, and low-level radiation, to name a few. The reason these problems still persist, many believe, is inattention: policymakers, scientists, and engineers have been preoccupied with the energy-producing aspect of the system, the reactor.

Due to such problems, nuclear power, unlike any other power source in history, has to be sold to an increasingly skeptical public. Some critics believe that if nuclear power is to fulfill its original promise, it must be improved, and that the officials must stop "concealing potentially embarrassing facts," as Commissioner Bradford of the NRC puts it.<sup>80</sup> Instead, nuclear utilities and regulators must be open with the public about the problems, and must resolve them without trampling on the rights of citizens.

Coal may kill more people than atomic power, but it does not raise fundamental issues concerning democratic values and constitutional rights. Solar power may be expensive, but it can be produced without the threat of sabotage. Energy shortages may involve some degree of sacrifice, but it is the sacrifice of a people free to complain. The late David Dinsmore Comey summed it up this way: "I [would] rather read the Bill of Rights by candlelight than not have it to read at all."<sup>81</sup>

---

80. Bradford Remarks, *supra* note 25.

81. Comey, *The Perfect Trojan Horse*, BULL. ATOM. SCI., June 1976, at 33, 34.