

Nuclear Unsecured: America's Vulnerable Nuclear Plants

About one-fifth of the nation's electricity is generated by 103 nuclear reactors at 65 sites in 31 states. More than half of these reactors are near metropolitan areas, including New York City (Indian Point), Philadelphia (Salem, Hope Creek, Limerick), Boston (Seabrook, Pilgrim), Chicago (Dresden) and New Orleans (Waterford).

These power plants represent prime targets for terrorists. The White House has identified nuclear facilities as among "the nation's highest risk targets" and among "the most vulnerable potential targets of terrorists."¹ The 9/11 Commission staff reported that "unidentified nuclear power plants" were among the 10 targets originally planned for September 11, 2001.²

Amazingly, an administration that touts its determination to fight terrorism has shown little interest in fortifying the defenses of the nation's nuclear reactors. Neither the White House nor the U.S. Nuclear Regulatory Commission (NRC), the agency that is supposed to regulate the nuclear industry, has shown a sense of urgency about this mission in the aftermath of the 9/11 attacks. In fact, the NRC worked with the industry's trade association to undermine congressional efforts to strengthen security.

U.S. Rep. Christopher Shays (R-Conn.), chairing a House subcommittee hearing on nuclear plant security in September, criticized the NRC for a weak response to the threat of terrorism. People living near the plants, he said, "take little comfort from a cozy, indulgent regulatory process that looks and acts very much like business as usual."³ At that hearing, an official from the U.S. Government Accountability Office (GAO), formerly the General Accounting Office, testified that security plans developed by operators of commercial reactors are based on templates that do not include key site-specific information. In addition, the NRC's assessment of those plans is based on a "paper review" and is not detailed enough to determine whether the plants are sufficiently prepared to repel an attack.⁴

There seem to be two primary reasons for the tepid approach to nuclear security: One, the Bush administration has a fierce ideological aversion to regulation, and two, the administration is heavily indebted to the nuclear industry and electric utilities for generous campaign contributions. The industry has contributed \$8 million since 2000 to Bush's campaigns, his inauguration committee and the Republican National Committee (RNC). In addition, Bush counts nine "Rangers" and "Pioneers" – those fundraisers who bundle \$200,000 and \$100,000, respectively, for his campaigns – from the nuclear industry.

The Risk is Real: “Dirty Bombs” in Our Midst

Terrorists seeking to inflict harm on the United States have good reason to target the nation’s nuclear reactors. Each one of these highly vulnerable facilities is a potential radioactive “dirty bomb” that, with sufficient cunning and improvised firepower, could be exploded with far more devastating effects than a dirty bomb constructed and transported by a terrorist. Further, nuclear power plants present attractive auxiliary targets: Lightly protected spent fuel pools are situated outside containment domes. In addition, the administration is promoting a plan that, if enacted, would result in tens of thousands of rail and truck shipments of highly radioactive spent fuel – all potential terrorist targets – from reactors to a massive nuclear waste storage site at Yucca Mountain, Nevada.

Twenty-seven state attorneys generals warned Congress in October 2002 that “the consequences of a catastrophic attack against a nuclear power plant are simply incalculable.”⁵ The release of millions of curies of toxic radioactive waste could create a regional catastrophe and render thousands of square miles uninhabitable for decades. The Chernobyl accident in Ukraine in 1986, the worst nuclear accident in history, illustrates the potential for death, illness and persistent environmental contamination. Chernobyl, which killed dozens of people immediately, contaminated more than 140,000 square kilometers of land; induced up to 2,000 cases of thyroid cancer, mostly in children, with that number expected to rise to 8,000-10,000 in the coming years; forced the resettling of hundreds of thousands of people; and disrupted the lives of more than 7 million people.⁶

Bush Administration and the NRC Show Little Interest in Nuclear Plant Security

For years, the nuclear industry and its political allies have thwarted rigorous regulation of nuclear safety and ignored recurring safety violations, such as the circumstances that led to the development of a gaping hole in the reactor vessel at the Davis-Besse reactor near Toledo, Ohio. Now those same forces are thwarting more rigorous *security* measures. Despite the demonstrated need for improved security against a terrorist attack, individual utility companies, the Nuclear Energy Institute (NEI, the trade association for the industry), the NRC and the Bush administration have shown little interest in stricter preventive programs.

The sections below summarize the reasons why the United States is ill-prepared to prevent or respond to a terrorist attack against a nuclear power facility.

New NRC Security Requirements Are Inadequate

Until recent revisions to its “Design Basis Threat” (DBT), which defines the maximum threat against which a facility must be prepared to defend, NRC regulations envisioned that no more than three terrorists and one insider would ever attack a nuclear power plant. But even the revisions, scheduled to take effect on October 29, were written in secret and have not been released to the public. It is believed that the current number

of possible attackers is higher than before, but still fewer than the number of 9/11 hijackers. The new DBT also does not require plants to protect against an air attack.

Representatives of other federal agencies, including the Department of Defense, told the Project on Government Oversight (POGO, a public interest organization) that the revised DBT is inadequate. POGO, after interviewing people who had reviewed the new DBT, concluded that it falls short, in part because it fails to envision an attack by a squad of 12 to 14 terrorists, as the intelligence community generally believes would be the case.⁷

Secrecy Results in Little Public Accountability for Plans

The NRC has thrown a shroud of secrecy over security deliberations, preventing the public, security experts and safety advocates from evaluating the rigor and efficacy of proposed security measures.⁸ Historically, “national security” has often been invoked as a pretext to cover up incompetence and politically embarrassing facts, and to resist public accountability. In this same tradition, the Bush administration and the NRC are using a cloak of secrecy to prevent independent public assessments of the agency’s performance. Secrecy also helps forestall public debate and agitation for security improvements that the industry considers too expensive.

Public Citizen and San Luis Obispo Mothers for Peace earlier this year sued the NRC, claiming its secret Design Basis Threat rulemaking was illegal. The U.S. Court of Appeals for the District of Columbia Circuit agreed and is holding the case in abeyance until the NRC follows up on its claim that it intends to conduct a proper rulemaking, which would allow for public input and require the agency to take public comments into account.⁹

Terrorism Exercises Highlight Serious Vulnerabilities

Mock terrorist attacks, known as force-on-force tests, have been staged to test the defenses of nuclear power plants. The NRC security official who conducted these tests found “a significant weakness” in armed response during 37 out of 81 mock attacks, or 46 percent of the time. He also found that mock attackers were able to take actions “which would lead to core damage and in many cases, to a probable radioactive release.”¹⁰

Moreover, these drills were often unrealistic because they used more guards than were normally on duty, used attackers who were not trained in terrorist tactics, and used unrealistic weapons (such as rubber guns) that do not simulate actual gunfire. These tests were suspended after 9/11 and will not fully resume until October 29 under the new, secret DBT. Further, the NRC has decided that it will not release any information about the results of force-on-force tests, enforcement actions, other security assessments or inspections.¹¹

Security Guards Are Ill-Equipped to Thwart Attacks

While there are too few security guards at nuclear power plants, the guards who are there do not have weaponry adequate to deal with terrorists and are not adequately trained to shoot at moving targets. Because guards are underpaid, demoralized and frequently replaced (many earn less than janitors), guards represent a weak link in the security chain. In some cases, security guards themselves do not believe they could defeat a terrorist attack. In a 2002 study, the Project on Government Oversight (POGO) interviewed 20 guards who protected 24 reactors. According to those interviews, guards at only a quarter of the plants believed they could adequately defend against a terrorist attack.¹²

Plants Remain Vulnerable While Waiting for Local First Responders

Plant guards are required only to prevent attackers from achieving certain targets until offsite support arrives. Critics charge that nuclear station guard forces could be overwhelmed by coordinated adversarial teams with superior numbers and more powerful weapons. The NEI's own documents show that, as the adversarial threat increases, more reliance is being placed on local law enforcement, including local and state police and the National Guard, to protect nuclear power stations. Yet waiting for reinforcements may mean that plant security is lost. Routinely, force-on-force drills are over in a matter of minutes, when either the attackers achieve their goals or are neutralized by the guarding force.

Corporate Conflicts of Interest Make Industry's Security Assessments Questionable

Claims of improvements in preparedness for terrorism attacks at nuclear plants are suspect due to the conflict of interests now inherent in such self-reporting. The company hired by the NEI to run the force-on-force tests, the Wackenhut Corporation, provides security at almost half of the nation's nuclear power plants.¹³

The company therefore has a vested interest in failing to identify security gaps. The company also has a history of incompetence with respect to nuclear security (guards found asleep; guards who faked foot patrols; guards caught cheating at a force-on-force test at Oak Ridge, a nuclear weapons site, in Tennessee).¹⁴ U.S. Rep. Ed Markey (D-Mass.), who sits on the House Select Committee on Homeland Security, recently compared the practice of allowing this kind of self-evaluation to "letting Olympic athletes perform their own secret drug tests."¹⁵

Defenses Against Aircraft Attacks Remain Inadequate

Nuclear plants built in the 1960s and 1970s were not designed to withstand the impact of aircraft crashes or explosive forces, and there is no government requirement that nuclear plants be secure from attack by aircraft. The industry group NEI says its study shows that a low-flying Boeing 767-400, traveling at 350 mph, would not penetrate the containment dome of a nuclear power plant.¹⁶

But German researchers, using a computer simulation that critics say is more realistic, found that large jetliners crashing into nuclear facilities under a variety of scenarios could cause uncontrollable situations and the release of radiation.¹⁷ This secret German study, leaked to the media, casts doubt upon the assurances of the NRC and NEI.

Since the 9/11 attacks, the NRC has undertaken a major study to evaluate reactor vulnerabilities and the potential effects of a large commercial aircraft hitting a nuclear power site. Those results are classified. While NRC officials acknowledge there are risks from certain types of aircraft at certain reactors, they contend that in the event of an aircraft attack, plant operators would have time to employ safety features that would lessen the risk.¹⁸ Given that the NRC study is secret, it is impossible for independent experts to evaluate these claims.

There is considerable debate about whether small aircraft, either by themselves or carrying explosives, could be used effectively as a weapon against nuclear reactors or spent-fuel pools. But there is little doubt that these aircraft are readily accessible to would-be terrorists. Some 200,000 privately owned aircraft can take off from 19,000 U.S. airports, providing ample opportunity for an attack. Indeed, the 9/11 hijackers explored using crop-dusting planes to deliver explosives. A GAO report found that 70 small aircraft – or an average of 14 per year – were stolen between 1998 and 2003.¹⁹ The ease of attack was demonstrated in January 2002 when a teen-age flight student crashed a single-engine Cessna airplane into a Tampa skyscraper.

Pools of Spent Fuel Vulnerable to Attack

Radioactive wastes from nuclear reactors – some 50,000 tons of it nationwide – are currently stored in standing pools of water or in dry casks near each nuclear reactor. While some spent fuel pools were designed with earthquakes and other natural disasters in mind, they are not designed to withstand terrorist attacks. Unlike nuclear reactors, which are protected by three to six feet of reinforced concrete, these pools are far more exposed and vulnerable.

A publicly available October 2001 NRC study estimates that a nuclear fuel fire, which could result from a terrorist attack that disables safety systems and leads to a loss of cooling water, could cause tens of thousands of deaths within 500 miles of the damaged facility.²⁰ The National Academy of Sciences has urged the NRC to upgrade the safety of nuclear waste storage pools at the nation's reactors.²¹

The NRC claims that an aircraft that crashed into a spent fuel pool would not rupture it or cause “significant” leakage.²² But Robert Alvarez, a former Energy Department senior policy adviser, told a Senate hearing in 2002 that an attack against a spent fuel pool “could drain enough water to cause a catastrophic radiological fire that cannot be extinguished.” He also cited a 1997 Brookhaven National Laboratory analysis that concluded that a fire of radioactive wastes could contaminate up to 188 square miles.²³

2004 NRC Proposal Would Weaken Fire Safety Requirements

In March 2004, the NRC proposed *weakening* fire safety regulations for nuclear power plants. This would make it harder for a reactor to be safely shut down in the event of a fire caused by a terrorist attack or accident. Current NRC regulations require the use of fire barrier materials and/or physical separation between systems used to automatically shut down reactors that are on fire. The NRC is proposing to allow operators to rely instead on manual shut-downs, a process that would require employees to manually shut down equipment in areas surrounded by smoke, fire and radiation.

An inability to do so could result in a catastrophic release of radioactivity. Reps. Markey and John Dingell (D-Mich.) accused the NRC last March of changing the rule because many nuclear plants were not in compliance with the current, more stringent fire-protection regulations.²⁴

Emergency Evacuation Plans Fail to Protect Public

Rep. Shays has pointed out that “compliance with critical incident response and evacuation planning has been allowed to become a static, bureaucratic exercise,” and that “no nuclear plant license has ever been suspended or revoked by the NRC due solely to weaknesses in emergency response and evacuation planning.”²⁵

For example, if there were an attack on Indian Point, the nuclear power plant located only 35 miles from New York City, the public would be inadequately protected from radiation releases, according to the “Witt Report,” an independent review of evacuation plans commissioned by New York Governor George Pataki.²⁶ Among the problems, according to Rep. Shays, are poor communication among federal, state and local officials, and a “dysfunctional daisy chain of confusing directives from the Federal Emergency Management Agency, the NRC and plant operators.”²⁷

Elected officials in the vicinity of Indian Point have sensibly refused to certify these questionable emergency plans and have called instead for the plant to be shut down. The Witt Report – as well as reports by the GAO²⁸ and a private security firm²⁹ – are crystallizing worries that emergency planning at other nuclear facilities around the country may be similarly deficient.

Industry Expenditures on Security Improvements Remain Hard to Assess

The nuclear industry has boasted that it has spent \$1 billion on security-related improvements since 2001.³⁰ Yet the adequacy of this sum is difficult to assess because the cost breakdowns have not been disclosed. For the same reason, it is difficult to know if the money is being well spent. The clear gaps that remain, as cited in the preceding pages, suggests that it is not.

It *is* clear that the Bush administration and the NRC are eager to protect the industry from the full costs of nuclear power – from research into new reactors to

maintaining the security of existing reactors to decommissioning shut-down reactors. Energy legislation now pending before the U.S. Senate, as S. 2095 and H.R. 6 (the conference report), would authorize more than \$2 billion for nuclear energy research and development.

This legislation was based on a blueprint developed by Vice President Cheney's secretive energy task force in 2001. The House passed the energy bill conference report in November 2003, which includes nuclear production tax credits. It also would reauthorize the Price-Anderson Act for another 20 years, capping the liability of the entire nuclear industry at about \$10.2 billion in the event of an accident or attack.

This amount would not begin to cover the damages from even a single catastrophic event. A 2004 study conducted by Edwin S. Lyman of the Union of Concerned Scientists found that a successful terrorist attack on the Indian Point nuclear plant, 35 miles from Manhattan, could cause as much as \$2.1 trillion in economic damages, in addition to 44,000 near-term deaths from acute exposure to radiation.³¹

Between 1950 and 1990, the nuclear industry received \$97 billion in federal subsidies.³² All of these government interventions represent sizeable subsidies for nuclear operators. They insulate electric utilities from bearing the full costs and risks of operating safe plants. Those costs instead are displaced to the public and the environment.

NRC Drops the Ball on GAO Report Showing Serious Security Lapses

The GAO issued a report in September 2003, urging a variety of security improvements at the nation's nuclear power plants.³³ It identified three major deficiencies in the NRC's oversight of nuclear plant security.

First, inspectors often classified security lapses as "non-cited violations" if the problem had not been identified frequently in the past and was not deemed by the agency to be something that would have direct or immediate consequences. This type of violation does not require a response from the licensee and does not require any follow-up by the NRC to see if the problem had been corrected.

Some of these non-cited violations appeared serious to the GAO. These included: a security guard found sleeping on duty for more than half an hour, a security guard who falsified logs to show he had checked vital doors and barriers when he was actually in another part of the plant, and guards who failed to search individuals and allowed them unescorted access to the plant's protected area even after metal detectors indicated they had metal objects in their clothing.

Second, the NRC did not systematically and routinely collect, analyze and disseminate security assessments to identify problems that may be common to plants or to provide lessons learned in resolving security problems.

Third, there were serious weaknesses in the way the NRC conducted mock terrorist attacks to evaluate security precautions. The exercises were conducted infrequently against security forces that were beefed up with additional guards or barriers. The simulated terrorists had unrealistic weapons and were not trained to operate like terrorists.

Despite al Qaeda's demonstrated interest in nuclear facilities and the GAO's specific security recommendations, neither the Bush administration nor the NRC has shown any urgency in addressing the issue. A year after the first GAO report, at a House hearing on September 14, 2004, the GAO presented testimony assessing the NRC's implementation of the 2003 recommendations.³⁴

The GAO concluded that very little had been accomplished:

While its efforts to date have enhanced security, NRC is not yet in a position to provide an independent determination that each plant has taken reasonable and appropriate steps to protect against the new DBT [design basis threat].

Among the problems cited by the GAO:

- The NRC's assessment of individual plant security plans consists of a "paper review" and is not detailed enough for the NRC to determine if plants can repel an attack.
- The security plans are largely based on a template and often do not include key site-specific information, such as where guards are stationed, how responding guards would deploy during an attack, and how long deployment would take.
- NRC officials do not typically visit nuclear plants to obtain site-specific information.
- The NRC is relying on force-on-force tests to test readiness, but the exercises will not be conducted at all facilities for three years.
- The NRC has no plan to improve its inspection plans as recommended by the GAO in 2003. For example, the NRC is still not following up to see whether violations of security requirements have been corrected.

Congress Fails to Act to Improve Nuclear Security

The Senate Committee on Environment and Public Works has passed nuclear security legislation in various forms three times, but the legislation has yet to make it to the floor for a vote by the full body. The most recent bill, the Nuclear Infrastructure Security Act of 2003 (S. 1043), was passed unanimously by the committee in May 2003.

This bill, while less ambitious than previous versions, is a step in the right direction but has not been passed by the House and is unlikely to be enacted this Congress. The legislation requires the NRC to conduct rulemaking to upgrade security requirements for nuclear facilities and requirements for emergency response; establishes a training program for National Guard as well as state and local law enforcement agencies; establishes regional security coordinators for nuclear facilities; and requires enhanced systems to manage the security of sensitive radioactive materials. Among other things, it does not require the NRC to include air and water attacks in its security requirements, and does not address the conflict-of-interest problem with companies such as Wackenhut, which both guard reactors and test security at plants.

Last year, Rep. Markey succeeded in attaching an amendment on nuclear security to the House energy bill, which made it into the energy bill conference report (H.R. 6). While the conference report passed in the House last November, it has been stuck in the Senate for other reasons and is unlikely to pass. Although less well defined, the provisions require an upgrade of security standards and emergency plans, regular force-on-force security tests and emergency response drills to the new standards, and improved whistleblower protections.

On September 29, Rep. Jerrold Nadler (D-N.Y.) successfully attached a modified version of what is in the energy bill, including a provision to require force-on-force tests to be conducted by NRC personnel, to the Judiciary Committee's version of the intelligence reorganization legislation recommended by the 9/11 Commission. These provisions were subsequently removed from the version to be voted on by the House.

Nuclear Industry Very Supportive of Bush Campaign

The Bush administration's inaction on nuclear security issues is all the more suspect considering its close ties to the nuclear industry. Before and after 9/11, the White House has worked zealously to promote the industry's prospects and pad its bottom line. Yet when it comes to imposing stricter security requirements, the administration has barely lifted a finger.

While the electric utility industry, which owns the nation's commercial nuclear reactors, has a large number of policy priorities – including repealing the Public Utility Holding Company Act (PUCHA), gutting clean air regulations and securing billions of dollars in tax breaks – resurrecting the nuclear power industry is near the top of its wish list. And in the Bush administration, wishes do come true. As the *National Journal* wrote in May 2001, “If nuclear power is Cinderella, its fairy godmother is Dick Cheney.”³⁵

The nuclear industry didn't have a pair of glass slippers to wear to Bush's ball, but it brought the next best thing: loads of campaign cash. According to Public Citizen's analysis of data provided by the Center for Responsive Politics, the nuclear industry's trade association and its member companies (including their employees) that own commercial reactors and other firms focused on nuclear plant construction and security

have given \$8 million to the Bush campaigns, the Bush-Cheney Inaugural Committee and the RNC since the 2000 election cycle. [See Figure 1.]

The Nuclear Energy Institute (NEI), the industry’s main trade and lobbying association, and 43 individual companies donated an average of \$186,045 to Bush campaign efforts. The biggest givers include Southern Co. (\$863,012), FirstEnergy (\$862,377), General Electric (\$855,996), TXU (\$765,598) and Dominion Resources (\$683,105). [For a complete list of campaign contributions by company, see Figure 4.]

Figure 1
Nuclear Industry Contributions to Bush Campaign & RNC, 2000-2004

Company/ Organization	Election Cycle						Total
	2000		2002		2004		
	Bush	RNC	Inaugural	RNC	Bush	RNC	
Nuclear Energy Institute (NEI)	\$5,200	\$11,500	--	\$125,350	\$2,250	--	\$144,300
Nuclear Plant Owners	\$321,929	\$2,405,733	\$600,000	\$1,784,582	\$676,285	\$215,690	\$6,004,219
Other Nuclear Industry Companies	\$100,176	\$651,011	\$245,000	\$452,376	\$276,145	\$126,697	\$1,851,405
TOTAL	\$427,305	\$3,068,244	\$845,000	\$2,362,308	\$954,680	\$342,387	\$7,999,924

Source: Public Citizen analysis of data provided by the Center for Responsive Politics. Totals include contributions from political action committees and individual members or employees of an organization, as well as unrestricted “soft money” donations from individuals and corporate treasuries before the 2004 election cycle (when such donations became illegal). Contribution data are as of October 1, 2004.

Nine top nuclear industry executives and lobbyists were named “Rangers” or “Pioneers” – the honorary titles given by the Bush campaign to those fundraisers who collect at least \$200,000 or \$100,000, respectively. These individuals personally brought in at least \$1.4 million – and almost certainly much more – for the Bush campaigns in 2000 and 2004. [See Figure 2.]

Figure 2
Nuclear Power Industry Rangers and Pioneers

Name	Employer	Occupation	Fundraising Status	Minimum \$ Bundled
Anthony J. Alexander	FirstEnergy ³⁶	President	2004 Pioneer, 2000 Pioneer	\$200,000
Dwight H. Evans	Southern Co. ³⁷	Executive Vice President	2004 Ranger	\$200,000
Stephen E. Frank	Southern California Edison ³⁸	Chairman, CEO & President ³⁹	2000 Pioneer*	n/a
Steve Hanks	Washington Group Intl.	President & CEO	2004 Pioneer	\$100,000
James Klauser	Wisconsin Electric ⁴⁰	State Government Affairs Director	2004 Ranger	\$200,000
Thomas Kuhn	Edison Electric Institute	President	2004 Ranger, 2000 Pioneer	\$300,000
David McClanahan	CenterPoint Energy ⁴¹	President & CEO	2004 Pioneer	\$100,000
Erle Nye	TXU ⁴²	Chairman	2004 Pioneer, 2000 Pioneer	\$200,000
David L. Sokol	Mid-American Energy Holdings ⁴³	Chairman & CEO	2004 Pioneer	\$100,000
TOTAL	--	--	--	\$1.4 million

Source: Public Citizen research and analysis of Bush campaign disclosures, www.WhiteHouseforSale.org.

*Pledged to become a Pioneer in 2000 but campaign would not confirm if bundler reached the goal or how much was collected.

Three executives at electric utilities that own nuclear power plants signed up to become Pioneers in the 2000 campaign. The campaign never disclosed whether Stephen E. Frank of Southern California Edison, a former member of the NEI board of directors, ever reached his goal or how much he raised. But Anthony Alexander of First Energy, which operates three nuclear plants in Ohio and Pennsylvania, and Erle Nye of TXU, which owns Texas’ Comanche Peak plant, each raised at least \$100,000 for the Bush campaign.

Alexander, whose company oversees the troubled Davis-Besse plant, also was named a member of “Team 100” for raising at least \$250,000 for the RNC in 2000. Nye repeatedly lent the TXU corporate jet to Bush; the campaign reimbursed his company

nearly \$139,000 for use of the plane, more than it paid any other firm.⁴⁴ Alexander and Nye also each personally donated an additional \$100,000 to the Bush-Cheney Inaugural Committee. (Six other nuclear industry companies also made \$100,000 contributions for the inauguration: CenterPoint, CMS Energy, Dominion, General Electric, Honeywell and Southern Co.)⁴⁵

Both Alexander and Nye – a past chairman of the NEI – were named to the Department of Energy transition team, as were representatives of Dominion, Southern California Edison, Southern Co. and USEC Inc. (The latter group processes uranium from old warheads into nuclear fuel as part of a “megatons-to-megawatts” program.) Also serving on the DOE transition team were Joe Colvin, CEO and president of NEI, and Thomas Kuhn, president of the Edison Electric Institute and another 2000 Pioneer.⁴⁶ Before taking charge of the main electric utility trade association, Kuhn headed the American Nuclear Energy Council, the precursor of the NEI.⁴⁷

Shortly after taking office, Bush put Cheney in charge of the National Energy Policy Development Group, and the nuclear industry enjoyed unfettered access to this secretive task force. During the meetings to develop a National Energy Policy, according to press reports, nuclear industry executives met repeatedly with, among others, Energy Secretary Spencer Abraham, energy task force director Andrew Lundquist, White House senior adviser Karl Rove and economic adviser Lawrence Lindsey.⁴⁸

The Bush administration refuses to release any information about direct industry contacts with the vice president’s office or the White House. But the Natural Resources Defense Council (NRDC) was able to obtain records of industry contacts with the task force in which Energy Department staff participated.⁴⁹ Those records show that:

- The NEI had contact with the task force 19 times.
- Edison Electric Institute had contact with the task force 14 times.
- USEC Inc. had contact with the task force 12 times.
- Westinghouse Electric Co., which makes reactors and other components for nuclear plants, had contact with the task force nine times.
- CMS Energy, which owns the Palisades nuclear plant in Michigan, had contact with the task force eight times.
- Exelon Corporation, the country’s largest operator of nuclear plants, had contact with the task force six times.

Perhaps it was the fairy godmother himself who best described the administration’s nonchalant attitude toward the appearance of corruption on the energy task force. “Just because somebody makes a campaign contribution,” Cheney said, “doesn’t mean that they should be denied the opportunity to express their view to government officials.”⁵⁰

The result of all those meetings could be seen in the energy task force’s final report, which called for “the expansion of nuclear energy in the United States as a major

component of our national energy policy” and urged the building of new nuclear power plants for the first time since the Three Mile Island disaster.⁵¹

The nuclear industry gave the administration glowing reviews. “The administration’s support for nuclear power as a proven energy technology that protects our air quality is a tremendously positive development for our nation,” said NEI President Joe Colvin. “The industry looks forward to working with the White House and Congress to make this long-term vision a reality.”⁵²

Of course, this all occurred before 9/11. But the threat of terrorism didn’t change the administration’s attitude toward the nuclear industry. On the contrary, less than two months after the attacks, Bush declared: “It is in our nation’s national interest that we develop more energy supplies at home. It is in our national interest that we look at safe nuclear power.”⁵³

Bush seemed less interested in making nuclear power safer. Yet with the administration putting no effort behind mandating tighter, federally supervised security at nuclear power plants – and pushing massive nuclear industry subsidies in the energy bill – it’s little wonder that twice as many nuclear industry executives joined the Bush-Cheney campaign fundraising team for 2004 than in 2000.

Again achieving Pioneer status are Alexander and Nye. Bush appointed Nye head of the National Infrastructure Advisory Committee (NIAC) and a member of the Homeland Security Advisory Council. The Edison Electric Institute’s Kuhn became a Ranger after raising at least \$200,000.

The other nuclear industry Rangers are Dwight Evans, executive vice president of Southern Co. (which operates three nuclear plants in Alabama and Georgia), and James Klauser, a lobbyist for Wisconsin Electric (which runs one of the state’s nuclear plants). A former top adviser to Wisconsin Gov. Tommy Thompson, Klauser is chairman of Bush’s campaign in the closely contested battleground state.

Joining the ranks of the Pioneers in 2004 are David McClanahan, CEO and president of CenterPoint Energy, which owns a piece of the South Texas Project nuclear facility; David L. Sokol, chairman and CEO of Mid-American Energy Holdings, which holds a 25 percent stake in the Quad Cities nuclear power plant; and Steve Hanks, president and CEO of Washington Group International, an NEI member company that boasts on its Web site of providing services to “virtually every nuclear power plant operating in the U.S. today.”

Nuclear Industry Blocks Proposals to Federalize Security

The nuclear industry’s largesse with campaign contributions and high-powered lobbying efforts helped block congressional proposals to federalize nuclear plant security forces and impede legislative efforts to mandate tighter security. Since 2002, the NEI and its member companies that lobbied on nuclear plant security issues have spent a total

of \$51.2 million on efforts to influence the White House, the NRC and other executive branch agencies and Congress. [See Figure 3.] Since lobbyists are not required to itemize their lobbying expenditures, it is impossible to know exactly how much the nuclear industry spent to thwart stricter federal security requirements.

In these efforts, the NRC has worked hand-in-hand with the NEI, sinking a bill (S. 1746) proposed by Sen. Harry Reid (D-Nev.) and others in 2002 that would have required nuclear plants to withstand attacks comparable to 9/11, mandated corrective actions for facilities that repeatedly fail security tests and required NRC review of emergency response plans and regular emergency response exercises. The bill was passed out of the Senate Environment and Public Works Committee with bipartisan support, including Republican Sens. Gordon Smith of Oregon and James Inhofe of Oklahoma, but never got a vote on the Senate floor.⁵⁴

The NEI and NRC both denounced the legislation. Joe Colvin of NEI insisted that the issue of nuclear plant security was “a problem that does not exist.” In a letter to Reid, NRC Chairman Richard A. Meserve sided with the nuclear industry, saying the bill “addresses a non-existent problem.”⁵⁵ In a speech at the National Press Club, Meserve declared that the agency “strenuously opposed” the legislation.⁵⁶

After the bill passed the Senate Environment and Public Works Committee in September 2002, Colvin issued a letter to senators expressing “the nuclear energy industry’s strong opposition to S. 1746.” He enclosed a copy of a letter from Meserve to Sen. James Jeffords (I-Vt.), noting that “the NRC believes that its provisions create substantive and administrative problems.”

The unanimity of the NEI and NRC was no coincidence. The agency and the trade association coordinated their legislative strategy. In December 2002, Rep. Markey released notes of a meeting between NRC officials and the NEI showing that “the nuclear industry is seeking to coordinate lobbying activities with the NRC aimed at blocking congressional legislation to strengthen the nation’s 103 nuclear power plants.”⁵⁷

The notes, taken at an October 2002 closed-door meeting between the NEI and NRC, described:

- The industry’s efforts to obtain a meeting with the White House Office of Homeland Security to “redirect the apparent nuclear focus coming from that office” and work toward “avoiding a [nuclear security] bill.”
- The industry’s need “to support the NRC’s credibility in the eyes of Congress and the public.”
- A pledge from the NRC that security measures developed by the commissioners would not be finalized without another agency-industry meeting where “everything will be out on the table.”⁵⁸

The trade group's favorite technique for wooing lawmakers was flying them and their aides on junkets to nuclear power plants around the world and the proposed Yucca Mountain radioactive waste disposal site in Nevada. In 2002, according to *Roll Call*, the NEI spent more than \$170,000 on these trips – more than any other corporate sponsor of congressional travel.⁵⁹

Figure 3
Nuclear Industry Lobbying, 2002-2004

Company/Organization	2002	2003	2004*	Total
Nuclear Energy Institute (NEI)	\$800,000	\$1,280,000	\$360,000	\$2,440,000
Nuclear Plant Owners	\$16,129,529	\$17,678,137	\$5,324,712	\$39,132,378
Other Nuclear Industry Companies	\$530,000	\$6,740,000	\$2,380,000	\$9,650,000
TOTAL	\$17,459,529	\$25,698,137	\$8,064,712	\$51,222,738

Source: Public Citizen analysis of lobby disclosure reports filed with the Secretary of the Senate and Clerk of the House, 2002-2004. Dollar amounts reflect the total federal lobbying expenditures by companies and organizations during reporting periods in which they lobbied on nuclear security issues. Lobby disclosure reports do not itemize expenditures for specific lobbying issues or bills.

*Totals include lobbying through June 30, 2004. As of October 1, mid-year 2004 lobby disclosure forms were unavailable for some firms that lobbied on nuclear industry security issues in prior years.

The NEI and 10 individual companies each spent more than \$2 million on federal lobbying from 2002 through the first half of 2004, according to the most recent data available. The most active nuclear industry firms in Washington were Honeywell (\$7.5 million), Exelon (\$5.9 million), Duke Energy (\$5.1 million), Progress Energy (\$4.8 million) and TXU (\$4.5 million). [See Figure 5 for annual lobbying totals for all nuclear industry companies.] In addition to the NEI, 18 individual companies lobbied on nuclear security issues over the past three years. These companies include 13 corporate owners of nuclear plants and five other companies that specialize in nuclear plant construction or security.

Three years after 9/11, Congress still has not enacted any legislation to reduce the terrorist threat at nuclear power plants, and the Bush appointees at the NRC have resisted using their regulatory powers to respond to the terrorism threat. For the administration and their close friends in the nuclear industry, the concern that increased security expenses could drive up the cost of nuclear power – and threaten industry profits – apparently trumps national security.

Figure 4
Nuclear Industry Contributions to Bush/RNC, 2000-2004

Company / Organization	Election Cycle						Total
	2000		2002		2004		
	Bush	RNC	Inaug.	RNC	Bush	RNC	
Alliant Energy	--	\$22,000	--	\$10,000	\$4,400	--	\$36,400
Ameren Corp.	\$7,000	\$2,050	--	\$300	\$10,400	--	\$19,750
American Electric Power	\$4,500	\$6,450	--	\$7,000	\$20,000	--	\$37,950
Babcock & Wilcox ⁶⁰	--	--	--	\$750	\$2,700	\$500	\$3,950
Bechtel Corp.	\$6,250	\$240,250	--	\$77,950	\$14,650	\$19,250	\$358,350
Black & Veatch	\$6,000	\$1,950	--	--	\$700	\$250	\$8,900
BNFL Inc. ⁶¹	\$1,300	\$56,800	--	\$61,770	\$3,200	\$509	\$123,579
Burns & Roe Group	--	\$1,000	--	--	--	--	\$1,000
CenterPoint Energy	\$37,820	\$273,636	\$100,000	\$61,694	\$44,000	--	\$517,150
CMS Energy	\$11,050	\$48,240	\$100,000	\$43,350	\$4,000	--	\$206,640
Constellation Energy	\$2,250	\$1,000	--	\$265	\$10,250	\$500	\$14,265
Dominion Resources Inc.	\$13,000	\$335,555	\$100,000	\$195,750	\$38,000	\$800	\$683,105
DTE Energy Co.	\$12,150	\$3,252	--	\$2,650	\$22,690	--	\$40,742
Duke Energy Corp.	\$5,000	\$35,500	--	\$30,500	\$20,710	\$300	\$92,010
Edison International	\$17,050	\$149,775	--	\$20,716	\$2,000	\$5,400	\$194,941
Energy East	\$2,000	--	--	\$70,000	--	--	\$72,000
Entergy Corp.	\$15,000	\$47,450	--	\$53,560	\$13,400	\$28,400	\$157,810
Exelon	\$16,750	\$132,605	--	\$226,651	\$16,750	\$41,405	\$434,161
FirstEnergy Corp.	\$76,685	\$348,630	\$100,000	\$280,812	\$56,000	\$250	\$862,377

Company / Organization	Election Cycle						Total
	2000		2002		2004		
	Bush	RNC	Inaug.	RNC	Bush	RNC	
Fluor Corp.	\$3,500	\$19,950	--	\$48,900	\$4,200	\$2,680	\$79,230
FPL Group Inc.	--	--	--	--	\$14,500	\$250	\$14,750
General Atomics	--	--	--	\$250	\$3,000	\$1,000	\$4,250
General Electric	\$58,301	\$260,686	\$100,000	\$225,916	\$113,175	\$97,918	\$855,996
Great Plains Energy	\$7,000	\$25,000	--	--	--	\$950	\$32,950
Honeywell	\$12,000	\$23,850	\$100,000	\$4,100	\$16,320	\$2,250	\$158,520
Mid-American Energy ⁶²	\$6,300	\$19,300	--	\$5,123	\$65,050	\$26,250	\$122,023
Nuclear Energy Institute (NEI)	\$5,200	\$11,500	--	\$125,350	\$2,250	--	\$144,300
Pacific Gas & Electric Co. (PG&E)	\$4,250	\$116,000	--	\$109,300	\$6,400	\$410	\$236,360
Parsons Energy and Chemicals Group	--	--	--	--	\$250	\$750	\$1,000
Pinnacle West	\$6,000	\$45,000	--	\$30,350	\$10,000	\$5,000	\$96,350
PPL Corp.	\$3,000	\$68,425	--	\$30,000	\$2,500	--	\$103,925
Progress Energy	\$250	\$32,400	--	\$250	\$14,500	\$5,000	\$52,400
PSEG	\$1,000	\$1,000	--	\$30,000	\$20,800	--	\$52,800
SCANA Corp.	\$1,000	--	--	--	\$4,000	--	\$5,000
Sempra Energy	\$3,000	\$1,500	--	\$36,500	\$8,775	\$2,775	\$52,550
Southern Company	\$24,425	\$242,365	\$100,000	\$221,675	\$190,297	\$84,250	\$863,012
STP Nuclear Operating Co.	\$1,900	--	--	--	--	--	\$1,900
TXU	\$40,549	\$291,500	\$100,000	\$293,136	\$39,263	\$1,150	\$765,598
USEC Inc.	--	--	\$25,000	--	\$17,000	\$250	\$42,250

Company / Organization	Election Cycle						Total
	2000		2002		2004		
	Bush	RNC	Inaug.	RNC	Bush	RNC	
Wackenhut	\$12,325	\$2,200	\$20,000	\$2,490	\$4,500	\$840	\$42,355
Washington Group International	\$500	\$44,325	--	\$30,250	\$96,450	\$500	\$172,025
We Energies (Wisconsin Energy)	\$2,000	\$250	--	\$15,000	\$14,800	\$11,100	\$43,150
Wisconsin Public Service Corp.	--	\$15,350	--	\$5,000	\$4,500	\$1,500	\$26,350
Xcel Energy	\$1,000	\$141,500	--	\$5,000	\$18,300	--	\$165,800
TOTAL	\$427,305	\$3,068,244	\$845,000	\$2,362,308	\$954,680	\$342,387	\$7,999,924

Source: Public Citizen analysis of data provided by the Center for Responsive Politics. Totals include contributions from political action committees and individual members or employees of an organization, as well as unrestricted "soft money" donations from individuals and corporate treasuries before the 2004 election cycle (when such donations became illegal). Contribution data are as of October 1, 2004.

Figure 5
Nuclear Industry Lobbying by Company, 2002-2004

Company / Organization	2002	2003	2004*	Total
Alliant Energy	\$626,888	\$585,737	--	\$1,212,625
American Electric Power	\$1,558,422	\$965,000	n/a	\$2,523,422
Burns & Roe Group	\$110,000	\$80,000	--	\$190,000
Constellation Energy	\$440,000	\$270,000	--	\$710,000
Dairyland Power Cooperative	--	\$90,000	--	\$90,000
Dominion Resources Inc.	\$440,000	\$520,000	--	\$960,000
DTE Energy Co.	\$1,520,000	\$2,280,000	--	\$3,800,000
Duke Energy Corp.	\$2,270,000	\$2,000,000	\$850,000	\$5,120,000
Entergy Corp.	\$1,570,699	\$1,647,000	\$700,712	\$3,918,411

Exelon	\$2,172,570	\$2,864,400	\$870,000	\$5,906,970
General Atomics	--	\$1,120,000	--	\$1,120,000
Honeywell	--	\$5,200,000	\$2,340,000	\$7,540,000
Nuclear Energy Institute	\$800,000	\$1,280,000	\$360,000	\$2,440,000
Progress Energy	\$1,830,950	\$1,896,000	\$1,104,000	\$4,830,950
Southern California Edison	\$1,380,000	\$1,480,000	\$620,000	\$3,480,000
TXU	\$2,320,000	\$2,220,000	--	\$4,540,000
Wackenhut	\$160,000	--	\$40,000	\$200,000
Westinghouse Electric Co.	\$260,000	\$340,000	--	\$600,000
Xcel Energy	--	\$860,000	\$1,180,000	\$2,040,000
TOTAL	\$17,459,529	\$25,698,137	\$8,064,712	\$51,222,378

Source: Public Citizen analysis of lobby disclosure reports filed with the Secretary of the Senate and Clerk of the House, 2002-2004. Dollar amounts reflect the total federal lobbying expenditures by companies and organizations during reporting periods in which they lobbied on nuclear security issues. Lobby disclosure reports do not itemize expenditures for specific lobbying issues or bills.

* Totals include lobbying through June 30, 2004. As of October 1, mid-year 2004 lobby disclosure forms were not available for all companies that lobbied on nuclear industry security issues in prior years.

Experts on Nuclear Power Plant Safety

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Dave Lochbaum, nuclear safety engineer, Union of Concerned Scientists
Jim Riccio, Greenpeace
Alice Slater, president, Global Resource Action Center for the Environment

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³⁸ Edison International, the parent company of Southern California Edison, owns 75 percent of the San Onofre nuclear power plant (San Clemente, Calif.) and 15.8 percent of the Palo Verde nuclear power plant (Phoenix, Ariz.)

³⁹ Frank retired in January 2002.

⁴⁰ Wisconsin Electric (a.k.a. We Energies) owns the Point Beach nuclear power plant (Two Rivers, Wis.).

⁴¹ Through its stake in Texas Genco, CenterPoint owns approximately 25 percent of the South Texas Project nuclear facility (Bay City, Texas). In July, CenterPoint struck a deal, pending regulatory approval, to sell Texas Genco to a group of private investors. The deal will not be completed before the first quarter of 2005.

⁴² TXU owns the Comanche Peak nuclear power plant (Glen Rose, Texas).

⁴³ Mid-American holds a 25 percent stake in the Quad Cities nuclear power plant (Cordova, Ill.)

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⁶⁰ Babcock & Wilcox is a division of McDermott International.

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