

Sarkar, J. (2022) Nuclear Reaganomics: Corporate lobbying after Three Mile Island, 1979-1985. In: Dietrich, C. R. W. (ed.) *Diplomacy and Capitalism: The Political Economy of U.S. Foreign Relations*. University of Pennsylvania Press: Philadelphia, Pennsylvania, pp. 206-220. ISBN 9780812253955 (hardback); 9780812298567 (ebook); 9780812225310 (paperback) (doi: 10.2307/j.ctv1sjwpfz.14)

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Chapter 11 Nuclear Reaganomics: Corporate Lobbying After Three Mile Island, 1979–1985

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Pre-print author's version

Full citation

"Nuclear Reaganomics: Corporate Lobbying after Three Mile Island, 1979-1985," in *Diplomacy and Capitalism: The Political Economy of U.S. Foreign Relations* edited by Christopher R. W. Dietrich (Philadelphia, PA: University of Pennsylvania Press, 2022), pp. 206-220.

Acknowledgment: The author is grateful to Fredrik Logevall and the 2020-21 Ernest May Fellows in History and Policy at Harvard University for insightful comments on an earlier draft.

On the morning of November 4, 1980, a high-ranking Bechtel Corporation official circulated a thirty-seven-page action plan within Ronald Reagan's Energy Policy Task Force. Titled "Recommended Action Plan for the New Administration," it contained detailed instructions to reorient U.S. foreign and domestic policies on nuclear energy to steer them away from what the U.S. nuclear industry perceived as Carter-era "antigrowth" and "political" impediments.¹ It was the blueprint to facilitate a "virtual 180-degree reversal of the Carter administration policy" to get the "U.S. nuclear industry back on its feet."² The document originated within the top echelons of Bechtel, the San Francisco-based engineering giant that had received the bulk of construction contracts for U.S. power reactors since the Eisenhower years. The action plan's specific goal was to increase U.S. nuclear exports, which it equated with U.S. global power. The document bluntly

stated, "The influence of the U.S. on international nonproliferation policies is in direct proportion to its role as a leading supplier. The less we sell overseas, the less influence we have."³ Circulated from the office of W. Kenneth Davis, Bechtel's vice president for nuclear development and a member of Reagan's Energy Policy Task Force, the action plan had three top-tier Bechtel executives in copy: Harry O. Reinsch, Caspar W. Weinberger, and Bechtel's president, George P. Shultz. Even though preelection polls had depicted a fairly close election, the morning of election day the note accompanying the action plan expressed "every confidence" that the Energy Policy Task Force would imminently reconvene to devise policies of "President-Elect Reagan."⁴ Later that day, Reagan won by a landslide, and the Republican Party took back control of the Senate for the first time in 28 years. According to the *New York Times*, at 9:50 P.M. Eastern time on election day, Jimmy Carter made the earliest concession statement of a major presidential candidate since 1904, when Alton B. Parker had conceded defeat to Theodore Roosevelt.⁵ In 1981, several of the "Bechtellians" referenced in the action plan would go on to hold key positions in foreign, defense, energy, and economic policies in the Reagan administration.

During the Carter years, Ronald Reagan had emerged as a staunch critic of the president's foreign and domestic policies. The former governor of California claimed that Jimmy Carter had endangered U.S. national interests abroad by continuing with détente with the Soviet Union and jeopardized interests of the white working class at home by imposing higher taxes and by failing to manage stagflation. Reagan's message attracted evangelical Christians, social conservatives, fiscal conservatives, libertarians, and business leaders such that both the New Right and the Religious Right came together in support of his 1980 presidential campaign.⁶

The ongoing Iran hostage crisis, which was exactly a year old on the day of the election, had dealt a huge blow to Carter's popularity as president, as had the Soviet invasion and occupation of Afghanistan. Reagan's proposed solution was to increase defense spending, reduce taxes, and drastically curtail the institutional capacity of the federal government. The Reagan revolution ushered in supply-side economics as the guiding practice of government policies, thereby formally replacing demand-driven Keynesian economics of the postwar years.⁷

In the midst of falling domestic demand for nuclear reactors, the Carter administration had passed stricter regulations on U.S. nuclear exports for nonproliferation, which upset the industry.⁸ The 1978 Nuclear Non-Proliferation Act exacerbated the industry's sense of crisis because it constrained its export potential by demanding full-scope safeguards from countries that bought U.S. nuclear materials and technologies.⁹ Economic duress of the nuclear industry meant bad business for both reactor suppliers like General Electric, Westinghouse, and Babcock & Wilcox as well the building corporation Bechtel, which handled the majority of infrastructure projects related to reactor construction.

The Three Mile Island accident in March 1979 in Middletown, Pennsylvania, thus aggravated the woes of an already struggling industry. After only one year of operation, the second reactor at Three Mile Island nuclear power plant experienced severe core damage, leading to radiation leaks that caused a public health scare among rural Pennsylvanians living close to the plant. The Kemeny Commission, formed by President Carter to independently investigate the causes of the reactor accident, found technological flaws in the reactor design as well as human operator errors. In October 1979, the Kemeny Commission's report publicly criticized the nuclear industry and the Nuclear Regulatory Commission (NRC) for what it called an avoidable accident. The commission's report affected public trust in nuclear power at home and confidence in U.S. reactor safety standards abroad.¹⁰ As antinuclear activists and environmental groups began to agitate against nuclear power after the reactor accident, the U.S. nuclear industry could not use rising oil prices during the Iranian revolution to promote itself as a viable energy alternative, as it had done during the 1973 oil shock. Against this backdrop, industry leaders sought a turnaround through increased government support— financial aid and deregulation— and found a willing advocate in presidential candidate, Ronald Reagan.

Before his political career, Reagan spent over a decade as the national spokesperson for General Electric as host of *General Electric Theater*, broadcast on CBS radio and television from 1953 to 1962.¹¹ The Reagan family, from their ranch house in Pacific Palisades in Los Angeles, California, appeared with General Electric home appliances in three-minute commercials with the slogan, "live better electrically."¹² Reagan even toured the company's facilities for several weeks each year as its goodwill ambassador. By the time he became the governor of California in 1967, Reagan's reputation as being probusiness and antiregulation was well established. He lost his presidential bid to incumbent Gerald Ford at the Republican National Convention in 1976 but emerged as a clear favorite of conservatives in the primaries in western and southeastern states.

Four years later, in Reagan's 1980 presidential campaign, not only were business leaders closely involved, but several high-ranking executives also took up prominent positions in his administration. The "boys from Bechtel" courted considerable public controversy for casting overwhelming influence on government policy during the Reagan years.¹³ After all, Bechtel's president, George Shultz, served as the secretary of state from 1982 to 1989 after chairing the President's Economic Recovery Policy Advisory Board in 1981 and 1982. The company's general

counsel, Caspar Weinberger, was appointed secretary of defense in 1981, a position he held until 1987, while Bechtel's top executive for nuclear power, W. Kenneth Davis, served as deputy secretary of energy from 1981 to 1983. All three were also involved in canvassing for reduced government oversight of the U.S. nuclear industry in the aforementioned action plan for Reagan's Energy Policy Task Force.

Scholarly efforts to foreground the role of economics in U.S. foreign relations is not new, inaugurated by Charles Beard, and expanded through economic critiques of U.S. global power by William Appleman Williams along with his fellow exponents of the Wisconsin School.¹⁴ In U.S. foreign relations historiography, the predominant narrative about proliferation and nonproliferation is that of national security, mainly understood through the prism of arms control.¹⁵ The global atomic marketplace is hardly present in the historical scholarship even though capitalist forces are intrinsic to both the circulation of nuclear technologies that can lead to "proliferation" as well as efforts to prevent that from happening, or "nonproliferation."¹⁶ That economic statecraft has been integral to U.S. nonproliferation such that the relationship between U.S. diplomacy and capitalism has significant implications for U.S. empire, merits a deeper inquiry. Emily Rosenberg's foundational work on state-corporate association to promote U.S. financial interests abroad, Kim Phillips-Fein's study of the role of businesses in the U.S. conservative movement, and Paul Kramer's notion of the United States as a "commodifying empire" are particularly relevant for capturing the role of capitalist actors and processes in U.S. nonproliferation policy.¹⁷

This essay discusses how economic statecraft has been integral to U.S. nonproliferation, such that the analytical framework of American "capitalist diplomacy," as invoked in the introduction to this volume, is essential to fully understand its intricacies. In this volume, Jason Scott Smith's essay on neoliberal legacies of the New Deal (Chapter 4), Erum Sattar's work on the U.S. export of expertise in dams (Chapter 5), and Alanna O'Malley's piece on the role of private corporations and the Export-Import Bank in decolonizing Southern and Central Africa (Chapter 9) directly intersect with the themes of this essay, particularly with reference to the nature of state-corporate networks, how those changed over time, and how the changes led to dispossession and inequality in society.

Covering up Three Mile Island

"Yes, I am scared of the possibility of a nuclear accident. Yes, I am scared of the possible impact of nuclear power plants on the environment," declared John G. Kemeny in his opening convocation speech as president of Dartmouth College in September 1978.¹⁸ He was addressing his young audience at the beginning of the academic year about "the growth of complexity in our civilization." Within six months, Kemeny would find himself as the chairman of the President Carter's Commission on the Accident at Three Mile Island.

On March 28, 1979, the second reactor at Three Mile Island (TMI-2) experienced the worst accident in the history of U.S. commercial nuclear power. The accident began just before four o'clock in the morning, when the cooling valve malfunctioned, leading to a partial meltdown of the reactor core. The plant operator, Metropolitan Edison, did not inform Richard Thornburgh, the governor of Pennsylvania, about the accident until around seven o'clock in the morning.¹⁹ Civil defense officials were called in. Much confusion ensued regarding evacuation of the area among rural Pennsylvanians who lived in the area. To avert panic and save its own reputation, Metropolitan Edison claimed that there was no radiation leak from the accident and that the site was "contained."

In reality, the core of the reactor was severely damaged, and radiation was released into the atmosphere.

A Congressional Research Service brief later noted that "there was some exposure of nearby residents to comparatively small amounts of radiation," while "some workers received excessive exposures," though "not enough to cause short-term injury."²⁰ The residents of Middletown, the closest town to the nuclear power plant, were not convinced. Over the next months and years, disgruntled residents filed lawsuits seeking compensation for lost business while public health fears of radiation-caused cancers fueled a burgeoning antinuclear movement.

The partial meltdown of TMI-2 grabbed headlines worldwide. The reactor accident not only contributed to mistrust of nuclear power and the industry but also demonstrated the lack of coordination in emergency preparedness at local, state, and federal levels. Lacking adequate information on nuclear accidents, and receiving mixed signals from Metropolitan Edison, Governor Thornburgh vacillated about whether to evacuate residents from the area. He evacuated only pregnant women and preschool children within a five-mile radius of the nuclear power plant but advised those within a ten-mile radius to stay.²¹ An evacuation of two hundred thousand to three hundred thousand people, although planned, was never executed, which led to public controversy about the governor's decisions.²²

On April 11, 1979, by executive order, President Carter appointed mathematician John Kemeny to chair the President's Commission on the Accident at Three Mile Island. Commonly known as the Kemeny Commission, the twelve-member team's task was to provide an independent assessment of "what happened at Three Mile Island.... how the accident could have been prevented.... [and] how the Government and others responded" and to make recommendations to "prevent any future nuclear accidents."²³ The Kemeny Commission's scrutiny of the U.S. nuclear industry was restricted to the utility (Metropolitan Edison Company, a subsidiary of General Public Utilities), the manufacturer of the nuclear reactor (Babcock & Wilcox), the engineering company that built the Three Mile Island plant (Burns and Roe), and the NRC.

Within months, the Kemeny Commission found that "fundamental changes in the industry, especially–but not only in the NRC, will be required if nuclear accidents as serious as that at Three Mile Island are to be prevented."²⁴ The commission discovered that as a result of an incident in the Davis-Besse plant in Ohio in September 1977, engineers at Babcock & Wilcox and an NRC inspector had "relatively clearly identified the potential for accident which became a reality at Three Mile Island." The commission took the view that "had appropriate action resulted at Babcock and Wilcox, the NRC, or in the utility industry, it is highly unlikely the accident would have happened."²⁵ Two engineers from Babcock & Wilcox testified to the commission that they had warned their superiors in separate memorandums that equipment malfunctions could lead to accidents in reactors like at Three Mile Island, a year before the actual accident.²⁶ However, Babcock & Wilcox ignored the warnings and sent no guidance to the utility company, Metropolitan Edison. Even after the partial meltdown of TMI-2, Babcock & Wilcox sent guidance to Metropolitan Edison on how to handle such emergencies after waiting a full week.

The star-studded movie *The China Syndrome*, released only weeks before the Three Mile Island accident, encapsulated the fears and mistrust of the public when it came to nuclear power. In the plot, an unsafe reactor is running at full capacity in California because otherwise the utility company would lose millions of investment dollars. The inspector has tampered with the radiographs to hide the technical flaw in the reactor. When the plant supervisor (John Lemmon) finds out, he advises

that the reactor should be shut down but is met with strong resistance from his colleagues and the company. To inform the public, the supervisor reaches out to a reporter (Jane Fonda) and her cameraman (Michael Douglas), who had earlier witnessed an accident being averted in the same nuclear power plant caused by the unsafe reactor. In his desperation, the plant supervisor takes the nuclear power plant hostage to broadcast his message about the unsafe reactor to the public. The film tragically ends with the plant supervisor being shot dead inside the reactor's control room by a SWAT team called in the utility company.

The chilling similarity between the film and their own nightmare was not lost on residents near Three Mile Island, especially as information about the negligence of Metropolitan Edison, Babcock & Wilcox, and the NRC became public knowledge. Citizens organized through environmental and antinuclear groups to hold the powerful accountable—the companies and the federal government. The antinuclear groups that already existed in the area before the accident, such as Three Mile Island Action Alert and the Environmental Coalition on Nuclear Power, saw their memberships rise. Numerous new civil society groups emerged in the wake of the accident, such as People Against Nuclear Energy, the Campaign to Stop the Restart, Concerned Citizens of Londonderry, and the Susquehanna Valley Alliance.²⁷

In the era of post-Vietnam mistrust of big government and large corporations, nuclear power entered the popular imagination as antidemocratic, secretive, and dangerous. Nuclear power represented the epitome of power over people, which in the latter half of the 1970s attracted popular opposition from both the political left and the right. Nowhere was this more pronounced than in the public health effects of radiation from accidents caused by poor reactor safety standards. The murder of Karen Silkwood, a technician at a Kerr-McGee plutonium fuel fabrication plant in Crescent, Oklahoma, had made national headlines just a few years before in November 1974.²⁸ In the weeks leading up to her death, she had been gathering evidence on safety standards at the plant to prove Kerr-McGee's willful negligence.²⁹ Even though the NRC closed the plant in 1975, Silkwood's heirs demanded compensation. The lawsuit continued well into 1979, when a federal jury awarded her estate \$10.5 million in damages, which made it to the front page of the *New York Times*. Litigation gave some hope, although it did not alleviate all problems. In the case of Three Mile Island, in 1981 the nuclear industry settled claims worth \$20 million for economic loss to businesses and individuals within twenty-five miles of the site and paid another \$5 million to establish a public health fund to study the health impact of the reactor accident.³⁰

There were no radiation-related casualties in the Three Mile Island accident, but the Kemeny Commission found "deficiencies in instrumentation for measuring the radioactivity released, particularly during the early stages of the accident."³¹ The commission's report also found that three plant workers received radiation doses of about 3 to 4 rems, which exceeded the NRC's maximum permissible quarterly dose of 3 rems.³² Jacob I. Fabrikant, renowned environmental radiologist and then senior scientist at the Donner Laboratory at Berkeley, directed the Kemeny Commission's Public Health and Safety Task Force. He confirmed at the Senate hearings of the Subcommittee on Health and Scientific Research in April 1979 that little information was available on the effects of low-dose radiation on the human body. He stated, "We do not know what the health effects are at dose rates as low as a few hundred millirem per year. It is probable that if health effects.... it has been necessary to estimate human cancer risk at low doses primarily from observations at relatively high

doses."³³ In his 1980 address at a conference organized by the industrial lobbying group Atomic Industrial Forum, Fabrikant repeated his position by reminding his audience that very little human data was available from epidemiological surveys of exposure to low-level radiation from which to draw conclusions for public health policy.³⁴ Nevertheless, in the report of the Kemeny Commission, Fabrikant concluded that radiation doses received by the population were so small that "there will be no detectable additional cases of cancer, developmental abnormalities, or genetic ill-health as a consequence of the accident at TMI." According to him, the major health effect of the accident was on "the mental health of the people" living in the area and the workers at the plant.

The Three Mile Island accident and the Kemeny Commission report were disastrous for an already struggling U.S. nuclear industry. In March 1980, the utility company Metropolitan Edison sued the reactor supplier Babcock & Wilcox for \$500 million for its inability to warn the utility company after the incident at Davis-Besse.³⁵ Metropolitan Edison also sued the NRC for \$4 billion for negligence, albeit unsuccessfully. In response to the Kemeny Commission's recommendations, the nuclear power industry formed the Institute of Nuclear Power Operations (INPO) in December 1979, headquartered in Atlanta, Georgia. The industry also created the Nuclear Safety Analysis Center within the Electric Power Research Institute to discuss technical changes to improve reactor safety. ³⁶ Formed as a nonprofit organization incorporated in the state of Delaware, INPO, which still exists, called itself an independent safety organization for the promotion of excellence in the operation of U.S. nuclear power plants. However, it promoted safety culture through self-evaluation of the nuclear power plants, namely, by the utility companies themselves. INPO's funding came from the industry while it maintained independence from the government.

Lobbying the State

President Eisenhower's 1953 Atoms for Peace proposal pushed forward civilian nuclear energy in foreign markets, thereby transforming U.S. power reactors into tools of economic statecraft.³⁷ Under the 1954 U.S. Atomic Energy Act, large amounts of information concerning civilian nuclear technologies were declassified for the first time. This permitted U.S. businesses to own nuclear knowhow and trade in it, which had previously been the sole preserve of the U.S. government.³⁸ From the mid-1950s onward, as the Eisenhower administration encouraged civilian nuclear energy at home and abroad, large corporations, like General Electric, Westinghouse, and Bechtel, had a natural advantage as they could withstand the sizeable financial risks in this new source of electricity. More importantly, it was only with the 1957 Price-Anderson Act, which limited corporate liability in nuclear accidents, that the industry finally became eager to participate in commercial nuclear power.³⁹

Many large U.S. firms had prior experience in nuclear technologies through their participation in the Manhattan Project during the Second World War.⁴⁰ Companies such as DuPont, Union Carbide, Allis-Chalmers, and others worked on government contracts in nuclear fission research during the war. Both General Electric and Westinghouse provided electrical equipment for the Manhattan Project, among other things. Notably, Bechtel developed infrastructure for the Hanford site in Washington state, while Westinghouse built reactors to power ships and submarines for the U.S. Navy under the stewardship of Hyman Rickover.

The U.S. nuclear industry had historically depended on federal funding, and state patronage was the key to its emergence. Government-led capitalist growth of the New Deal era created a nurturing environment for U.S. firms, many of which later played a significant role in the nuclear industry. Established in 1898, Bechtel gained its initial experience in infrastructure projects of the New Deal years with its first major undertaking, the Hoover Dam. Similarly, General Electric and Westinghouse, also founded in the Gilded Age, benefited from New Deal-era policies such as the Rural Electrification Administration, which brought electricity to America's farms.

Reactors were expensive products—selling them abroad required large loans for their buyers. Those loans were provided by the U.S. Export-Import Bank, the taxpayer-funded financial institution established in the New Deal era to provide public credit to encourage private participation in economic activities outside the United States.⁴¹ After Atoms for Peace, while the Price-Anderson Act underwrote financial risks from nuclear accidents, the Export-Import Bank became indispensable for selling U.S. power reactors in foreign markets. When U.S. companies competed with their European and Canadian counterparts in selling reactors abroad, their offers would be sweetened by Export-Import Bank loans on generous terms.

After his electoral victory, Ronald Reagan formed a transition team for the NRC headed by Richard T. Kennedy. A former Army colonel, proindustry Kennedy was nominated in 1975 by President Gerald Ford as a commissioner to the NRC, where he frequently disagreed with fellow NRC commissioner Victor Gilinsky over nonproliferation matters. Kennedy was also a member of Reagan's advisory group for nuclear power regulation that was heavily composed of business leaders such as Arthur Randol of Exxon and Frank Staszesky of Bechtel.⁴² With Kennedy's leadership of the NRC Transition Team, business leaders communicated their concerns about specific NRC regulations with requests to disband them once Reagan was sworn in.

In one such letter, Norval E. Carey, vice president of General Atomics, wrote to Kennedy complaining about the NRC's security "upgrade rule" that required companies to improve infrastructure of nuclear facilities to prevent theft, sabotage, and other forms of unauthorized access of special nuclear materials. For Carey, the NRC requirement increased costs even though the "derived benefits are very abstract, highly subjective and unquantifiable."⁴³ Carey called for a reexamination of the rule and "considerations of cost/benefit" because the NRC's "overzealous regulation imposes unwarranted penalty upon the sector of private industry."⁴⁴ The industry thus opposed nuclear security measures on grounds of costs.

The Reagan administration responded positively to corporate lobbying by the nuclear industry. The administration's actions in 1981 were made according to the blueprint provided in "Recommended Action Plan for the New Administration" from November 1980. The plan, prepared by the subcommittee on nuclear power and electric utilities of Reagan's Energy Policy Task Force, had directed the administration to develop a policy that "includes support of accelerated licensing of light water reactors, the reprocessing of spent fuel, demonstration of high-level waste disposal, continued development and demonstration of the fast breeder reactor and, when timely, fusion."⁴⁵

The industry wanted limited government oversight, not reduced funding. In October 1981, when Reagan announced several measures to limit the regulatory capacity of the federal government in civilian nuclear power, he spoke with one voice with industry leaders. He declared, "Nuclear power has become entangled in a morass of regulations that do not enhance safety but that do cause extensive licensing delays and economic uncertainty."⁴⁶ The administration removed the federal ban on commercial reprocessing of plutonium and on breeder reactor technologies—two major Carter-

era polices to manage the proliferation-prone plutonium economy that were extremely unpopular with the industry—and promised a business-friendly environment for the "revitalization of the U.S. industry's efforts to develop nuclear power."⁴⁷

While the administration slashed government funds for social services like public housing, it increased funding for nuclear energy. At a time when every other Department of Energy program witnessed budget cuts, such as solar energy and conservation, the budget for nuclear energy increased by 36 percent to \$1.6 billion.⁴⁸ His administration even endorsed funding for the Clinch River breeder reactor in Tennessee, which his predecessor had opposed on grounds of nonproliferation and economics.⁴⁹

The biggest concern of the industry as a consequence of Three Mile Island was NRC's prerogative of granting export licenses. ⁵⁰ Their target was to make the NRC toothless. Frank M. Staszesky Jr. of Bechtel Power wanted to shift "the export licensing function from NRC to the Executive Branch" through the president's executive order.⁵¹ The proposal consisted of the executive branch determining an export license on the basis of the Carter-era Nuclear Non-Proliferation Act. Such a mechanism, Staszesky argued would "eliminate the existing confusion and uncertainties" and be "conducted in a timely manner."⁵² Despite the U.S. nuclear industry's dislike of the Carter-era domestic legislation, any amendment would have been difficult to move through the Democratic-controlled House Foreign Relations Committee. As a result, both the nuclear industry and proindustry Republican lawmakers, such as John Wydler of New York, recommended that the president decide export licenses through executive order "while a strategy is worked out with the White House" to deal with the Non-Proliferation Act.⁵³

Stripping the NRC of its regulatory power while concentrating that authority in the hands of a proindustry president was representative of what economists would call "regulatory capture." The nuclear industry and pro-industry lawmakers saw it as working toward an agenda to help "the U.S. to regain its worldwide leadership in nuclear development" and dismantle the "bankruptcy of the Carter administration's nonproliferation policy."⁵⁴

The relationship between civilian nuclear exports and U.S. nonproliferation was obvious to the corporate actors. The U.S. nuclear industry needed to sell power reactors abroad to control the recipient countries' nuclear programs. If the United States did not, some other country would, like France, West Germany, or the Soviet Union. To business leaders, the Carter-era policy of denial through strict export regulations was misguided, and it could only be corrected by a new approach to "rejuvenate the Eisenhower 'Atoms for Peace' concept thru [*sic*] aggressive nuclear leadership in the framework of assured energy supply."⁵⁵

John Wydler recommended to Richard Kennedy to fill key appointments in the Departments of State, Energy, and Commerce, the National Security Council, the Arms Control and Disarmament Agency, and the NRC to be of "energy supply advocates" who believed that "aggressive nuclear cooperation can help recapture U.S. influence on other nations."⁵⁶ That the industry got its way became obvious when, in 1981, Caspar Weinberger of Bechtel became the secretary of defense and Kenneth Davis, also of Bechtel, was appointed deputy secretary of energy. The following summer, George Shultz, the former president of Bechtel, was named secretary of state following the resignation of Alexander Haig. Later that September, Richard Kennedy himself, proindustry NRC commissioner and chair of the NRC Transition Team, became the Reagan administration's ambassador-at-large for nonproliferation and special adviser on nuclear energy.⁵⁷

When Shultz became the third Bechtel executive to join the Reagan administration in July 1982, the company's influence over government policy came up for review at the Senate Foreign Relations Committee during his confirmation.⁵⁸ Bechtel had large infrastructure contracts in many parts of the world, including Saudi Arabia, a kingdom it had been particularly close to since the 1940s.⁵⁹ After the 1973 oil shock, when oil-rich nations in the Middle East had large spendable surpluses, Bechtel bagged construction contracts worth billions of dollars, like the Jubail industrial city and the King Khalid International Airport, both in Saudi Arabia.⁶⁰ At his Senate confirmation, while describing the family-owned San Francisco-based multinational construction company as a "truly remarkable organization," Shultz lost his composure when Alan Cranston, Democratic senator from California, produced letters from Bechtel official Joseph A. Damm that showed Bechtel's willingness in 1975 to sell the "entire gamut" of sensitive nuclear technology related to uranium enrichment to Brazil. Shultz himself was then Bechtel's president.

At the time, the Ford administration was trying to stop West German company Kraftwerk Union from exporting similar technologies to Brazil.⁶¹ Cranston asked Shultz whether he would reverse the Carter-era policy of restricting exports of nuclear technology as secretary of state. Cranston claimed that Bechtel's offer to Brazil in 1975 was an attempt to undermine the U.S. government's nonproliferation policy. Shultz retorted that Cranston's question was a "kind of smear on Bechtel." He claimed to have learned about the Brazil offer "only after the fact" blaming it on the Bechtel official for being an "overenthusiastic business development person."⁶² Despite concerns about Bechtel's overwhelming influence on the Reagan administration's policy, the Republicancontrolled Senate unanimously voted 97-0 to confirm George Shultz as secretary of state in July 1982, a position in which he would serve until January 1989. The Reagan administration indeed implemented the nuclear industry's recommendations for pursuing an aggressive nuclear export policy. By the end of 1982, the Reagan administration was seeking new markets, such as the People's Republic of China.⁶³ The administration worked around the Nuclear Non-Proliferation Act's requirement of full-scope safeguards by finding third-party suppliers such as France to keep prior U.S. commitments of nuclear exports, as in the case of India and South Africa.⁶⁴ It reversed earlier policies of not providing nuclear materials and technologies to countries suspected of proliferation. The administration approved the sale of 143 tons of U.S.-produced heavy water to Argentina through West Germany and did away with the ban on providing reactor spare parts to India.⁶⁵

Despite the Reagan administration's proactive support for the nuclear industry, the export of U.S. power reactors did not increase. A large part of the reason was the long-term social and political effects of the accident in Three Mile Island. Public knowledge of negligence by the NRC and the nuclear industry in the wake of the nuclear accident led social movements on the antistatist conservative right and the proregulation political left to come together in a bipartisan backlash against nuclear power.⁶⁶

Nuclear Power and American Capitalist Diplomacy

The Reagan administration did not trade nonproliferation for geopolitics, but the two went hand in hand, mediated through the capitalist diplomacy of the U.S. nuclear industry. The administration did not dismantle the NRC and the Nuclear Non-Proliferation Act. It neither permanently withdrew from the International Atomic Energy Agency nor challenged the nonproliferation treaty.⁶⁷ It simply worked to make sure that the institutions, legislation, and treaty mechanisms of nonproliferation *worked* for U.S. business interests at home and abroad. The tensions between the state and corporate actors of the Ford and Carter years were thus transcended in favor of increased coordination and cooperation between businesses and the government in the realm of nonproliferation. National Security Decision Directive 6 represented the essence of numerous memos and much correspondence from businesses to the Reagan campaign and the transition team on what government policy on nonproliferation should be like: "remove any unnecessary impediments to commercial relations in the field of nuclear energy."⁶⁸

Scholarship on the Reagan years is dominated by narratives of nuclear deterrence, the nuclear war scare, and arms control, such as Able Archer, the Strategic Defense Initiative, and the Intermediate-Range Nuclear Forces Treaty, while most accounts of Reagan-era U.S. nonproliferation policy focus on the government's neglect of proliferation concerns for geopolitical ends.⁶⁹ The administration's benign neglect of Pakistan's nuclear weapons development as CIA-funded mujahideen fought the Soviets in Afghanistan, its tacit support for Israel's 1981 airstrike on Iraq's Osirak reactor, and an informal understanding with South Africa to not conduct nuclear weapon tests are notable examples.⁷⁰ This essay has shown that the above is only a small part of the full picture. US capitalist diplomacy holds the key to comprehensively understand the Reagan administration's nuclear nonproliferation policy.

As social movements against nuclear power and nuclear weapons reduced public support for the industry within the United States, its business leaders looked abroad for markets. New markets were hard to come by in an age of wars, civil wars, and insurgencies raging from the Middle East to Central America to southern Asia. Despite a nuclear cooperation agreement with China, congressional approval did not arrive during the Reagan years. In 1983, the industry launched an extensive public relations campaign to clean up its image, called "Nuclear Power: Time for a Comeback," in its efforts to educate what it perceived to be a misguided public.⁷¹ In 1985, several nuclear reactor accidents took place at Davis-Besse in Ohio, Rancho Seco in California, and Brown's Ferry in Tennessee, which exacerbated popular mistrust of nuclear power.⁷² That year, a *Forbes* front page article titled, "Nuclear Follies," wondered, "Can a technology as rigorous and demanding and, for all that, as useful as nuclear power find a place in a society as open as the U.S.!"⁷³

It was not until the 1986 Chernobyl accident in Soviet Ukraine that the U.S. nuclear industry could claim to have a superior reactor design and better safety standards than that of the other superpower. The specter of the RBMK reactor, Soviet red tape and misinformation, and the radiation release that spread over Europe made the plight of the residents near Three Mile Island far less jarring to the general public.

The dispossession caused by state-corporate networks were not insignificant in Three Mile Island. Fearful of radiation-caused illnesses and deeply distrustful of nuclear power, the residents near Three Mile Island organized themselves in 1985 to oppose the restart of the TMI-1 reactor. To them, nuclear power reactors were large projects for which big government acted with big corporations. Nuclear power was secretive, was managed by technocrats, and reeked of being antidemocratic. Despite the community's efforts to influence government policy, the NRC voted four to one in favor of restarting the reactor.⁷⁴ As for TMI-2, Bechtel, which had been in charge of the cleanup of the reactor, was accused of mismanagement and neglect of safety standards.⁷⁵ Even though the utility company dismissed the allegations, the NRC found evidence in March 1986 that Bechtel had indeed harassed the engineer who had complained about its safety procedures.⁷⁶ One

month later, Pripyat would wake up to what would become arguably the worst nuclear reactor accident in history. For the U.S. nuclear industry, media criticism of Soviet reactor technologies and their opaque organizational culture would provide some temporary relief.

Notes

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² Ibid.

³ Ibid.

⁴ Letter from F. M. Staszesky, Jr., to Michel T. Halbouty, 4 November 1980, Box 91, RTK-HIA.

⁵ Hendrick Smith, "President Concedes: Republican Gains Victories in All Areas and Vows to Act on Economy," *New York Times*, 5 November 1980, 2, 18.

⁶ Kevin Kruse and Julian E. Zelizer, *Fault Lines: A History of the United States Since 1974* (New York: W. W. Norton), Chapter 5: Turning Right; Kim Phillips-Fein, *Invisible Hands: The Businessmen's Crusade Against the New Deal* (New York: W. W. Norton, 2010), Chapter 11: The Market Triumphant.

⁷ On this transformation originating in the economic crisis of the 1970s, see Judith Stein, *Pivotal Decade: How the United States Traded Factories for Finance in the Seventies* (New Haven, CT: Yale University Press, 2010).

⁸ Jayita Sarkar, "The Economic Strategies of U.S. Nonproliferation Policy During the Nixon-Ford Years," *Journal* of *Global Security Studies* 6, no.1 (March 2021) 1-6; see also "U.S. Reactor Makers' Recovery in Doubt After 4-Year Market Dip," *New York Times*, March 7, 1978, 47, 59.

⁹ The Nuclear Nonproliferation Act required recipient countries to accept full-scope IAEA safeguards on U.S. nuclear exports, which few foreign countries were keen to do, thereby hampering export prospects for the nuclear

industry. See Public Law 95-242, Nuclear Nonproliferation Act, 10 March 1978,

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¹⁴ Charles A. Beard, An Economic Interpretation of the Constitution of the United States (New York, NY:

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¹⁵ On this subject, see, for example, Francis J. Gavin, "Strategies of Inhibition: U.S. Grand Strategy, the Nuclear Revolution, and Nonproliferation," *International Security* 40, no. 1 (Summer 2015): 9–46. Gheorghe makes a commendable attempt to foreground the role of the market in nuclear proliferation but does not account for economic factors, actors, and processes, but instead assumes that market share is the equivalent of political power distribution (or "polarity," as she calls it). See Eliza Gheorghe, "Proliferation and the Logic of the Nuclear Market," *International Security* 43, no. 4 (Spring 2019): 88–127.

¹⁶ U.S. nonproliferation policy can be defined as unilateral, bilateral, and multilateral strategies to prevent other countries from developing their own nuclear weapons.

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³⁴ Jacob I. Fabrikant, "Health Effects of the Nuclear Accident at Three Mile Island," presented, as Invited Speaker, at the Conference on Environmental Regulation of the Nuclear Industry: A New Decade, Atomic Industrial Forum, San Francisco, CA, May 18-21, 1980, Box 4, JGK-DC.

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³⁷ Mara Drogan, "The Nuclear Imperative: Atoms for Peace and the Development of U.S. Policy on Exporting Nuclear Power, 1953-1955," *Diplomatic History* 40, no. 5 (2015): 948–974; John Krige, "Atoms for Peace, Scientific Internationalism, and Scientific Intelligence," *Osiris* 21, no. 1 (2006): 161–181; Jonathan E. Helmreich, "The United States and the Formation of the EURATOM," *Diplomatic History* 15, no. 3 (July 1991): 387–410.
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