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# THE REAGAN ADMINISTRATION'S NONPROLIFERATION NONPOLICY

Frank B. Cross\*
and Cyril V. Smith\*\*

While the world's attention remains riveted on the unsteady course of strategic and theater arms control, concern for the horizontal spread of nuclear weapons has been decisively upstaged. With the inauguration of Ronald Reagan and the subsequent decision to devote the bulk of American foreign policy energy to East-West competition, this more immediate threat to peace and stability now has become a side issue.

During his campaign, President Reagan spurred some controversy by proclaiming that horizontal nuclear proliferation was "none of our business." In office, however, the President has retreated from this position. Indeed, the President announced that nonproliferation is a "fundamental national security objective." Similarly, Undersecretary of State Richard Kennedy recently declared that "there can be no more dangerous possibility in the world than further proliferation of nuclear weapons." Still, in

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<sup>1.</sup> For a discussion demonstrating the present administration's relative lack of concern for nonproliferation objectives, see *infra* notes 99-200 and accompanying text. Indeed, the renewed commitment to opposing the Soviet Union may itself have affirmatively impeded nonproliferation objectives. *See*, e.g., THE HARVARD NUCLEAR STUDY GROUP, LIVING WITH NUCLEAR WEAPONS 228 (1983) ("The emphasis on East-West conflict [has] led to neglect of some areas of nonproliferation cooperation with the Soviet Union.").

<sup>2. 17</sup> WEEKLY COMP. PRES. DOC. 768, 768 (July 20, 1981). This speech is President Reagan's first and only major address on nonproliferation issues. He promised that the United States would "continue to inhibit the transfer of sensitive nuclear material, equipment and technology, particularly where the danger of proliferation demands . . ." Id. Other Reagan administration officials have also stressed their commitment to nonproliferation goals. See generally Congressional Research Service, Nuclear Export Policy Of the Reagan Administration: A Summary Analysis and Four Case Studies 1-9 through 9 (Apr. 1982).

<sup>3.</sup> Plutonium Use Policy: Hearings Before the Subcomm. on Energy, Nuclear Proliferation, and Government Processes of the Senate Comm. on Governmental Affairs, 97th Cong., 2d Sess. 2 (1982) [hereinafter cited as Hearings on Plutonium Use Policy].

the last three years there has been a radical redirection of American foreign policy and a much lower priority for nonproliferation.<sup>4</sup>

The present administration is committed to reversing the foreign non-proliferation policy practiced by the United States during the years 1974-80, a policy set in motion by the dramatic events of May 1974, when India detonated a nuclear explosive.<sup>5</sup> The Reagan Administration's approach threatens the progress made in the aftermath of 1974, and erodes the international nonproliferation regime.

The policies of the Reagan administration manifest a general disregard for nonproliferation. The London Economist observed that "the Reagan Administration policy looks less like a show of sensible flexibility than like a chipping away at the foundations of the whole international effort to curb nuclear proliferation." Senator Percy, a fellow Republican of the President, announced that he was "truly concerned—indeed amazed—at the apparent willingness of this administration to engage in nuclear commerce with countries which have not forsworn the option to develop nuclear weapons."

The Reagan administration policy has been implemented in a number of ways. Generally, there has been widespread relaxation of controls on American nuclear exports<sup>8</sup> and severe budget cuts in the federal government's nonproliferation programs.<sup>9</sup> In short, the Reagan administration policy shows very little concern for limiting future nuclear proliferation. An accurate understanding of the Reagan strategy requires a brief review of America's traditional policies and a close look at the assumptions governing the new strategy.

### I. HISTORIC NONPROLIFERATION POLICY OF THE UNITED STATES

The United States' efforts to prevent nuclear proliferation began as early as 1946, with the Baruch Plan to "internationalize" atomic energy. 10 This

<sup>4.</sup> See, e.g., Technical Aspects of Nuclear Nonproliferation: Safeguards: Hearings Before the Subcomm. on Energy Research and Production of the House Comm. on Science and Technology, 97th Cong., 2d Sess. 80 (1982) (remarks of Rep. Lujan) ("international safeguards and matters of that kind are not of prime importance at the State Department") [hereinafter cited as Hearings on Technical Aspects of Nuclear Nonproliferation]. See generally infra notes 97-197 and accompanying text.

<sup>5.</sup> Nuclear Safety—Three Years After Three Mile Island: Hearings Before the House Comm. on Government Operations and Interior and Insular Affairs, 97th Cong., 2d Sess. 27 (1982) (statement of Peter Bradford, Commissioner, NRC).

<sup>6.</sup> Free Trade In Bombs?, THE ECONOMIST, Aug. 21, 1982, at 14.

<sup>7.</sup> See Hearings on Plutonium Use Policy, supra note 3, at 2.

<sup>8.</sup> See infra notes 99-169 and accompanying text.

<sup>9.</sup> See infra notes 170-89 and accompanying text.

<sup>10.</sup> See A Report on the International Control of Nuclear Energy (Mar. 16, 1946) (pre-

plan was motivated by the recognition that an international competition in atomic weaponry was extremely hazardous to world peace and sought to distinguish "safe" or "peaceful" from "dangerous" nuclear development.<sup>11</sup> As a result, the plan attempted cooperative international development of nuclear energy, under the auspices of a United Nations commission.<sup>12</sup> This plan, however, was rejected by the Soviet Union and other nations, and its failure led to strict controls instituted to protect the United States' monopoly on nuclear weapons.<sup>13</sup> Yet these controls failed to prevent the U.S.S.R. and Great Britain from acquiring "the bomb."

The era of secrecy officially ended in 1953, when President Eisenhower announced the "Atoms for Peace" program, which liberalized American export policy and promoted the "peaceful" use of nuclear energy.<sup>15</sup> This program allowed the United States to assist foreign nuclear programs in exchange for the promise that the knowledge would not be put to military use.<sup>16</sup>

America's new policy initiated nuclear power projects in dozens of countries, without regard to those countries' need for nuclear power technology.<sup>17</sup> "Atoms for Peace" authorized private industry to construct and operate nuclear reactors, and established a framework for international commerce in nuclear materials.<sup>18</sup> Bilateral cooperative agreements were established, conditioned on requirements such as a declaration committing the countries to the peaceful use of nuclear supplies and on the maintenance of safeguards on transferred materials.<sup>19</sup> Twenty-eight countries executed such agreements with the United States.<sup>20</sup>

In 1968, this program was supplemented by the signing of the Treaty on

pared for the Secretary of State's Comm. on Nuclear Energy), reprinted in Congressional Research Service, Reader on Nuclear Nonproliferation 5 (Dec. 1980).

<sup>11.</sup> Id. at 30-33. See Congressional Research Service, Legislative History of the Nuclear Nonproliferation Act of 1978, 96th Cong., 1st Sess. 416 (1979) (summarizing significance of Baruch plan) [hereinafter cited as Legis. Hist.].

<sup>12 11</sup> 

<sup>13.</sup> The HARVARD NUCLEAR STUDY GROUP, supra note 1, at 225.

<sup>14.</sup> Wolfe, Could America's Nuclear Policies Be Counterproductive?, BULLETIN OF THE ATOMIC SCIENTISTS, Jan. 1980, at 43.

<sup>15.</sup> The history of this program is summarized in McGrew, Nuclear Revisionism: The United States and the Nuclear Non-Proliferation Act of 1978, 7 MILLENIUM 237 (Winter 1978-79).

<sup>16.</sup> See id. at 238; Wolfe, supra note 14, at 43.

<sup>17.</sup> Legis. Hist., supra note 11, at 416.

<sup>18.</sup> See McGrew, supra note 15, at 238.

<sup>19.</sup> See generally Congressional Research Service, United States Agreements for Co-operation in Atomic Energy (1976); McGrew, supra note 15, at 238-39.

<sup>20.</sup> McGrew, supra note 15, at 238-39.

the Nonproliferation of Nuclear Weapons (NPT).<sup>21</sup> While the NPT also encouraged the fullest possible exchange of nuclear technology, it also committed signators to "not in any way assist, encourage or induce any non-nuclear-weapon state to manufacture or otherwise acquire nuclear weapons."<sup>22</sup>

The "Atoms for Peace" program, which encouraged the spread of peaceful nuclear technology, remained surprisingly intact for twenty years.<sup>23</sup> Later, however, standards for agreement and safeguards diffused and difficulties arose.<sup>24</sup> The program's failure to prevent India's nuclear test led to a major revision in American nonproliferation policy.<sup>25</sup> At that time, "it appeared that the world was on the brink of a nuclear scramble as a result of growing loopholes in the global nuclear energy regime."<sup>26</sup>

American policy was recast in the wake of the events of 1974 under the Ford and Carter administrations. These administrations shared a series of like assumptions and goals that produced a common view of both the issues and the proper role of American policy. A brief look at these principles illustrates the breadth of departure of the Reagan approach from principles shared by two administrations of sharply divergent political views.<sup>27</sup>

American policy focused on the containment of the "plutonium economy," a complex system of reprocessing, recycling and breeder technologies that produces weapons-usable plutonium.<sup>28</sup> The Ford administration sought to avoid the risks inherent in this system by deferring commercialization, by requesting that all nations participate in a moratorium on trans-

<sup>21.</sup> Treaty on the Non-Proliferation of Nuclear Weapons, opened for signature July 1, 1968, 21 U.S.T. 483, T.I.A.S. No. 6839, 729 U.N.T.S. 161.

<sup>22.</sup> Id. at art. I.

<sup>23.</sup> McGrew, supra note 15, at 238-39.

<sup>24.</sup> See Legis. Hist., supra note 11, at 416: "[E]xport was permitted for certain reactor fuels that were themselves already suitable for immediate use in nuclear explosives. By the middle of the 1960's the consequences of such looseness became apparent." As a result, "U.S. export policy strained safeguards in some cases to the point where they could no longer provide timely warning in the event diversion occurred." Id. at 417.

<sup>25.</sup> Legis. Hist., supra note 11, at 417.

<sup>26.</sup> Nye, We Tried Harder (and Did More), 36 FOREIGN POL'Y 101, 101 (Fall 1979).

<sup>27.</sup> The nonproliferation policies of the Carter administration, briefly summarized here, are discussed elsewhere in more detail. For a defense of the Carter policies by one of its chief architects, see Nye, *supra* note 26. For a critical appraisal of the Carter policies, see, e.g., Wolfe, *supra* note 14.

<sup>28.</sup> These and other key components of America's nonproliferation policy are summarized in Congressional Research Service, Nuclear Energy: Carrying Out U.S. Nonproliferation Policy in the 96th Congress CRS-3 (1981). See Nye, supra note 26, at 101 (crediting the policy with a "greatly diminished [international] interest in burning plutonium in thermal reactors").

ferring reprocessing or uranium enrichment technology, and by acting to ensure that there would be an adequate supply of nuclear fuel to countries that forego reprocessing.<sup>29</sup>

President Ford set other rigid limits on the export of this and similar technology (such as uranium enrichment techniques) and attempted to bring all recipients of American nuclear trade and assistance under "full scope" safeguards. These safeguards applied to the totality of a country's nuclear facilities, including those acquired solely by import.<sup>30</sup>

President Ford also announced new approval criteria for nuclear cooperation with the United States. Specifically, he reaffirmed the importance of adherence to the NPT and the acceptance of full scope safeguards.<sup>31</sup> In order to promote compliance with these requirements, President Ford sought renegotiation of existing agreements and obtained promises of fuel supply commitments.<sup>32</sup> President Ford also sought international cooperation of other supplier nations, in conformance with the above principles.<sup>33</sup> Finally, President Ford directed the Secretary of State and the Nuclear Regulatory Commission (NRC) to emphasize nonproliferation objectives in rendering nuclear export licensing decisions.<sup>34</sup>

Other policy decisions hinged on nonproliferation objectives. Although a variety of domestic factors influenced the gradual withdrawal of government backing for domestic reprocessing and the eventual move to breeder reactors, the need for proof of sincerity in our nonproliferation policies played a supporting role. President Carter's decision to defer indefinitely the introduction of such technologies was designed both to lead by example and to allay the suspicion that commercial considerations underlay the administration's hard line on proliferation.<sup>35</sup>

<sup>29.</sup> Legis. Hist., supra note 11, at 917 (reprint of President Ford's major policy address on nonproliferation issues).

<sup>30.</sup> Id. at 913-14 (summarizing Ford's policies).

<sup>31.</sup> Id. at 922.

<sup>32.</sup> Id.

<sup>33.</sup> Id.

<sup>34.</sup> Id.

<sup>35.</sup> The Ford and Carter administrations' decision to defer commercial reprocessing was instrumental in our ability to convince France and England to modify their reprocessing policies. See Legislation to Amend the Nuclear Non-Proliferation Act of 1978: Hearings Before the House Comm. on Foreign Affairs and its Subcomm. on International Security and Scientific Affairs and International Economic Policy and Trade, 97th Cong., 2d Sess. 117 (1982) (statement of Brian Chow, Senior Research Analyst, Pan Heuristics) [hereinafter cited as Hearings on Legislation to Amend the Nuclear Non-Proliferation Act of 1978]. A recent assessment discusses the Carter decision and its importance to nonproliferation goals. See Statement by Paul Leventhal, President, Nuclear Control Institute, "Prospects for Stopping the Spread of Nuclear Weapons: A Mid-Term Assessment" (Feb. 3, 1983).

In April 1977, President Carter relayed to Congress the formative principles of United States nonproliferation policy. In his address, he declared that the nation would defer indefinitely the commercial reprocessing and recycling of plutonium and would continue to restructure and defer the implementation of the United States' breeder reactor program. President Carter also stated that he would increase funding for research and development of fuel cycle programs that do not involve access to nuclear weapon materials. In addition, President Carter stated that the United States would increase its capacity to provide enriched uranium to countries that would comply with full-scope safeguards and forego the reprocessing of fuel. Moreover, he directed that the United States continue to embargo the export of equipment or technology that would permit uranium enrichment and reprocessing. Finally, President Carter proposed changes in statutory requirements and international agreements that would further international safeguards against proliferation.<sup>36</sup>

Perhaps most controversially, the Carter administration applied heavy pressure on other suppliers, both to curb sensitive nuclear exports and to refrain from reprocessing or recycling American-supplied fuel in their own domestic facilities.<sup>37</sup> President Carter enjoyed numerous successes in his efforts at diplomatic persuasion. For example, his administration checked South Korea's purchase of a reprocessing plant from France in 1976 and stemmed Taiwan's experimental reprocessing program in 1977.<sup>38</sup> President Carter's greatest success, however, was his ability to convince France to change its export and reprocessing policies, which eventually prevented Pakistan from obtaining nuclear materials.<sup>39</sup>

The majority of Carter's policies became law with the passage of the 1978 Nuclear Nonproliferation Act (NNPA).<sup>40</sup> The NNPA institutionalized historic American commitment to nonproliferation objectives. In it, Congress declared that "the proliferation of nuclear explosive devices or of the direct capability to manufacture or otherwise acquire such devices poses a grave threat to the security interests of the United States and to continued international progress toward world peace and development."<sup>41</sup>

<sup>36.</sup> See Legis. Hist., supra note 11, at 415-16 (summarizing Carter's address).

<sup>37.</sup> Id. See generally Congressional Research Service, supra note 28.

<sup>38.</sup> See Dunn, Half Past India's Bang, 36 FOREIGN POL'Y 71, 71 (Fall 1979). Several other successes are discussed in Power, The Carter Anti-Plutonium Policy, 7 ENERGY POL'Y 215, 231 (Sept. 1979).

<sup>39.</sup> See Hearings on Legislation to Amend the Nuclear Non-Proliferation Act of 1978, supra note 35, at 117 (statement of Brian Chow, senior research specialist at Pan Heuristics); and id. at 188 (statement of Rep. Ottinger).

<sup>40. 1978</sup> Nuclear Nonproliferation Act, 22 U.S.C. § 3201 (1982).

<sup>41.</sup> *Id*.

Subchapter I of the Act sets forth the objective of the United States to provide an adequate nuclear fuel supply to other countries.<sup>42</sup> Under the Act, such assurances are limited to those "nations which adhere to policies designed to prevent proliferation."<sup>43</sup> More specifically, the reliable fuel supply guarantee is to be limited to those nations that accept full-scope safeguards on all their peaceful nuclear activites.<sup>44</sup>

Subchapter II of the Act is intended to strengthen the international safeguards system, and to commit the United States to provide resources and other support to the International Atomic Energy Agency (IAEA) in order to enforce its safeguards.<sup>45</sup> In addition to financial support and training, subchapter II directs the President to negotiate with other nations for commitments enhancing the effectiveness of international safeguards.<sup>46</sup>

Section 2156 of chapter 23, the focus of the NNPA, sets the criteria for nuclear exports.<sup>47</sup> The Act mandates that the President limit the sale of nuclear materials to countries that have accepted full-scope safeguards.<sup>48</sup> Under this chapter, Congress intended to use the United States' nuclear export leverage to induce nations to submit their nuclear facilities to international safeguards. If a safeguards agreement is violated (or if a nuclear device is exploded), the Act requires that the United States terminate its nuclear exports to that nation.<sup>49</sup> The Act also directs the Executive to seek renegotiation of all existing bilateral cooperative agreements in conformity with these and other statutory criteria.<sup>50</sup>

Under the Act, a Nuclear Regulatory Commission (NRC) license is required for the export of any source or special nuclear material, production or utilization facility, fuel fabrication plant or byproduct material.<sup>51</sup>

<sup>42. 1978</sup> Nuclear Nonproliferation Act, § 101 (codified at 22 U.S.C. § 3201 (1982)).

<sup>43. 22</sup> U.S.C. § 3221 (1982). See also 42 U.S.C. § 215(i)(A) (1976 & Supp. V 1981).

<sup>44. 22</sup> U.S.C. § 3223(d) (1982). In addition, the reliable fuel supply guarantee is to be limited to those nations that agree not to establish reprocessing or enrichment facilities. *Id.* 

<sup>45.</sup> Id. § 3241 (1982). The IAEA is the international organization charged with monitoring nuclear facilities around the world in order to detect any diversion of nuclear materials.

<sup>46.</sup> Id. § 3243 (1982).

<sup>47. 42</sup> U.S.C. § 2156 (1976 & Supp. V 1981).

<sup>48.</sup> Id. § 2157(a)(1), (b) (1976 & Supp. V 1981).

<sup>49.</sup> Id. § 2158 (1976 & Supp. V 1981).

<sup>50.</sup> Id. § 2153 (1976 & Supp. V 1981).

<sup>51.</sup> Id. § 2155 (1976 & Supp. V 1981). Nuclear material includes source material, or uranium and thorium, certain special fissionable material (plutonium, uranium-233, uranium-235), and byproduct material (certain tailings and wastes). 42 U.S.C. § 2014(e), (z), (aa) (1976 & Supp. V 1981). Nuclear facilities include reactors, enrichment or reprocessing plants, fuel fabrication facilities, and major reactor components. Id. § 2014(v), (cc). See also 10 C.F.R. § 110.2 (1982). Procedures for obtaining a license are set forth at 42 U.S.C. § 2155 (1976 & Supp. V 1981).

Before approving a license, the NRC must receive approval from affected Executive Branch agencies, including the Departments of State and Energy.<sup>52</sup> These licensing approvals must conform to the export criteria under section 2156.<sup>53</sup>

The Act also establishes procedures to regulate exports of so-called "dual-use" equipment. "Dual-use" equipment is exported equipment, other than nuclear material and equipment, that a nation might use to develop nuclear weapons.<sup>54</sup> Companies exporting these items, which are registered on the Nuclear Referral List,<sup>55</sup> must obtain a license from the Commerce Department before they are permitted to export.<sup>56</sup> While there are no specific statutory criteria for approval of these licenses, the Department traditionally has considered such factors as the intended use, the sensitivity of the item, and any assurances that can be given that the equipment will not be used for nuclear weapons development.<sup>57</sup> This provision reflects the recognition that comprehensive export controls are required to combat proliferation effectively.

In sum, the Ford and Carter policies evinced a clear commitment to nonproliferation objectives. Under the Ford and Carter administrations, the NNPA's nonproliferation objectives limited nuclear exports to fully-safeguarded nations, restricted the use of plutonium and nuclear reprocessing, and provided ample resources to ensure the effectiveness of safeguards. In contrast, President Reagan has adopted a fundamentally different policy and, as a result, has severely undermined the former United States policy of nonproliferation.

#### II. THE REAGAN ADMINISTRATION'S NONPOLICY

In undermining the United States policy of nonproliferation, President Reagan has adeptly avoided violating the specific, enforceable requirements of the NNPA. Nevertheless, the President has repeatedly ignored the spirit of the legislation and has violated the language of some of the Act's less enforceable provisions. For example, the Act directs the President to "take immediate and vigorous steps" to secure international coop-

<sup>52. 42</sup> U.S.C. § 2155(a) (1976 & Supp. V 1981). An exception is made for byproduct material, which requires no Executive Branch review. *Id.* 

<sup>53.</sup> Id. § 2155(a)(1).

<sup>54.</sup> Id. § 2014(v).

<sup>55.</sup> This includes such items as advanced generation computer systems, lasers and flash x-rays. 15 C.F.R. § 378.2 (1983).

<sup>56. 42</sup> U.S.C. § 2139(b) (1976 & Supp. V 1981). A parallel requirement is contained in the Export Administration Act of 1979, Pub. L. No. 96-72, 93 Stat. 503 (1979) (codified as amended at 50 U.S.C. § 2401-20 (1976 & Supp. V 1981)).

<sup>57. 22</sup> U.S.C. § 3241 (1982).

eration in enforcing full-scope safeguards.<sup>58</sup> The Reagan administration has ignored this and other NNPA directives.<sup>59</sup>

The policies of the Reagan administration offer a sharp contrast to the approach adopted in the NNPA. Public statements by the President and leading administration officials suggest that three new principles direct to-day's policy: (1) emphasis on the reliability of the United States as a supplier of nuclear materials; (2) a "two-track" approach to the export of nuclear materials whereby the United States exports only to its allies, and (3) an emphasis on security measures designed to reduce the incentive to proliferate.<sup>60</sup> A closer examination of these principles, however, suggests that they offer little promise as a nonproliferation "policy."

# A. "Reliable Supply" as an Excuse for Increasing Nuclear Exports

Central to the Reagan analysis of its nonproliferation objectives is the importance of United States market dominance and the consequent "reliability of supply." Reliability of supply, of course is a fundamental principle of American nonproliferation policy. It dates back to the Ford administration and is expressly incorporated in the NNPA. The guarantees of supply of past administrations were conditioned on compliance with the international safeguards regime. The Reagan administration policy, however, is more lenient and supplies nuclear materials to nations that do not accept full international safeguards. As the basis for its new policy, the Reagan administration cites the slipping United States' share of the market in nuclear technology and materials, and links this decline to past administrations' emphasis on denial of nuclear materials. As a result,

<sup>58. 10</sup> C.F.R. § 110 (1983). Rather than pursuing international nonproliferation policies with vigor, President Reagan has all but ignored them. In both 1981 and 1982 Congress passed resolutions requesting that the President put nonproliferation policies on the agenda for economic summit conferences and both times the resolutions were ignored. See Hearings on Plutonium Use Policy, supra note 3, at 10 (statement of Sen. Glenn).

<sup>59.</sup> A holdover member of the Nuclear Regulatory Commission has concluded that the Reagan policy "goes a long way towards nullifying Congressional intent in enacting the Atomic Energy Act..." Letter from Victor Gilinsky to Rep. Richard L. Ottinger (Mar. 18, 1983).

<sup>60.</sup> See Clausen, The Reagan Nonproliferation Policy, 12 ARMS CONTROL TODAY 1 (1982).

<sup>61.</sup> In his July 1981 policy address, President Reagan emphasized: "We must reestablish the Nation as a predictable and reliable partner" in international nuclear trade. 17 WEEKLY COM. PRES. DOC. 769 (July 20, 1981). Likewise, former Assistant Secretary of State James L. Malone declared: "If we are to maintain our influence in the international community on nuclear issues, we must be an active participant in nuclear trade and commerce." See Nuclear Export Policy of the Reagan Administration, supra note 2, at 1-2.

<sup>62. 22</sup> U.S.C. § 3201(b) (1982); see supra notes 21, 42-44 and accompanying text.

<sup>63.</sup> See infra notes 99-110 and accompanying text.

the Reagan administration seeks renewed influence over the nuclear market through a reprise of the United States' nuclear monopoly of the 1950's and 1960's.<sup>64</sup>

Within this view, only American leadership can create the conditions necessary for wider application of safeguards and more vigorous enforcement of the international regime.<sup>65</sup> The return of the American nuclear industry to world dominance, therefore, will allow the United States to strengthen both its nuclear commerce and the international safeguards regime.<sup>66</sup> At the same time, sensitivity to the energy requirements of the industrialized nations, under the more lenient attitude toward requests for reprocessing and United States-supplied materials, will secure their cooperation on an wide range of security issues, including nonproliferation.<sup>67</sup>

In part, however, the Administration policy seems to be more of a justification for expanding U.S. commercial nuclear exports. While careful to qualify their statements with support for nonproliferation, State Department officials were quick to advertise their interest in "aggressive" support for Nuclear exports, noting the need to work closely with industry in this regard.<sup>68</sup> It thus appears that nonproliferation was being invoked to justify a policy of expanding exports chosen for commercial reasons.

If reliable supply did indeed achieve nonproliferation objectives, then the Reagan administration's nonproliferation policy would be acceptable. In operation, however, the new policy reflects a rather naive analysis of the interplay between American market dominance and the health of the in-

<sup>64.</sup> See Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 72 (statement of L. Manning Muntzing, President, American Nuclear Society) (reliable supply is "first and foremost" among Reagan Adminitration policies).

<sup>65.</sup> See B. Goldschmidt & M. Kratzer, World Nuclear Energy 47 (Smart ed. 1982).

<sup>66.</sup> See Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 73 (statement of L. Manning Muntzing); Goheen, Problems of Proliferation: U.S. Policy and the Third World, 35 WORLD POLITICS, Jan. 1983, at 194, 208-09.

<sup>67.</sup> See Hearing on Plutonium Use Policy, supra note 3, at 6 (statement of Richard Kennedy, Ambassador at Large for Nuclear Nonproliferation Policy).

<sup>68.</sup> See State Department Transition Paper, Recommendations for the Reagan Administration Nonproliferation Policy, 1 (Dec. 18, 1980); see also Schultz Strives to Promote Exports of Nuclear Technology Wash. Post, Sept. 15, 1982, at A8, col. 2. Asst. Secretary of State Malone candidly stated that "maintaining the economic health of this major industry is in itself a very important objective." See Congressional Research Service, supra note 2, at I-4. According to some, these exports constitute the "only hope" for the United States nuclear industry. Controls on Exports of Nuclear-Related Goods and Technology: Hearings Before the House Comm. on Foreign Affairs and its Subcomm. on International Security and International Economic Policy and Trade, 97th Cong., 2d Sess. 50 (1982) (statement of Virginia Foote, Center for Development Policy).

ternational regime.<sup>69</sup> The rise of competing suppliers and the inevitable decentralization of the international market occurred well before the Ford and Carter administrations gave priority to nonproliferation.<sup>70</sup> The decline in United States exports, therefore, is not the result of the non-proliferation policies of past administrations.

Nor is there a necessary correlation between robust American nuclear exports and strengthened international safeguards. The Reagan administration sees an opportunity for creative leadership from a position of strength. Nevertheless, there is a risk that in a dormant market, American gains in the world market may be at the expense of other suppliers.<sup>71</sup> Under these circumstances other supplier countries may find it difficult to enter into the "cooperative" spirit that administration rhetoric promises.<sup>72</sup> For example, France and West Germany, in view of a revitalized American industry competing in a shrinking market,<sup>73</sup> may discount the purity of American motives.<sup>74</sup> At a minimum, it is unlikely that other suppliers will rally beneath the banner of American export muscle. The goodwill produced by a more conciliatory approach on reprocessing and retransferring of nuclear materials is counterbalanced by the hostility created by lost foreign orders.<sup>75</sup>

<sup>69.</sup> Several factors unrelated to nonproliferation policy contributed to the slipping American position in the enrichment services and reactor markets. One was President Nixon's efforts to shift enrichment services from government to private hands, followed by the June 1974 decision to suspend long-term enrichment contracts. Norman, *Uranium Enrichment: Heading for the Abyss*, 221 SCIENCE 731 (1983); M. BRENNER, NUCLEAR POWER AND PROLIFERATION 1, 14-15 (1981). Others attribute the rise in European nuclear exports to an accelerating interest by European governments in high-technology exports to offset balance-of-payments deficits. DUFFY & ADAMS, POWER POLITICS 61 (1978). M. BRENNER, supra, at 210-11, concludes that the Carter policy, rather than precipitating a decline, simply took place against a background of lessened control over the market.

<sup>70.</sup> See, e.g., Clausen, supra note 60, at 3 (suggesting that the decline in the United States market position can be attributed to "structural causes and the inevitable rise of competing suppliers"); see also J. Nye, Nuclear Proliferation: Breaking the Chain 20 (Questor ed. 1981).

<sup>71.</sup> For a more detailed discussion, see Clausen, supra note 60, at 3.

<sup>72.</sup> See M. LONNROTH & W. WALKER, WORLD NUCLEAR ENERGY, at 213 (Smart ed. 1982) (in a contracting market, competition for orders creates a "serious risk of increased confrontation" among suppliers).

<sup>73.</sup> See S. Schneider, The Oil Price Revolution, at 341 (1983).

<sup>74.</sup> Such a response would be a reprise of European reactions to the Carter decision to defer a move to breeders and reprocessing. Then, the decision was seen as an attempt to force the more advanced European technologies off the market in favor of American reactor manufacturers. *Id.* at 344; S. WINKLER, NUCLEAR PROLIFERATION IN THE 1980'S 146-47 (Kincade & Betram eds. 1982).

<sup>75.</sup> See Clausen, supra note 60, at 3: "Contrary to Administration arguments, U.S. export ambitions could well make the other suppliers less receptive to appeals for collective restraint on behalf of nonproliferation interests."

Ultimately, the "reliable supply" open export policy by definition creates new access to sensitive technologies. The difficulty lies in distinguishing between the benefits of influence and the dangers of the spread of unsafeguarded technology. The NNPA promoted the United States as a reliable supplier, but only to those nations "sharing our nonproliferation objectives." The Reagan policy, on the other hand, assures a reliable supply to all nations, regardless of their proliferative intent.

# B. A Two-Track Policy that Only Promotes Exports with No Counterbalancing Restrictions

Under its nonproliferation policy, the Reagan administration adopts a "two-track" approach to the issues surrounding plutonium reprocessing, recycling and use in breeder reactors. This policy adopts a very flexible approach toward exports to nations that are deemed low proliferation risks, and, in theory, restricts exports to likely proliferants. President Reagan's July 1981 policy statement on nonproliferation, although vague in certain critical respects, included an explicit commitment not to inhibit or set back civil reprocessing or breeder activities in advanced countries posing no proliferation risk. A State Department transition team paper, prepared in late 1980, called for an end to "unnecessary" efforts aimed at similar domestic programs. President Reagan's July 1981 policy statement transition team paper, prepared in late 1980, called for an end to "unnecessary" efforts aimed at similar domestic programs.

Highly critical of the universalism of the Carter years, the Reagan administration seeks the creation of a favored class of nuclear actors. At present, this favored class includes Western Europe, Japan, and certain other industrialized countries.<sup>80</sup> These nations, by virtue of the advanced state of their nuclear programs, their "impeccable" nonproliferation credentials, and presumably their close ties to the United States, receive immunity from NNPA provisions requiring approval for each instance of reprocessing and retransfer of United States-supplied fuel.<sup>81</sup> While congressional opposition chilled attempts to amend the NNPA in favor of these "programmatic" approvals, State Department and Nuclear Regula-

<sup>76.</sup> See M. Brenner, supra note 69, at 80: "Under competitive circumstances, market logic inevitably drives down the restraints and expands the freedom of buyers."

<sup>77.</sup> S. REP. No. 467, 95th Cong., 2d Sess. 2 (1977).

<sup>78.</sup> See supra note 2.

<sup>79.</sup> Transition Paper, supra note 67, at 1.

<sup>80.</sup> See Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 73 (statement of L. Manning Muntzing).

<sup>81.</sup> The administration has lifted the embargo on exports of reprocessing technology and has considered sales to Japan and Western Europe, as well as sharing gas centrifuge enrichment technology with Australia. See Clausen, supra note 60, at 3; Congressional Research Service, supra note 2, at II-1 to II-6, II-13 to II-18.

tory Commission policy now reflects this more permissive attitude.82

The new policy, in addition to turning a blind eye to the use of American materials, also embraces a case-by-case approach to the export of reprocessing technology by American firms. Arguing that such facilities will be built regardless, the administration asserts that only an active American role in the market can improve facility safeguards.<sup>83</sup>

These moves to open up the export market in plutonium technology and to ease out the American veto power over reprocessing decisions are part of a more comprehensive attack on the Carter approach. In keeping with the "realistic" emphasis of the Reagan administration, the new policy is based on the existence of a wide variety of proliferation risks, ranging from the immediate, such as Argentina and Pakistan, to the vanishingly small, Western Europe and Japan. By creating a two-track policy, the Reagan administration hopes to secure the support of other Western European nuclear suppliers while simultaneously maintaining the technical embargo for less favored states.<sup>84</sup>

While having superficial appeal, this approach does more to facilitate exports than to promote nonproliferation. In practice, it simply represents a loosening of restrictions for some countries, with no concomitant tightening for high-risk nations.<sup>85</sup> Although this policy may be valid on other grounds, it is hardly an answer to the problem of nuclear proliferation.

More seriously, this liberal policy toward the export of sensitive technology, combined with approval for reprocessing and retransfer of United States-origin fuel, contains the seeds of its own destruction. Although on its face the policy is confined to a few favored countries, it is certain to invite demands from other nuclear importers for similar treatment. Given the initial emphasis on cooperation and reliability of supply, refusal will become more difficult. Countries will point to American policy toward Europe as justification for their own interests. At the same time, the

<sup>82.</sup> See Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 79 (statement of Michael J. Brenner, Professor, Graduate Sch. of Pub. & Int'l Aff., Univ. of Pittsburgh): "The Reagan Administration has, in effect, given the West Europeans and Japanese a green light for moving ahead with reprocessing and, implicitly, for recycle into light water reactors as well as breeder reactors." The administration's abortive attempt to rewrite the NNPA is described in Oberdorfer, Administration Moving to Loosen Laws on Curbs for Nuclear Weapons Abroad, Wash. Post, Oct. 11, 1981, at A1, col. 1, and A6, col. 1.

<sup>83.</sup> See generally Congressional Research Service, supra note 2.

<sup>84.</sup> See Nomination of Richard T. Kennedy: Hearing's Before Senate Comm. on Foreign Relations, 97th Cong., 2d Sess. 16 (1982).

<sup>85.</sup> The failure to create a genuine two-track approach is in sharp contrast to the Carter policy. See Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 62 (statement of Joseph Nye).

<sup>86.</sup> Lanouette, Reagan's Non-Policy, 38 Bull. of Atomic Scientists 32-33 (1982).

lure of an expanding export market will blur the bright line between "safe" and "unsafe" nuclear recipients.<sup>87</sup>

The administration dismisses this possibility by simply denying that there is a connection between a *laissez-faire* policy for Europe and a demand for similar access elsewhere. Officials claim that there is "no change" in American policy, no implication of support or endorsement of plutonium use.<sup>88</sup> Recent negotiations with Mexico and other countries, where American exports to Europe were invoked as a justification for exports to other countries, suggest that this is not so.<sup>89</sup> In this instance, the United States faces certain demands from other nations to expand exports.

In contrast, the Reagan administration has failed to invoke its two-track policy to obtain nonproliferation concessions from other suppliers. When asked what the United States received in return for liberalizing its plutonium policies, former Undersecretary of State Kennedy responded: "We are actively pursuing precisely that as our objective, an objective, the kind of objective I refer to in my opening remarks, which we would hope would be a mutually shared objective." In a somewhat more lucid and candid response to a similar question later in the day, the Undersecretary stressed that "we are not putting these things as a quid pro quo." In short, controls on plutonium use have been loosened in the name of non-proliferation, but nothing has been obtained in return.

<sup>87.</sup> Lanouette concludes that the "most damaging consequences" of the Reagan policy are the changes making it "politically (if not intellectually) impossible to draw a line of discrimination between those states deemed acceptable proliferation risks—and granted the right to reprocess, and those from whom it is withheld . . . " Id. at 33. See Hearings on Legislation to Amend the Nuclear Non-Proliferation Act of 1978, supra note 35, at 73 (statement of S. Jacob Scherr of Natural Resources Defense Council: "Undoubtedly nations other than Japan and members of Euratom will demand equal treatment. It appears from remarks made by Prime Minister Gandhi during her visit to Washington last week that India may be first in line.").

<sup>88.</sup> Statement of Archelaus Turrentine, Deputy Assistant Director of ACDA (September 8, 1982) at 7 (available at Catholic University Law School Library).

<sup>89.</sup> Leventhal statement, supra note 35, at 2 ("Mexico and South Korea are demanding access to the same reprocessing equipment being offered to Japan"); see Nuclear Control Institute, Nuclear Control Index of Congress 2 (1983) (Reagan administration is negotiating with Mexico for export of enrichment and reprocessing technology to induce Mexico to buy United States reactors).

<sup>90.</sup> See Hearings on Legislation to Amend the Nuclear Non-Proliferation Act of 1978, supra note 35, at 2 (statement of Rep. Bingham: "[T]he Administration is taking these risks without enunciating, even roughly, the concessions it hopes to get from our allies.").

<sup>91.</sup> Hearings on Plutonium Use Policy, supra note 3, at 23.

<sup>92.</sup> Id. at 38.

# C. "Security Assistance" that Promotes Military Exports to Right-Wing Regimes

The third leg of the Reagan policy attempts to address the security motivations that may drive a country to obtain nuclear weapons. A combination of arms sales, direct security ties and a more robust defense posture, in this view, would reassure countries whose confidence in the United States was shaken during the 1970's and for whom an independent nuclear force might seem appealing.<sup>93</sup> This is potentially the most promising non-proliferation avenue pursued by the administration. While both President Ford and President Carter viewed proliferation primarily as a function of access to materials and technology, the Reagan administration strategy shifts this attention to the strategic fears that presumably govern a country's decision to open or accelerate the nuclear option.<sup>94</sup>

Not coincidentally, many of the emerging proliferation risks, Argentina, South Korea, Taiwan, and Pakistan, are also anticommunist regimes. Nonproliferation offered a convenient excuse for closer ties with such nations. For the Reagan administration, containing Soviet influence through security assistance would have nonproliferation benefits as well.<sup>95</sup>

Even here, the effects of the new policy are of limited value in combatting proliferation. The security dimension of proliferation seeks to integrate nonproliferation concerns into a broader national security framework. As matters stand, however, influencing nuclear choices is a secondary or tertiary objective, vulnerable to frequent preemption by more prominent interests. For example, our nonproliferation interest in security assistance to Taiwan and Argentina, in the wake of the Falklands conflict, took a back seat to other United States goals. In this case, our nonproliferation interest in these countries was superceded by our ties to the People's Republic of China and Great Britain. American nonproliferation objectives, therefore, continually are compromised by other American foreign policy interests.

<sup>93.</sup> PRESIDENT OF THE UNITED STATES, U.S. ARMS CONTROL AND DISARMAMENT AGENCY 1981 ANNUAL REPORT at 28-29 (Comm. Print 1982).

<sup>94.</sup> See L. Dunn, Controlling the Bomb 125-28, 155-56.

<sup>95.</sup> Ebinger, International Politics of Nuclear Energy, 57 Wash. Papers 1, 69 (1978), argues that both Carter and Ford saw security guarantees as a moderating influence on nuclear ambitions. The current approach differs in its almost exclusive reliance on a non-proliferation tool that is at best complimentary to other approaches. Id.

<sup>96.</sup> Nye, Political Solutions, 38 BULL. OF THE ATOMIC SCIENTISTS 30, 31 (August-September 1982). See Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 87 (statement of Paul Leventhal, President, Nuclear Control Institute: "Proliferation is generally deemed a distant, long-term problem and is inevitably relegated to a low order of priority.").

This is not to suggest that deference to these other objectives is wrong or that nonproliferation should dwarf all other American foreign policy conerns. Rather, it highlights the inherent limitations of a security-based nonproliferation policy. Because nonproliferation must be balanced against other foreign policy objectives, the effectiveness of arms transfers and security ties as nonproliferation instruments is inherently compromised.<sup>97</sup>

As the above discussion makes clear, President Reagan has yet to develop an effective nonproliferation policy. Those characteristics of American policy may actually turn on other procommerce or anticommunist goals of the administration. Nonproliferation rhetoric has not been matched by significant action, and one is left with the suspicion that the rhetoric may simply be an obscurant to justify other foreign policy objectives. The result is a nonproliferation "nonpolicy." Few, if any, positive accomplishments can be attributed to the new principles discussed above.

# III. THE ADMINISTRATION'S DESTRUCTION OF EFFECTIVE NONPROLIFERATION PROGRAMS

More serious than the lack of affirmative nonproliferation commitments, however, is the Reagan administration's dismantling of the gains made over the past six years. Export controls have been relaxed, even where it was unnecessary to establish our reliability of supply. Notwithstanding continued inflation, America's nonproliferation budget has been cut dramatically over the past two years. As discussed below, these actions and others are eviscerating traditional American nonproliferation efforts.

<sup>97.</sup> See Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 22 (statement of Joseph Nye of the John F. Kennedy Sch. of Gov. at Harvard: "security guarantees... are not always credible. Many of the most difficult cases, in fact, are outside the range of credible security guarantees."); see also discussion of Pakistan, infra notes 144-65 and accompanying text.

<sup>98.</sup> The administration has taken numerous actions demonstrating its lack of commitment to nonproliferation principles. Reagan sought to use fuel from domestic reactors in America's nuclear weapons program, a step of major symbolic importance to nonnuclear countries seeking to do likewise. This effort was blocked by the Republican-controlled Senate on an 88 to 9 vote. See Hearings on Legislation to Amend the Nuclear Nonproliferation Act of 1978, supra note 35, at 78 (statement of S. Jacob Scherr).

Another example is provided by the President's abortive attempt to transfer America's enrichment program to the control of the private sector. This plan, developed by the Department of Energy to promote exports, was shelved in the face of considerable congressional opposition. See Nuclear Nonproliferation Policy and the Implications of Technology: Hearings Before the Subcomm. on Energy, Nuclear Proliferation and Government Processes of the Sen. Comm. on Governmental Affairs, 97th Cong., 1st Sess. 28, 35 (1981) (statement by Sen. Glenn).

## A. The New Free Market in Nuclear Exports

In line with these new principles, the Reagan administration removed many restrictions on American exports of nuclear material. In contrast with the policies of the two previous administrations, export of materials related to nuclear power development now appears to be accepted with little or no restrictions.

# 1. Reagan's Proposed Export Policies

Earlier this year, the Reagan administration abandoned all pretense on this issue by recommending radically new nuclear export policies. The Nuclear Regulatory Commission's three Reagan-appointed Commissioners prepared two significant amendments that would eliminate key non-proliferation restrictions.<sup>99</sup>

The first NRC amendment seemed designed to undermine efforts to place nuclear facilities under international inspections. Currently, sensitive equipment can be exported only to countries that have signed the Nuclear Nonproliferation Treaty or that have agreed to permit IAEA inspections at all their nuclear facilities.<sup>100</sup>

Full scope safeguards, which have long been a foundation of American nonproliferation policy, are crucial to the success of the IAEA. Inspections are intended to discover any diversion of nuclear materials from civilian programs to weapons development. To conduct the inspections, the IAEA must audit nuclear facilities and continually check what materials are in the country's possession and where those materials are going. If any of a country's facilities are not safeguarded, however, the system is ineffective. Materials may be diverted from the unsafeguarded facility or, more seriously, materials may be transferred from a safeguarded facility to an unsafeguarded one. In the latter case, it is *impossible* for the IAEA to discover diversion of materials from even safeguarded sources.

Because full-scope safeguards are so important, the United States historically has refused to sell sensitive materials to countries that resist such procedures. The Reagan proposal, however, would remove two key atomic reactor components, control rods and primary coolant pumps, from the list of equipment subject to these restrictions. A dissenting Carterappointed commissioner, Victor Gilinsky, described the proposal as "nulli-

<sup>99.</sup> Benjamin, NRC Seeks Shift in Nuclear Export Rules, Wash. Post, Mar. 23, 1983, at A16, col. 1.

<sup>100.</sup> See 42 U.S.C. § 2157(a)(1) (1976 & Supp. V 1981).

<sup>101.</sup> Lanouette, Safeguards Secrecy, 39 Bull. of the Atomic Scientists 51, 52 (1983).

<sup>102.</sup> See Benjamin, supra note 102.

fying congressional intent in enacting the Atomic Energy Act's full-scope safeguards requirement," and stated that the NRC should be adding equipment to the restricted list, rather than deleting items from the list. 103

At the same time, President Reagan's new NRC majority recommended another dramatic change in export policy. This proposal would create a privileged category of countries that could obtain reactor components from the United States under a general license, without advance review by the NRC.<sup>104</sup> As a part of the administration's two-track policy, this list of preferred countries included most of Western Europe, Canada and Japan. Remarkably, though, the proposed list also included South Korea, Taiwan, the Philippines, and Indonesia, all of whom are prospective proliferants.<sup>105</sup> Not only is this plan dangerous on its face, it is an ominous sign for future applications of the two-track policy.

In substance, this second proposal would authorize manufacturers to export virtually any reactor component to any of these countries, without so much as notifying the United States government. In addition to the new free market for sales to privileged countries, the plan would make it more difficult to prevent retransfers of American equipment to other governments. In this proposal, the NRC all but disavowed its nonproliferation objectives. Fortunately, congressional opposition indefinitely stalled these proposals. 107

# 2. President Reagan's De Facto Export Policy

As negative as the proposals were, they constituted nothing more than an attempt to institutionalize policies that are already in effect in the Reagan administration. A recent report from the General Accounting Office analyzed the record of the administration's approval of nuclear-related equipment and component parts. The General Accounting Office found that the Commerce Department issued fifty-seven export licenses for the sale of controlled technology to the nuclear programs of India, South Africa, Argentina, and Israel, even though these countries do not accept full-scope safeguards. Although much of the report is classified, the sanitized version made available to the press contained the conclusion that

<sup>103.</sup> Gilinsky letter, supra note 59, at 1.

<sup>104.</sup> See Benjamin, supra note 99.

<sup>105.</sup> Id.

<sup>106.</sup> *Id*.

<sup>107.</sup> See Proposal to Loosen Export Restrictions on Some Power Reactor Parts, Nucleonics Week, May 26, 1983, at 3.

<sup>108.</sup> See Benjamin, GAO Cites Loophole in Nuclear Export Law, Wash. Post, Oct. 16, 1983, at A6, col. 1.

<sup>109.</sup> Id.

these exports "facilitated the efforts of [these countries] to acquire nuclear weapons." <sup>110</sup>

A more detailed examination of American nonproliferation policy toward specific countries further demonstrates the effects of the new liberalized export policies pursued by the Reagan administration. Outside the Middle East, the four most likely new proliferants are probably Brazil, South Africa, Argentina, and Pakistan.<sup>111</sup> As the following discussion illustrates, the Reagan policies have, if anything, facilitated these countries' efforts to obtain the bomb.

The most extreme example may be Reagan administration policy toward Brazil. Some observers see a concerted Brazilian move toward nuclear weapons; few would omit Brazil from their list of likely proliferants. <sup>112</sup> If the Reagan administration were indeed pursuing a two-track policy, Brazil should be a clear case for restraint. In contrast, the administration not only has encouraged Brazil's nuclear program, but also has impeded efforts to secure Brazilian acceptance of full-scope safeguards.

United States relations with Brazil date back to a 1972 bilateral agreement for nuclear cooperation.<sup>113</sup> Subsequently, Brazil contracted for a power plant and agreed to use only American enriched uranium in this reactor. Brazil gave a preliminary sign of its proliferative intentions in 1975, when it negotiated with West Germany for eight reactors and the transfer of ultracentrifuge technology, ideally suited to isolate weapons-usable nuclear materials.<sup>114</sup> Pressure from the United States induced West Germany to limit, but not cancel the contract.<sup>115</sup> Despite its contacts with West Germany, Brazil's nuclear program remains largely dependent on its American reactor.<sup>116</sup>

The United States made its first shipment of enriched uranium in 1978, pursuant to the original contract. Later that year, Congress passed the

<sup>110.</sup> Id.

<sup>111.</sup> See, e.g., Epstein, A Ban on the Production of Fissionable Material for Weapons, 243 Sci. Am. 213, 218 (1980) (most likely new proliferants are Pakistan, Israel, Egypt, South Africa, Spain, Argentina and Brazil); The Harvard Nuclear Study Group, supra note 1, at 222 (the most likely new proliferants are Iraq, Libya, Pakistan, South Africa, Argentina, Brazil, Chile, South Korea, and Taiwan).

<sup>112.</sup> See Epstein, supra note 111, at 218; see also THE HARVARD STUDY GROUP, supra note 1, at 222.

<sup>113.</sup> See Congressional Research Service, supra note 2, at II-8.

<sup>114.</sup> Id. at II-10.

<sup>115.</sup> See Finkelstein, Brazil, America and Nonproliferation, 7 THE FLETCHER F. 277, 297-98 (Summer 1983).

<sup>116.</sup> See Benjamin, Brazil Takes Step Toward Developing Nuclear Weapons Potential, Wash. Post, Feb. 3, 1983, at A29, col. 1.

NNPA. The NNPA precluded further transfer of American enriched uranium, because Brazil had not signed the NPT and did not agree to full-scope safeguards.

By 1981, Brazil was again in the market for enriched uranium, but still refused to agree to full-scope safeguards. Under the original contract, however, Brazil was required to pay a twenty million dollar penalty if it went elsewhere for enriched uranium.<sup>117</sup> Here was an exceptional example of potential American leverage. The contractual penalty was high enough to be of major concern to Brazil, and the administration had its opportunity to obtain full-scope safeguards from a key potential proliferant.<sup>118</sup>

In a remarkable move, Vice President Bush announced that "the Secretary of Energy opened an exception so that the penalty clause of the nuclear contract with Brazil could be dispensed with . . ." Brazil, therefore, was given the go-ahead to purchase enriched uranium from European sources. Ironically, this decision not only frustrated nonproliferation objectives, but also sacrificed American exports and the goal of market dominance as well.

Following this decision, the administration spokesmen dropped hints that the United States had received some concessions on safeguards in exchange for dropping the penalty. The absence of any significant deal, however, was clear when earlier this year it was announced that Brazil was using an unsafeguarded laboratory-scale reprocessing plant, in combination with the American-supplied reactor, to produce bomb-grade plutonium. As a result of America's refusal to insist upon full scope safeguards, Brazil now has a renewed capability to move toward obtaining nuclear weapons without international detection.

Nevertheless, the world may be temporarily spared the prospect of a Brazilian bomb. The international economic crisis has crippled Brazil's nuclear power industry. Brazil's President recently announced a 47% cut in the industry's funding and delayed plans for all new development. 122 Thus, the international recession has turned out to be President Reagan's most effective nonproliferation policy.

<sup>117.</sup> CONGRESSIONAL RESEARCH SERVICE, supra note 2, at II-9.

<sup>118.</sup> Id. at 11-10. See Finkelstein, supra note 115, at 311, suggesting that "America's trump card is Brazil's debilitating debt." The article goes on to state that the Reagan Administration was able "to pressure Brazil successfully to cancel the proliferation-sensitive aspect of its contract with West Germany." Id.

<sup>119.</sup> See NATURE, Oct. 29, 1982, at 695.

<sup>120.</sup> See CONGRESSIONAL RESEARCH SERVICE, supra note 2, at II-11.

<sup>121.</sup> See Benjamin, supra note 116.

<sup>122.</sup> House, Brazil's Nuclear Dream Falters, Wash. Post, Feb. 12, 1983, at A8, col. 1.

American exports to South Africa offer a second example of the administration's nonpolicy. Like Brazil, South Africa is bound by an American enrichment contract with a twenty million dollar penalty, which the administration now apparently plans to waive in exchange for a "constructive dialogue." <sup>123</sup>

In accord with the Reagan administration's objectives, the Department of Commerce has undermined international nonproliferation efforts in South Africa. The Department maintains a nuclear referral list of "dual use" commodities that, while not necessarily nuclear, may facilitate a country's efforts to develop the bomb. Exports of these commodities must first be approved by the Department. 124 Under the Reagan administration, however, Commerce Department approval has not been a major stumbling block to dual use exports. 125 The Department announced a more "flexible policy" to the approval of "material and equipment which have nuclear related uses" to the nation of South Africa. 126 In pursuit of this policy, Commerce expressed its intent to authorize exports of helium 3, which can be used to produce tritium, a form of hydrogen used in nuclear weapons. 127 The Department of Commerce has also authorized sales of materials on the nuclear referral list to Argentina, Brazil, Chile, and India, all of whom have failed to sign the NPT and have refused to accept full-scope safeguards. 128

In addition, the Department has approved the sale of computers so sophisticated that they have potential nuclear end-uses. <sup>129</sup> In 1971 and 1973, prior to America's most serious nonproliferation commitments, advanced computers were exported to South Africa and put to use in an unsafeguarded nuclear enrichment plant. <sup>130</sup> The administration, of course, has no guarantee that future computer exports will not be put to a similar use.

The administration, in fact, seems quite unconcerned about South Africa's growing nuclear program. Last year, it came to light that an Ameri-

<sup>123.</sup> See U.S.—South Africa Nonproliferation Accord Will Soon Permit Free SWU Pact Termination, Nuclear Fuel, July 18, 1983, at 1.

<sup>124.</sup> See supra notes 55-58 and accompanying text.

<sup>125.</sup> See Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 80 (the "generous standards used by the Commerce Department" have been used to "circumvent" the NNPA) (statement of Michael Brenner of University of Pittsburgh).

<sup>126.</sup> Hearings on Controls on Exports of Nuclear-Related Goods and Technology, supra note 66, at 1.

<sup>127.</sup> *Id*.

<sup>128.</sup> Id. at 86 (response of the Commerce Department).

<sup>129.</sup> Nuclear Control Institute, supra note 89, at 2; Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 64 (statement of Mr. Leventhal).

<sup>130.</sup> Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 64.

can firm, Edlow International, arranged for a South African purchase of enriched nuclear fuel from other nations.<sup>131</sup> The NNPA would have prohibited a direct sale of this material by the United States. While this act was not illegal, an administration truly concerned with nonproliferation policy would have used various types of leverage to discourage such practices by American firms abroad.<sup>132</sup>

The present administration, however, cares little about these practices. There is evidence that the State and Energy departments were aware of the American brokering of this sale, yet chose to keep their knowledge secret. This action virtually amounted to promoting the sale.<sup>133</sup> The reaction of the Reagan administration was the same when an international subsidiary of Westinghouse planned the sale of a nuclear reactor to Iraq, whose nuclear ambitions are hardly in doubt.<sup>134</sup> Moreover, when a Canadian subsidiary of Combustion Engineering contracted to ship uranium to Argentina, the Reagan administration did nothing.<sup>135</sup> The apparent Reagan message to these multinational firms which actively undercut professed American nonproliferation policies, is "full speed ahead."

In at least one instance, the administraton has embarassed itself in its eagerness to authorize exports. Argentina has never accepted the NPT or full-scope safeguards and is high on everyone's list of likely future proliferants. Nonetheless, in 1981, the United States approved the sale of computer control equipment for a heavy water nuclear plant in Argentina. This equipment apparently is assembled in Europe, awaiting future delivery.

<sup>131.</sup> Hearings on Controls on Exports of Nuclear-Related Goods and Technology, supra note 67, at 38-39; see Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 54 (statement by Virginia Foote of the Center for Development Policy) ("Rather than exert leverage over South Africa by making the transaction public and reporting it to Congress, the State Department and DOE kept the transaction a secret."); Clausen, supra note 60, at 8 ("South Africa has obtained enriched uranium from Europe to start up its Koeburg reactors, in a deal brokered by United States firms with at least the passive assent of the administration").

<sup>132.</sup> Hearings on Controls on Exports of Nuclear-Related Goods and Technology, supra note 67, at 39 (statement of James Culpepper, Deputy Asst. Sec. for Security Affs., DOE) ("We do not attempt to control brokering activities.").

<sup>133.</sup> See supra note 131.

<sup>134.</sup> Hearings on Controls of Exports of Nuclear-Related Goods and Technology, supra note 67, at 54 (statement of Ms. Foote).

<sup>135.</sup> Id. at 52-53.

<sup>136.</sup> See Barnaby, The Falklands Fallout, 38 BULL. OF ATOMIC SCIENTISTS 34 (1982); see also supra note 128.

<sup>137.</sup> See Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 68-69 (discussion of James Devine, Asst. Sec. of State, Nuclear Energy and Energy Technology Affairs).

After Argentina's invasion of the Falkland Islands, the administration sought to withdraw its approval of the sale, admitting that the approval "could be viewed as sanctioning such transactions without full scope safeguards. <sup>138</sup> Unfortunately, the Falkland Island experience had little effect on future nonproliferation decisions of the Reagan administration. Similar dual-use items continue to be exported to nations that have not accepted full-scope safeguards. <sup>139</sup>

Moreover, now that the Falklands crisis is over, the United States is once again liberalizing its nuclear export policies toward Argentina. Even though the Reagan administration recognized that trading with Argentina would undermine full-scope safeguards, it approved the sale of over a hundred tons of "heavy water," produced in the United States but owned by West Germany. Although officials of the NRC opposed the sale, the foreign ownership of the materials permitted the administration to exploit a loophole in the NNPAA and avoid the need for NRC approval. 141

When authorizing the sale, the State Department once again paid lip service to full-scope safeguards, but exempted the sale on the grounds that it did not "consider this transaction a significant new supply." The Argentines surely consider the sale significant, however, since they have a two hundred and fifty ton heavy water reactor that previously had no fuel supply and now as a result of the sale will come on line in 1985. Argentina's nuclear program can now proceed unhindered.

The final nuclear "hot spot" is South Asia, where India already has proliferated and Pakistan stands on the brink of doing the same. The Reagan administration is proudest of its nonproliferation policy toward this region, and Pakistan is repeatedly held out as a case where Reagan has a much more realistic and more effective policy than Carter. He Reagan has resumed massive military and economic aid to Pakistan, in the form of a five year, \$3.2 billion package, including forty F-16 aircraft. This policy contrasts with that of President Carter, who twice suspended military assistance to Pakistan, under the terms of the Symington Amendment to the

<sup>138.</sup> Id. at 62 (statement of Nunzio Palladino, Chairman, Nuclear Regulatory Commission).

<sup>139.</sup> See supra note 128.

<sup>140.</sup> See Nucleonics Week, Aug. 25, 1983, at 7; Benjamin, U.S. to Allow Argentina Nuclear Aid, Wash. Post, Aug. 17, 1983, at A1, col. 1.

<sup>141.</sup> Benjamin, *supra* note 140, at A13, col. 6.

<sup>142.</sup> *Id*.

<sup>143.</sup> Id.

<sup>144.</sup> R. Manning, Overboard with General Zia, The New Republic, Feb. 24, 1982, at 16, 19. Pakistan is held out as a test case for nonproliferation policies. See S. Weissman & H. Kroskey, The Islamic Bomb 325 (1981).

Foreign Assistance Act of 1961. The Symington Amendment prohibits military assistance to countries supplying or receiving enrichment technology or materials without safeguards. Under its policy, the administration contends that it will provide the security guarantees necessary to eliminate Pakistan's incentive to proliferate.

The history of Pakistan's nuclear ambitions began before the Reagan administration's strategic attention was drawn to the region. Since India's "peaceful" nuclear test in 1974, Pakistan has sought through both overt and covert means to obtain a variety of sensitive nuclear technologies. He Because Pakistan refused to sign the NPT and acquiesce to full-scope safeguards, 147 it has been necessary for Pakistan to conduct its search for nuclear materials through the "gray market."

The Carter administration sought repeatedly to restrict the flow of sensitive technology to Pakistan, and in the process, won concessions of restraint from European suppliers. Later began to backslide, however, after Russia invaded Afghanistan, and Reagan now has removed all restrictions on American trade with Pakistan. Later Because Pakistan betrays no interest in altering its nonacceptance of full-scope safeguards, the administration's professed confidence in its nonproliferation policies is unavailing. Similarly, the new reluctance to pressure other nuclear suppliers to accept safeguards removes an important constraint on Pakistan's access to nuclear technology. As a result, American policy toward Pakistan will stand or fall on the effectiveness of the new security guarantees.

Although American aid to Pakistan is motivated by our own security concerns in the region, administration officials consistently have defended the program on nonproliferation grounds.<sup>152</sup> In their view, aid redresses

<sup>145.</sup> See Foreign Assistance Act of 1961, §§ 669-670 (codified as amended at 22 U.S.C. § 2429, 2429b (1982)).

<sup>146.</sup> See S. WEISSMAN & H. KROSKEY, supra note 144, at 161-223.

<sup>147.</sup> For background discussion on Pakistan's nuclear program, see Ebinger, U.S. Nuclear Non-Proliferation: The Pakistan Controversy, 3 THE FLETCHER F. 1 (1979); Khalizad, Pakistan and the Bomb, 36 Bull. Of Atomic Scientists 38 (1980).

<sup>148.</sup> See Goheen, supra note 66, at 202-03.

<sup>149.</sup> See Manning, supra note 144, at 18-19.

<sup>150.</sup> See S. WEISSMAN & H. KROSKEY, supra note 144, at 222 (secret, unsafeguarded facilities have been critical to Pakistan's nuclear program); see also R. BETTS, NON-PROLIFERATION AND U.S. FOREIGN POLICY 109-10 (Yager ed. 1980) (describing history of Pakistan's position on international safeguards); Dorian & Spector, Covert Nuclear Trade and the International Nonproliferation Regime 35 J. of INT'L Aff. 29, 65 (Spring/Summer 1981) (Pakistan has benefited from the lack of full coverage by IAEA safeguards).

<sup>151.</sup> S. Weissman & H. Kroskey, *supra* note 144, at 320.

<sup>152.</sup> Security and Economic Assistance to Pakistan: Hearings Before the House Comm. on

the military fears that push Pakistan to nuclear weapons, and simultaneously provides the added leverage necessary to lobby against proliferation. To the delight of these officials, nonproliferation dovetailed neatly with the goal of containing Soviet influence in the region.<sup>153</sup>

Ensuring adequate security guarantees is complicated, however, and even this huge increase in aid cannot make Pakistan "secure." The enormous disparity between India and Pakistan in national wealth is reflected in an Indian defense budget three times that of Pakistan and in India's standing armed forces, which are twice as large as Pakistan's The regional disparity remains, therefore, despite the increased military aid.

The Administration's claim that expanded aid has given increased influence over Pakistan's nuclear program is also unsupported. All indications are that the country's nuclear program is proceeding, unchecked by the new Administration policies. 156

Moreover, the use of leverage as influence implies a willingness to withdraw American assistance to enforce nonproliferation objectives. This willingness, however, is missing in the current administration. It is clear that nonproliferation is superceded by the administration's concerns regarding the Soviet threat in South Asia. It is difficult, therefore, to imagine the circumstances under which President Reagan would cease military

Foreign Affairs, 97th Cong., 1st Sess. 23-24 (Sept. 16, 1981) (statement of James Buckley, Undersecretary of State).

<sup>153.</sup> S. WEISSMAN & H. KROSKEY, supra note 144, at 321.

<sup>154.</sup> See R. BETTS, supra note 150, at 350.

<sup>155.</sup> See ARMS CONTROL AND DISARMAMENT AGENCY, WORLD MILITARY EXPENDITURES AND ARMS TRANSFERS 1971-80, March 1983, at 52, 62 (India's standing armed forces number 1.28 million, 550,000 in Pakistan's armed forces, and India's defense expenditures amount to over \$4 billion versus Pakistan's \$1.15 billion).

For a discussion of the administration's justification of the aid, see Hearings on Security and Economic Assistance to Pakistan, supra note 152, at 304 (statement of Undersecretary Buckley); Aid and the Proposed Arms Sale of F-16s to Pakistan, Hearings Before the Senate Comm. on Foreign Relations, 97th Cong., 1st Sess. 5 (Nov. 12, 1981) (statement of Undersecretary Buckley); see also Clausen, supra note 60, at 9; Nuclear Proliferation: Dealing with Problem Countries: Hearings Before the Subcomm. on International Security and Scientific Affairs and International Economic Policy and Trade of the House Comm. on Foreign Affairs, 97th Cong., 1st Sess. 31 (1981) (statement of Edward Luttwak, Senior Fellow in Strategic Studies, Georgetown Center for Strategic and International Studies); Pierre, Arms Sales: The New Diplomacy, 60 FOREIGN AFFAIRS 266, 281 (Winter 1981-82).

<sup>156.</sup> Clausen, supra note 61, at 9; Nuclear Nonproliferation: Dealing with Problem Countries, Hearings Before the Subcomm. on Int'l Security and Scientific Affairs and Int'l Economic Policy and Trade of the House Comm. on Foreign Affairs, 97th Cong., 1st Sess. 31 (Statement of Edward Luttwak, senior fellow in strategic studies, Georgetown Center for Strategic and Int'l Studies); A. Pierre, Arms Sales: The New Diplomacy, 60 Foreign Affairs 266, 281 (Winter 1981-82).

aid. 157

The Reagan administration had its greatest leverage over Pakistan prior to approval of the arms sales, and the failure to extract concessions at that stage is significant. By extending assistance without setting any conditions, Pakistan is, if anything, rewarded for her move toward nuclear weapons. Such a signal will not be lost on other threshold nuclear states, who may view American security guarantees and arms transfers as compliments to, rather than substitutes for, their nuclear weapons development programs. The administration's decision to seek a waiver of the Symington Amendment will only serve to reinforce this impression.

The most likely effect of this military assistance is to revitalize tension and suspicion between India and Pakistan, whose legacy of mutual animosity leaves confrontation a constant possibility.<sup>161</sup> Few Indians have forgotten that American weapons were used by Pakistan in the 1971 war, and the F-16s in the present deal create a new set of fears. The result is a spiralling regional arms race and increases in hostility and fear.<sup>162</sup>

Under the Reagan administration, nonproliferation goals in South Asia will suffer for several reasons. American assistance contributes to instability in the region, and as a result, nuclear momentum may intensify in both countries. India may push ahead with its nuclear weapons program because it fears Pakistan's rearmed air force, now capable of military strikes deep into Indian territory. The resultant rising tensions between the two countries will reinforce the same fears that sparked Pakistan's nuclear program. If this increases the risk of war, both countries will redeem their nuclear options, possibly setting the stage for the world's first regional nuclear war. 164

The Reagan administration could have provided the same protection to Pakistan with arms transfers of a smaller scale and a lower order of sophis-

<sup>157.</sup> L. DUNN, supra note 94, at 36, 114.

<sup>158.</sup> See Pierre, supra note 155, at 181-82.

<sup>159.</sup> See S. WEISSMAN & H. KROSKEY, supra note 144, at 318-19.

<sup>160. 47</sup> Fed. Reg. 9805 (Mar. 8, 1982). This amendment is discussed at *supra* note 145 and accompanying text.

<sup>161.</sup> R. Manning, *supra* note 144, at 17; House Comm. on Foreign Affairs Staff Study Mission, Proposed U.S. Assistance and Arms Transfers to Pakistan: An Assessment 24 (Comm. Print 1981).

<sup>162.</sup> See Hearings on Aid and the Proposed Sale of F-16s to Pakistan, supra note 155, at 48 (statement of Sen. Hatfield).

<sup>163.</sup> See Hearings on Security and Economic Assistance to Pakistan, supra note 152, at 181 (statement of Selig Harrison, of Carnegie Endowment for Int'l Peace).

<sup>164.</sup> See R. Manning, supra note 144, at 16, 18 ("nuclear analysts agree that the most likely scenario for conflict is between India and Pakistan").

tication, such as the Northrop F-5G.<sup>165</sup> The United States could also have attempted to strike a hard bargain with Pakistan before the sale and conditioned the military assistance on the cessation of Pakistan's nuclear weapons program. Unfortunately, the administration's preoccupation with other foreign policy goals has preempted its nuclear nonproliferation objectives.

Remarkably, the security assistance provided to Pakistan is now being undermined by nuclear assistance to India. President Reagan apparently is prepared to authorize the export of nuclear reactor components to India. Secretary of State Schultz promised the Indians that President Reagan would do whatever was necessary to provide spare parts for India's American-designed reactors, <sup>166</sup> a step taken only after Japan refused to act as our proxy and supply the components. In declining, Japan reportedly chided the United States for ignoring its nonproliferation commitments. <sup>167</sup>

The Reagan administration consistently has demonstrated its willingness to engage in nuclear commerce with India, a nation that still refuses to abide by the Nuclear Nonproliferation Treaty. Recognizing that Congress would not permit continued fuel shipments to India's reactors, President Reagan has arranged with France to provide enriched uranium. Moreover, this willingness to supply India's nuclear program is undaunted by reports that India is preparing for still another nuclear test. 169

## B. The Reduction of Nonproliferation Resources

The Reagan administration's lack of commitment to nonproliferation, evident in its nuclear export policies, is equally apparent in its budget figures. <sup>170</sup> Joerg Menzel, Chief of the Nuclear Safeguards Technology Di-

<sup>165.</sup> See Hearings on Security and Economic Assistance to Pakistan, supra note 152, at 178 (statement of Selig Harrison); id. at 130 (statement of Steven Cohen, Professor of Political Science at the University of Illinois).

<sup>166.</sup> Walsh, Critics Dispute India—U.S. Nuclear Trade-off, 221 Science 531 (1983).

<sup>167.</sup> Nuclear Control Institute, Reagan Administration to Approve Nuclear Exports to India Despite Ban in Nuclear Non-Proliferation Act, June 21, 1983, at 1 (press release).

<sup>168.</sup> See, e.g., Nuclear Fuel, Feb. 14, 1983, at 2; Claiborne, New Nuclear Dispute, Wash. Post, May 13, 1983, at A21, col. 4.

<sup>169.</sup> Benjamin, U.S. is Delaying Nuclear Exports to India, Wash. Post, June 23, 1983, at A16, col. 1.

<sup>170.</sup> United States financial support of the IAEA is crucial to the success of the international nonproliferation safeguards program. IAEA is plagued by a shortage of inspectors and equipment that, if uncorrected, threatens to undermine the Agency's efforts. See, e.g., Hearings on Legislation to Amend the Nuclear Non-Proliferation Act of 1978, supra note 35, at 81 (statement of S. Jacob Schert); The Israeli Air Strike, Hearings Before the Senate Comm. on Foreign Relations, 97th Cong., 1st Sess. 195 (1981) (statement of Rep. Markey); The International Atomic Energy Agency (IAEA): Improving Safeguards, Hearings Before the House Comm. on Foreign Affairs and its Subcomm. on International Security and Scientific

vision of the Arms Control and Disarmament Agency candidly testified: "We are a small agency with a small program." He might have added that they are a smaller agency with a smaller program than they were in 1980. When it comes to budget cutting, nonproliferation obviously is considered a social program, not a military one. Furthermore, these budget cuts have occurred without regard to the NNPA's specific commitment to "ensure that the IAEA has the resources to carry out" its mandates. 172

In 1976, President Ford firmly established the United States' financial commitment to nonproliferation when he pledged one million dollars of special aid annually to help the International Atomic Energy Agency upgrade its safeguards systems.<sup>173</sup> Actual assistance from the United States substantially exceeded this goal, and from fiscal year 1977 through fiscal year 1981, the United States provided over twenty-three million dollars in special assistance to the Agency.<sup>174</sup> This trend now has been dramatically reversed.

The Arms Control and Disarmament Agency's external research expenditures for nonproliferation programs grew from approximately \$1.2 million in 1976 to \$2.5 million in 1980.<sup>175</sup> Expenditures directed to international safeguards increased from approximately \$700 thousand in 1976 to nearly \$1.4 million in 1980.<sup>176</sup> In President Reagan's first year in office, however, he cut nonproliferation expenditures back to \$890 thousand, a reduction of over 60%.<sup>177</sup> Expenditures on international safeguards were cut by a third.<sup>178</sup> Furthermore, these cuts were made across the board. The fuel cycles and facilities program was cut by 9%, systems development decreased by 55%, remote verification measures were cut back by approximately 30%, and the budget for instruments and methods was eliminated

Affairs and on International Economic Policy and Trade, 97th Cong., 2d Sess. 76-77 (1982) (statement of Lawrence Scheinman, Center for Int'l Studies, Princeton University) [hereinafter cited as Hearings on the International Atomic Energy Agency].

<sup>171.</sup> Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 95 (statement of Joerg Menzel, Chief of the Nuclear Safeguards Technology Div., Arms Control and Disarmament Agency).

<sup>172. 22</sup> U.S.C. § 3241(b) (1982).

<sup>173.</sup> See Congressional Research Service, Nuclear Safeguards: Selected References 7 (1982).

<sup>174.</sup> Id.

<sup>175.</sup> Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 68.

<sup>176.</sup> Id. at 69.

<sup>177.</sup> Id. at 68.

<sup>178.</sup> Id. at 69. The administration's support for breeder reactors and reprocessing facilities will increase the strain on IAEA resources. Hearing on Nuclear Safety Three Years After Three Mile Island, supra note 5, at 6 (statement of Peter Bradford, NRC Commissioner) (greater access to plutonium is "likely to overwhelm the IAEA's safeguard system" given the difficulties of overseeing storage and transportation of separated plutonium).

altogether. 179

These cuts do not simply reflect a cut in the Arms Control and Disarmament Agency's overall budget. The portion of the Agency's research expenditures directed toward nonproliferation efforts decreased from 66% in 1980 to only 44% in 1982. When Congress confronted the administration about these budget cuts, administration officials explained that the cuts were a result of both "general budget tightening" and the transfer of responsibilities from the Arms Control and Disarmament Agency to other agencies, such as the Department of Energy. The latter reason is untenable—DOE assistance programs directed toward international safeguards also declined in the first year of the Reagan administration. Nuclear Regulatory Commission nonproliferation programs were dramatically cut as well, with its aid to safeguards dropping by more than 50%. 183

The consequences of these budget cuts are most apparent in the development of the Remote Continual Verification (RECOVER) program, begun in 1976. RECOVER is a system that, once developed, will monitor remotely the operational status of the IAEA's surveillance cameras and containment devices. Officials at the Arms Control and Disarmament Agency concluded that this system of remote sensors would enhance the efficiency and effectiveness of IAEA inspections.<sup>184</sup>

As demonstrated by a General Accounting Office investigation, however, the Agency has fallen far behind in developing RECOVER. The deadline for completing a key component, necessary to link the program to existing IAEA sensors, was missed because the Agency lacked the technical staff and resources necessary to develop the project.<sup>185</sup>

In 1980, the Arms Control and Disarmament Agency officials predicted that RECOVER would be operational by 1982. Now, the Agency suggests that 1987 is a more realistic estimate for implementation. The Agency has

<sup>179.</sup> Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 69.

<sup>180.</sup> Id.

<sup>181.</sup> Id. at 166.

<sup>182.</sup> Nuclear Safeguards: Selected References, supra note 173, at Attachment II.

<sup>183.</sup> Id.

<sup>184.</sup> GENERAL ACCOUNTING OFFICE, RECOVER: A POTENTIALLY USEFUL TECHNOLOGY FOR NUCLEAR SAFEGUARDS, BUT GREATER INTERNATIONAL COMMITMENT IS NEEDED 1 (1983) [hereinafter cited as GAO REPORT]. Even the Reagan Arms Control and Disarmanment Agency (ACDA) still believes that the RECOVER program will provide "improved effectiveness" in IAEA safeguards and "increased efficiency in the use of IAEA inspector resources." Hearings on Technical Aspects of Nuclear Nonproliferation, supra note 4, at 65 (statement of Jorge Menzel). Paul Leventhal described RECOVER as offering a "quantum leap" beyond the current safeguards system. Hearings on the International Atomic Energy Agency, supra note 170, at 88.

<sup>185.</sup> GAO REPORT, supra note 184, at 23.

conceded that the delays are attributable to its inadequate staff size and expertise. 186

In an effort to speed up development, the Agency attempted to transfer responsibility for RECOVER to DOE, which possesses greater overall resources. DOE refused this request and while it finally accepted some portions of the program, it specifically restricted its funding to very low levels.<sup>187</sup> The program now languishes in the executive branch and even the 1987 implementation date seems questionable.

The failures of RECOVER development cannot be blamed entirely on the Reagan administration. Even the Carter budgets were inadequate to complete the task. Nevertheless, the fact that Reagan cut the already inadequate Agency budgets is certain to frustrate this and other valuable nonproliferation research and development projects. Nor is there any excuse for these cutbacks. While no one would dispute the need to reduce today's federal deficits, the sums involved in the nonproliferation programs are miniscule, amounting to only a few million dollars. Neither their small cost nor their potentially huge benefit, however, has saved these programs from crippling budget cuts in the Reagan administration.

In sum, the Reagan administration's export policy has promoted nuclear commerce, with little or no regard for the proliferative consequences. Combined with the dramatic reductions in federal nonproliferation programs, the administration's nonproliferation program appears to be more like a "nonpolicy."

#### IV. THE TRUE ADMINISTRATION NONPROLIFERATION POLICY?

The Reagan administration's patent lack of a nonproliferation policy is somewhat mysterious. No ideological commitment explains this absence of concern. Two and one half years of the Reagan administration offer ample evidence that efforts to stop the spread of nuclear weapons have waned in priority; but simply to note this effect falls short of an explanation. In reality, the Reagan policy may be directed by a sophisticated, if misguided, analysis of the prospects for halting proliferation.

Administration officials appear to have reconciled American policy to the view that proliferation is inevitable and that efforts to stop it are futile and naive. In this view, virtually nothing can stop the drive of countries like Pakistan, South Africa, and Argentina for national nuclear forces.

<sup>186.</sup> Id. at 22.

<sup>187.</sup> Id. at 28.

<sup>188.</sup> Id. at 3, 22-23; see supra note 170.

<sup>189.</sup> See supra notes 173-75.

Combined with this pessimistic outlook is a move toward "realism" in American foreign policy. 190 The result is a shift in concern from containing proliferation to preparing America for an emerging nuclear-armed world. At a minimum, this planning adopts a more conciliatory approach to prospective proliferants. More enthusiastic approaches would encompass technical assistance for new nuclear forces.

Obviously, this is not the administration's public stance. Announcing this position would result in overwhelming congressional and public opposition. In 1981, Lewis Dunn observed that "nonproliferation zealots will criticize the United States for even isolated, limited accommodation with new nuclear powers. And the broader public may find it difficult to appreciate the logic behind such a policy." At the time, Dunn was a senior staff member at the Hudson Institute and one of the most vocal advocates of a "realistic" nonproliferation policy. He now serves as a special counselor to the administration's ambassador-at-large for nuclear nonproliferation policy. Dunn's 1982 book, Controlling the Bomb, proposes many of the policies adopted by the Reagan administration and appears to stand as a blueprint for the Reagan administration's policies. 192

The "realistic" view emphasizes the costs of nonproliferation policy, when it competes with other foreign policy objectives. Because proliferation is perceived to be unavoidable, these other objectives begin to assume primacy. Such "realism," therefore, calls for a friendlier policy toward potential proliferants. As summarized by Dunn: "even with a willingness to pay a significant price to contain the nuclear genre, greater realism about what can be achieved by United States policy is necessary. Preventing any more countries from joining the nuclear club is not a reasonable goal." 193.

The parallels between the proposal espoused in *Controlling the Bomb* and the course followed by Reagan are direct. As Representative Udall has observed, the "administration's policy seems to assume that nuclear proliferation is inevitable and therefore we should free ourselves of restraints on commerce . . . ." While this venture into the thought processes of the Reagan State Department is necessarily speculative, 195 it

<sup>190.</sup> See Hearings on International Atomic Energy Agency, supra note 170, at 86 (statement of Paul Leventhal) (Reagan strategy has moved from preventing proliferation to managing its consequences).

<sup>191.</sup> L. DUNN, supra note 94, at 178.

<sup>192.</sup> Id.

<sup>193.</sup> Id. at 179.

<sup>194.</sup> Hearings on Legislation to Amend the Nuclear Non-Proliferation Act of 1978, supra note 35, at 3.

<sup>195. 217</sup> Science 1388 (1982) (much of the Reagan policy, of course, remains classified).

appears that the administration has secretly reversed the public and congressional consensus for opposing nuclear proliferation.

If this is the view that shapes American policy, what are the future implications? The first is a drawback that even Dunn concedes: As attention shifts to the inevitability of additional nuclear powers, efforts to control the spread will suffer. <sup>196</sup> The mere recognition of inevitability will undermine support for a vigorous nonproliferation strategy. While Mr. Dunn believes that this tendency can be overcome, it is difficult to deny the empirical experience of the past two years. The world has seen a series of decisions that slight nuclear containment in favor of other objectives.

Because this attitude is tacit, however, the administration has successfully employed nonproliferation rhetoric to justify policies actually designed to promote commerce or support politically disfavored regimes.<sup>197</sup> Under the guise of nonproliferation, the administration has advanced other goals that would otherwise be more difficult to justify to Congress.

The administration's approach is tragic in its international effects. While no informed observer would guarantee that American policy can prevent future proliferation, active nonproliferation efforts can successfully retard the spread of nuclear weapons. In 1963, President Kennedy predicted that the 1970's would see as many as twenty-five nuclear powers. The inaccuracy of this prediction is due in large part to America's intervening efforts to prevent proliferation through support for the international safeguards regime. Given this record of at least partial success and the undeniable benefits of merely slowing proliferation, the administration's abandonment of these historic policies is both irresponsible and dangerous.

#### V. CONCLUSION

In a very short period of time, the Reagan administration radically re-

<sup>196.</sup> See Hearings on the International Atomic Energy Agency, supra note 170, at 86 (statement of Paul Leventhal) ("proliferation will be inevitable if we assume it to be").

<sup>197.</sup> See supra notes 61-97.

<sup>198.</sup> See THE HARVARD NUCLEAR STUDY GROUP, supra note 1, at 215.

<sup>199.</sup> The Carter administration, for example, had numerous successes in restraining exports to potential proliferants. See supra notes 37-40 and accompanying text.

<sup>200.</sup> See THE HARVARD NUCLEAR STUDY GROUP, supra note 1, at 223:

If the rate [of proliferation] can be slowed, there are better chances of managing the destabilizing effects and the prospects of nuclear use. For every extra year in which an additional country does *not* have nuclear weapons, there is at least some reduction in the likelihood of nuclear war.

See Goheen, supra note 66, at 213-15.

vised the American nuclear nonproliferation policies pursued by the Ford and Carter administrations. This revision demonstrates that the present administration accords low priority to the nonproliferation initiatives that were once important objectives of American foreign policy. The relative ascendance of competing goals, including expanded exports and support for anticommunist nations, inevitably compromised the traditional national commitment to preventing the spread of nuclear weapons.

Fortunately, the factors influencing a nation's ability and willingness to develop nuclear weapons are many and varied. As a result, no short-term change in American nonproliferation policy, such as that pursued by President Reagan, will have an immediate or dramatic effect on international nuclear proliferation. Nevertheless, the administration has embarked on a dangerous course that presents a significant risk of future proliferation by one or more of the nations discussed above. The seeds sown by these new policies may be reaped in years to come, in the form of new nuclear powers that may threaten international stability and peace. It is now prudent for America to reexamine the policies of the Reagan administration and restore our nation's traditional commitment to nonproliferation.