## "We Are Not a Nonproliferation Agency"

Henry Kissinger's Failed Attempt to Accommodate Nuclear Brazil, 1974–1977

### · Carlo Patti and Matias Spektor

Long before the Indian nuclear explosion of 1974 awakened the international community to the risks of proliferation in developing countries, Brazil found in the United States its major partner for the nuclear age. In the late 1930s and 1940s, a string of secret agreements had enabled the U.S. government to obtain supplies of Brazilian rare earths, thorium, and uranium for ts wartime operations. In the 1950s, Brazil was a major recipient of funds and technical assistance from U.S. laboratories under the Atoms for Peace program, and a generation of Brazilian nuclear scientists trained at U.S. universities. As the 1960s and 1970s progressed, officials in Brasília turned to the United States for support in setting up an indigenous nuclear industrial complex that they hoped would include uranium enrichment and reprocessing facilities. Brazil's first nuclear-power reactor (Angra I) was built and fueled under a Westing-house contract endorsed by U.S. authorities.<sup>1</sup>

Nevertheless, the Indian test in 1974 quickly shifted the dynamics in Washington and across the West, with significant repercussions for the prospects of proliferation in the developing world. To the surprise of Brazilian officials, key decision-makers in the State Department, the Arms Control and Disarmament Agency (ACDA), and representatives in the U.S. Congress put forward new arguments for the application of tighter regulations to the transfer of sensitive nuclear technologies, and a core group of Western countries set

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<sup>1.</sup> For some recent work, see Carlo Patti, "The Origins of the Brazilian Nuclear Programme (1951–1955)," *Cold War History*, Vol. 15, No. 3 (2015), pp. 353–373; Carlo Patti, *O programa nuclear brasileiro: Uma história oral* (Rio de Janeiro: Fundação Getulio Vargas [FGV], 2015), p. 270; Matias Spektor, "The Evolution of Brazil's Nuclear Intention," *The Nonproliferation Review*, Vol. 23, No. 5–6 (2016), pp. 635–652; and the website of the Nuclear Proliferation International History Project at the Woodrow Wilson Center for International Scholars. The authors of this article are currently exploring the history of the Brazilian nuclear program and will publish new work on this and on Brazil's attitude toward the nuclear nonproliferation regime.

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out to establish common rules and controls for nuclear-technology suppliers in what would later become the Nuclear Suppliers Group. If successful, the arguments for additional regulations in the field of global nuclear know-how transfers would amount to a normative framework far more intrusive in the domestic affairs of developing countries than had been the case before. At a time when the political-diplomatic clash between the industrialized North and the developing South was acute in domains as varied as trade, aid, and the Law of the Sea, disputes over nuclear proliferation threatened to sever the ties that for a long time had bound the United States to some of its closest Third World allies in the global Cold War.<sup>2</sup>

This article illustrates how Henry Kissinger managed the emerging tension between traditional alliance politics and nonproliferation policy in the developing world. As national security adviser from 1969 to 1975 (and secretary of state from 1973 to 1977), Kissinger had become the chief architect and operator of the policy of engagement with the military dictatorship ruling Brazil. He had convinced Richard Nixon to talk about Brazil's rulers as "key to the future" when the dangers of social upheaval and revolution spread across South American countries such as Argentina, Bolivia, Chile, Peru, and Uruguay.<sup>3</sup> But India's nuclear explosion in 1974 rekindled worries among senior U.S. and West European officials that the spread of nuclear technologies-which had reached South America at the hand of the United States—could end up in covert nuclear installations run by military personnel and scientists keen on acquiring or building their own capabilities to produce fissile material. To be sure, some level of concern had always been present. From the 1950s on, U.S. officials had worked to prevent Brazil from acquiring centrifuge technology and to delay the pace of indigenous know-how development.4 But only the shock of 1974 induced the U.S. govenrment act on the fear that the spread of dual technology to the developing world could

<sup>2.</sup> On the growing challenge to the West, see Kai Alderson and Andrew Hurrell, eds., *Hedley Bull on International Society* (London: Palgrave Macmillan, 2000). For a broader discussion of the tension between alliance politics and postcolonial politics, see Odd Arne Westad, *The Global Cold War* (Cambridge, UK: Cambridge University Press, 2005). For a recent assessment of North-South tensions, see Giuliano Garavini, *After Empires: European Integration, Decolonization and the Challenge from the Global South, 1957–1986* (New York: Oxford University Press, 2012).

<sup>3.</sup> Matias Spektor, *Kissinger e o Brasil* (Rio de Janeiro: Zahar, 2009); and Tanya Harmer, "Brazil's Cold War in the Southern Cone, 1970–1975," *Cold War History*, Vol. 4, No. 4 (2012), pp. 659–681.

<sup>4.</sup> For a recent summary of existing literatures on the issue of the gas centrifuge, see Patti, "The Origins of the Brazilian Nuclear Programme"; and William Burr, "The 'Labors of Atlas, Sisyphus, or Hercules'? U.S. Gas-Centrifuge Policy and Diplomacy, 1954–60," *International History Review*, Vol 37, No. 3 (2015), pp. 431–457.

have destabilizing effects for U.S. policy, even if the countries in question were reliable Cold War allies. Key U.S. officials set out to tighten controls and devise targeted nonproliferation measures, but their quest for a new set of policies designed to prevent the spread of nuclear technology found a powerful challenger in Kissinger, who responded by putting forward a proposal to accommodate Brazilian nuclear ambitions instead.

This article also seeks to contribute to the body of work that has in recent years shed new light on U.S. nonproliferation policies in the 1970s, with a focus on the Nixon and Ford administrations' skepticism about the prospects of the Nuclear Non-Poliferation Treaty (NPT), the role of nuclear technologies in sustaining the alliance architecture of the Cold War, and the difficult choices Washington had to make in its attempts to forge a sturdy nonproliferation regime.<sup>5</sup> Although Kissinger worried about the possibility that Third World allies might acquire nuclear capabilities of their own, he made it a point to argue for "political solutions" to the problems that inhered in the spread of nuclear know-how. He was not confident that additional controls and targeted nonproliferation policies would effectively prevent technology from diffusing, and he feared that U.S. attempts to halt the dissemination of nuclear science might alienate allies and be counterproductive. Moreover, to the extent that other Western countries looked after the economic interests of their own national nuclear industries, the United States might find itself increasingly isolated in a global market that it once controlled. In this article we also unearth new primary sources pertaining to the growing tensions between the United States and the Federal Republic of Germany (FRG) over dual-technology transfers to Brazil, complementing and expanding existing bodies of knowledge. The West German government's initial willingness to provide nuclear technical assistance to the Brazilians through the largest

<sup>5.</sup> For a general evaluation of the Nixon-Kissinger attitude toward the NPT, see Michael J. Brenner, Nuclear Power and Non-Proliferation: The Re-Making of the U.S. Policy (New York: Cambridge University Press, 1981), p. 324; Francis J. Gavin, "Nuclear Nixon: Ironies, Puzzles, and the Triumph of Realpolitik," in Fredrik Logevall and Andrew Preston, eds., Nixon in the World: American Foreign Relations, 1969–1977 (Oxford, UK: Oxford University Press, 2008), pp. 126–145; Shane J. Maddock, Nuclear Apartheid: The Quest for American Atomic Supremacy from World War II to the Present (Chapel Hill: University of North Carolina Press, 2010), p. 416; James Cameron and Or Rabinowitz, "Eight Lost Years? Nixon, Ford, Kissinger and the Non-Proliferation Regime, 1969–1977," Journal of Strategic Studies, Vol. 40, No. 6 (2016), pp. 1–28; William Burr, "A Scheme of 'Control': The United States and the Origins of the Nuclear Suppliers' Group, 1974–1976," International History Review, Vol. 36, No. 2 (2014), pp. 252–276; and William Burr and Jeffrey Kimball, Nixon's Nuclear Specter: The Secret Alert of 1969, Madman Diplomacy, and the Vietnam War (Lawrence, KS: University Press of Kansas, 2015), p. 448.

bilateral technological cooperation agreement ever became a serious source of diplomatic friction in U.S.-FRG and U.S.-Brazilian relations.<sup>6</sup>

The story of Kissinger's policy of accommodation toward a nuclear Brazil is part of a broader attitude of pragmatism in the face of spreading independent nuclear capabilities among U.S. allies so long as these allies remained crucial to U.S. foreign policy. Kissinger's reluctance to push back too strongly against Brazil's policy of dual-use technology acquisition and development thus illustrates themes that marked U.S. policy vis-à-vis other developing countries that were committing resources to their own nuclear capabilities, such as Argentina, Iran, Pakistan, and South Africa. Our account of Kissinger's policy of accommodation toward Brazil is based on U.S. and Brazilian records and on in-depth oral history interviews with key players. We hope this article will encourage others to search for more materials pertaining to key countries across the developing world and thereby pave the foundations for a broader, more global history of nonproliferation diplomacy in the era of East-West détente.

The article begins by discussing how the Nixon and Ford administrations set out to turn Brazil into an ally in the global Cold War and what parameters they established for securing engagement in Brasília. We note how the 1973 oil shock and the surge of global demand for nuclear energy curtailed the U.S. government's ability to honor existing commitments to provide nuclear fuel to future Brazilian nuclear power plants and prompted officials in Brazil to seek out other, more reliable partners in the industrialized world. We then turn to the emerging nuclear-technology cooperation between Brazil and the FRG, the one country that initially agreed to sell uranium enrichment technologies to the Brazilians in exchange for lucrative contracts in the nuclear-energy sector. The article then looks at Kissinger's decision to resist pressure from his own administration and Congress to craft a dedicated nonproliferation policy for Brazil and instead seek to accommodate the nuclear ambitions of the Brazilian generals. The article turns next to Jimmy Carter's presidential campaign, when Brazil was singled out as a target state for both nuclear proliferation and human rights policy, in what amounted to a sharp critique of Kissinger's policy of engagement with the Brazilian military junta. We end

<sup>6.</sup> William Gray, "Commercial Liberties and Nuclear Anxieties: The U.S.-German Feud over Brazil, 1975–1977," *International History Review*, Vol. 34, No. 3 (2012), pp. 449–474.

<sup>7.</sup> For an assessment of U.S. policy toward Argentina, see Jacques Hymans, "Of Gauchos and Gringos: Why Argentina Never Wanted the Bomb, and Why the United States Thought It Did," *Security Studies*, Vol. 10, No. 3 (2001), pp. 153–185. For recent work on U.S. policy toward the Iranian nuclear program at the time, see Farzan Sabet, "The Iranian Nuclear Program, U.S Policy, and the Non-Proliferation Regime, 1969–1979," Ph.D. Diss., Graduate Institute, Geneva, 2017.

by showing how the presidential transition of January 1977 made U.S. accommodation of Brazil unravel, opening the door to a more confrontational approach.

#### Kissinger Engages Brazil

Not long after Kissinger became national security adviser in 1969, he set out to reexamine policy toward Brazil. By far the largest country in South America, Brazil was governed by a staunchly anti-Communist military regime bent on fighting its own regional Cold War. Within months, Kissinger had commissioned a set of policy papers to turn Brazil into a target for "devolution": the attempt by the Nixon administration to delegate power and responsibility to emerging regional powers such as Iran, South Africa, Indonesia, and Brazil. By 1971, dictatorial Brazil was a major beneficiary of the Nixon Doctrine, according to which major countries in the developing world enjoyed privileged access to and concessions from the White House in exchange for policy coordination in regional matters and in global multilateral institutions.<sup>8</sup> As President Nixon argued to British Prime Minister Edward Heath in a discussion about the future of the Cold War in Latin America, Brazil "is the key to the future."

The Nixon administration's "devolution" coincided with Brazil's attempt to build a major nuclear industrial complex. Brazilian plans to acquire nuclear technology for civilian purposes traced back to the mid-1940s, but not until the late 1960s did nuclear energy take center stage in Brazilian industrial policy. The regime set out to purchase a handful of nuclear power plants from foreign sellers and to provide subsidized credit for the development of a nascent indigenous nuclear industrial complex to support those plants. The expectation in Brasília was that nuclear-plant construction would spill over to promote associate nuclear industrial services in the country and that there would be a serious move toward indigenous research and development on the back of foreign technology transfers. The goal was to pave the way for the development of indigenous industrial capabilities in the nuclear fuel cycle,

<sup>8.</sup> Spektor, Kissinger e o Brasil, p. 48.

<sup>9.</sup> Secret Memorandum from Henry Kissinger on a meeting between the U.S. President and British Prime Minister Edward Heath, 20 December 1971, in National Archives and Records Administration (NARA), Nixon National Security Council Materials, VIP Visit Boxes 910–954, https://nsarchive2.gwu.edu/NSAEBB/NSAEBB71/doc15.pdf.

<sup>10.</sup> Emanuel Adler, *The Power of Ideology: The Quest for Technological Autonomy in Argentina and Brazil* (Oakland, CA: University of California Press, 1987).

including uranium extraction, enrichment, and reprocessing. These priorities reinforced the belief in Brasília that signing on to the NPT would run counter to national interests, especially if adherence to the treaty ended up closing off future options in the field of nuclear explosions and weaponization. Brazil's leaders refused to sign on to the NPT, arguing that it permanently mortgaged the technological futures of non-nuclear weapons states.

None of this affected the willingness of the United States to cooperate with the Brazilian nuclear program. In 1971, after a bidding process, Brazil granted its first nuclear power-plant contract to Westinghouse Electric Company. The U.S. company provided a turnkey nuclear power plant with a pressurized water reactor, the fuel of which was to be purchased by Brazil from the United States Atomic Energy Commission (USAEC) on multiyear contracts. Besides nuclear plants for electricity generation, Brazil expected to buy uranium-prospecting technologies from the United States for the exploration of its own large uranium reserves, which it had been nationalized in 1970. At the time, Brazil also sought U.S. technical cooperation to build a uranium enrichment facility and explore spent-fuel reprocessing. The United States excluded enrichment and reprocessing technologies from the deal, but the reactor sale moved forward even as the tide in policy circles in Washington was beginning to turn against would-be proliferators like Brazil. By the time Watergate engulfed the Nixon administration, India's May 1974 nuclear test had transformed U.S. attitudes toward Brazil for good, and an export ban on sensitive technologies had become operational. As Nixon resigned and the world came to grips with the implications of the Indian bomb, influence in Washington over nuclear sales to developing countries progressively shifted from the White House to other agencies within the executive branch and, increasingly, to Congress, making it more difficult to justify nuclear technical cooperation to countries such as Brazil on grounds of foreign policy and grand strategy.<sup>12</sup>

<sup>11.</sup> For a discussion of Brazilian plans for nuclear explosions, see Matias Spektor, "Why Brazil Never Built the Bomb?" (paper presented at the Annual Meeting of the Society for Historians of American Foreign Relations, Arlington, VA, 23 June 2017). For an assessment of Brazilian attitudes toward the NPT, see Carlo Patti, "Brazil in the Global Nuclear Order," Ph.D. Diss., University of Florence, 2012, ch. 2.

<sup>12. &</sup>quot;Proposal for a Study on the Initiation and Development of a National Fuel Cycle and Nuclear Reactor Component Industry in Brazil," 28 February 1974, in Paulo Nogueira Batista Archive (PNB) at the Centro de Pesquisa e Documentação sobre a História Contemporânea do Brasil da Fundação Getulio Vargas (CPDOC/FGV), pn a 1975.01.09. President Geisel regularly pointed out the importance of nuclear energy for Brazilian growth, starting with his inauguration speech on 15 March 1974. American Embassy (AmEmbassy) Brasília to Secretary of State (SecState), Confidential, Cable 1974BRASIL01966, 23 March 1974, in Department

Dominant attitudes in Brazil, however, were rapidly moving toward an ever more nationalist stance on nuclear matters. Authorities were less prone to commit to nonproliferation norms and had fully adopted the anti-NPT rhetoric that lasted for three decades. Their stance undoubtedly had to do with the Brazilian regime's growing nuclear ambitions, but the full meaning of this transition can be grasped only if the story is embedded in the context of Brazilian domestic politics. Soon after the Cuban missile crisis in October 1962, Brazil's democratically elected, left-leaning government made a series of commitments to nonproliferation. Alongside Mexico, Brazil took the initiative for turning Latin America into a nuclear-weapons-free zone. At the time, Brazil was an active member of the United Nations' (UN) Eighteen-Nation Disarmament Committee, which set out to consider disarmament, confidence-building measures, and nuclear-test restrictions as a way of providing the basis for stable global nuclear governance. The Brazilian military, which opposed President João Goulart, came to see further steps toward nonproliferation as a threat to Brazilian policy autonomy, technological independence, and national grandeza (greatness).

By the time the military ousted Goulart from power in late March 1964, Brazilian policy on nuclear matters had reversed. Even though the new rulers eschewed any plans to abandon the negotiations for a Latin American nuclear-weapons-free zone, they did introduce provisions into the treaty to ensure Brazil could formally remain a member of the denuclearized area without ever adopting its safeguards regime or its ban on "peaceful nuclear explosions" (PNEs) along the lines of the U.S. Plowshares program. By 1967, the Brazilian military junta explicitly committed to keeping the door open to the possibility of building a nuclear explosive in the future. In 1969, it also refused to sign on to the NPT, accusing it of permanently mortgaging non-nuclear-weapons states' technological futures. Brazilians did not worry that their stance might trigger a security dilemma in neighboring Argentina, where government

of State, Central Foreign Policy Files (DOS/CFP). NARA; Exposição de Motivos No. 245/74, Ministério de Minas e Energia (MME), 23 April 1974, cited in Exposição de Motivos No. 055/74, 13 August 1974, in Conselho de Segurança Nacional, Secreto, in Antônio Francisco Azeredo da Silveira Archive (AAS) at CPDOC/FGV, mre pn 1974.08.15, mre/pn (1/661); and Ueki to Geisel, Despacho, 16 April 1974, in Ernesto Geisel Archive (EG), CPDOC/FGV, pr 1974.03.26/2 On the evolution of negotiations with France and West Germany, see Nogueira Batista to Saraiva Guerreiro, Memorandum, DEC/75, Secret, 20 May 1974, in PNB, pn a 1952.07.01. On Kissinger's view of sales to Brazil, see Nogueira Batista to Saraiva Guerreiro, Memorandum, DEC/75, Secret, 20 May 1974, in PNB, pn a 1952.07.01. Kissinger is discussed in Garrett Corporation to the Nuclebrás Superintendent Carlos Syllus Pinto, 24 June 1975, in PNB, pn c 1969.12.01.

officials also saw the evolution of the global nonproliferation regime as detrimental to their own national interests.<sup>13</sup>

As the policy of nuclear technology assistance to Brazil began to lose support in Washington, Brazilian authorities turned to European countries as potential suppliers, even though authorities in Brazil thought U.S. technology superior and more suitable for Brazil's own interests. The quest for alternative partners in place of the United States as Brazil's main technology provider was not new: Brazil had undergone a similar search twenty years earlier, in the 1950s, when it first set out to acquire centrifuges for research purposes and encountered resistance from the United States. Now, in the early 1970s, Paris and Bonn represented the alterative. The French and West German governments showed no sign of sacrificing a good nuclear-technology sale to Brazil on the altar of emerging, ever stricter nonproliferation rules and controls.

Brazilians felt pressed to arrange a package of nuclear purchases for another reason too: the global energy crisis of November 1973, which threatened the booming Brazilian economy—and the domestic political stability on which the ruling regime depended. At the time, Brazil imported almost all of its oil, and with the price of crude climbing, the economic growth that had buoyed Brazil's authoritarian regime since 1964 came under serious threat. In a bid to devise solutions to this problem, Brazilian officials hoped that domestic nuclear energy production might provide a way out in the mid to long term. By early 1974, they were convinced that, when it came to foreign nuclear technologies, "rapid action would be highly compensating," and they moved ahead to launch Plano 1990, a program created by the Brazilian national electric company Eletrobras to expand domestic electrical capacity over

<sup>13.</sup> For an assessment of Brazil's evolving position at the time, see Patti, "Brazil in the Global Nuclear Order," pp. 58–70; Paulo Wrobel, *Brazil, the Non-Proliferation Treaty and Latin America as Nuclear Weapon-Free Zone* (Brasília: FUNAG, 2017); and Ryan Musto, "'Keep the Nuclear Beast in a Cage': Brazil, the United States, and Peaceful Nuclear Explosions under the Treaty of Tlatelolco, 1964–1967" (paper presented at the Annual Meeting of the Society for Historians of American Foreign Relations, Arlington, VA, 23 June 2017). On the explicit commitment by the Brazilian military to leave a nuclear-explosion option open, see "Minutes of the Fortieth Session of the Brazilian National Security Council," 4 October 1967, in Archive of the Brazilian Foreign Ministry in Brasília, available in English at http://digitalarchive.wilsoncenter.org/document/116914. On the absence of a regional security dilemma at that juncture, see Rodrigo Mallea, Matias Spektor, and Nicholas Wheeler, eds., *The Origins of Nuclear Cooperation: A Critical Oral History between Argentina and Brazil* (Rio de Janeiro: FGV, 2015).

<sup>14.</sup> On choosing the United States over other countries—such as the United Kingdom, West Germany, and Sweden—see Patti, *O programa nuclear brasileiro*, p. 216; and Guilherme Camargo, *O fogo dos deuses: Uma história da energia nuclear: Pandora 600 a.C.–1970* (Rio de Janeiro: Contraponto, 2006), p. 272. On Brazil's nuclear choices in the 1950s and on the cooperation with West Germany, see Patti, "The Origins of the Brazilian Nuclear Programme, 1950–1951"; and Burr, "The 'Labors of Atlas, Sisyphus, or Hercules'?," pp. 431–457.

the following 25 years through the construction of eight nuclear plants and the acquisition of fuel-cycle technologies.<sup>15</sup>

Brazil's quest for international partners other than the United States in the production of nuclear fuel grew stronger when USAEC unilaterally announced in August 1974 that, in the wake of the energy crisis and the resulting spike in global demand for enriched uranium, it would be unable to honor its commitment to provide fuel for Brazil's future nuclear power plants. The possibility of such disruption in future fuel provision had always been a possibility. Clauses to that effect had been included in the contracts signed between the United States and Brazil just two months earlier. 16 But the Brazilian government took great offense at the measure and denounced U.S. unreliability, paving the way for European countries to step in as future suppliers for the Brazilian nuclear program. Nationalists in Brazil rallied behind the military rulers' decision to move away from the United States, portraying Washington's suspension of future fuel guarantees as an evil plot to prevent the Brazilian economy from modernizing. The argument grew stronger in policy circles that Brazil would find a suitable place in a nuclear world only if it developed indigenous nuclear capabilities (even if the long road to selfsufficiency required a few stops in Paris or Bonn). Nationalism, authoritarian rule, and profound suspicion of U.S. intentions were now the foundation on which Brazilian nuclear ambitions took root. 17

Critical to this period was the Indian explosion of May 1974. From that moment onward, global concerns over nuclear proliferation surged, eventually turning dictatorial Brazil into a target state. The process, however, was slow, and the West German government had powerful incentives to consider replacing the United States as Brasília's main source of reactors and nuclear-technology supply.

# The Nuclear Agreement between West Germany and Brazil

In February 1974, the Brazilian government looked for new partners to complement U.S. cooperation. Brazil's strategy, as in the past, was to have as many

<sup>15.</sup> Ueki to Geisel, Despacho, 23 April 1974, in EG, pr 1974.03.26/2. The nuclear industrial plan was drafted in early 1974. Maurício Grinberg, interview, Rio de Janeiro, 7 February 2012.

<sup>16. &</sup>quot;Fuel Contract entre a Westinghouse e a FURNAS para ANGRA 1," Confidential, n.d., in PNB, pn a 1955.08.03 (48-748).

<sup>17.</sup> Ueki to Geisel, Despacho, 14 May 1974, in EG, pr 1974.03.26/2.

partners as possible, with a view to reducing dependence on any single third party. Brazilians mostly turned to France and the FRG, countries with the most advanced nuclear industries after the United States. Japan, Great Britain, and Italy had also been considered, but not for Brazil's more ambitious plans, which included not only the 1973 decision to acquire a second nuclear-power reactor but also the goal of equipping themselves for the full nuclear fuel cycle, including sensitive technologies such as ultracentrifuge uranium enrichment and spent-fuel reprocessing. Talks with French and West German officials were kept quiet. Whether the French government was aware that it was in "competition" with the FRG is unclear, but after several months of negotiations the emissaries from the Commission à l'Énergie Atomique (the French Nuclear Energy Commission) told the Brazilians that France would not provide sensitive gaseous diffusion enrichment technologies. Instead, the French offered to sell Framatome power reactors to be fueled by the European consortium Eurodif, and the Brazilians ended up in 1975 limiting cooperation with France to research on fast reactors. 18 Negotiations with the FRG proved to be more fruitful. In mid-February 1974, West German and Brazilian officials began to negotiate a major agreement, including public-private joint ventures to mine and enrich uranium, train hundreds of Brazilian nuclear-sector personnel and scientists, and transfer heavy materials, turbo-generators, and reactor technology from the West German nuclear industry to Brazil. In turn, Brazilian authorities agreed to commission up to eight West German nuclear-power reactors by 1990.

Cooperation between the two countries in the field had a long pedigree, with Brazil purchasing its first centrifuge from the FRG in the 1950s and sending a generation of nuclear scientists and engineers to complete their graduate education in West Germany. Brazilian scientists trained at the nuclear research center at Jülich, which was also the seat of the FRG's gas centrifuge research. Moreover, in the late 1960s, West German Minister of Finance Franz Josef Strauss and Secretary of the Ministry of Scientific Research Hans-Hilger Haunschild offered the Brazilians an ambitious plan of cooperation that included assistance in uranium prospection and the secret installation in Brazil of an ultracentrifuge uranium enrichment facility (to be

<sup>18.</sup> For a summary of other types of foreign assistance, see "II Plano Nacional de Desenvolvimento: Programa nuclear," 1974, in CBTN, personal archive. (The authors thank the late Maurício Grinberg, former supervisor of CBTN, for sharing this document.) Brazilian nuclear scientists also collaborated with the Italian Comitato Nazionale per l'Energia Nucleare until 1987. See Carlo Patti, "An Unusual Partnership: Brazilian-Italian Forms of Cooperation in the Nuclear Field (1951–1986)," in Elisabetta Bini and Igor Londero, eds., Nuclear Italy: An International History of Italian Nuclear Policies During the Cold War (Trieste: Edizioni Università di Trieste, 2017).

installed at an airstrip controlled by the West German company Dornier in the state of Minas Gerais). Although the proposed assistance was exactly the kind the Brazilians were hoping to secure, they turned down the offer under U.S. pressure. According to the chief Brazilian nuclear negotiator, Paulo Nogueira Batista, the United States threatened to block a World Bank loan for financing hydroelectric facilities if Brazil pursued such a deal. As the Brazilian and West German delegations met to discuss the terms of a potential nuclear-assistance agreement in 1974, negotiators from Brazil were acting on the assumption that, although the United States remained their main source of cooperation in the nuclear field, the FRG remained both willing and able to assist in the field of ultracentrifuge uranium enrichment. A

At the time, the global market for nuclear technology was in a state of flux. The major player in the field, the United States, was considering the privatization of large chunks of its nuclear sector, while granting private companies the ability to export nuclear fuel and sensitive technologies, as well as the right to constitute multinational facilities for enriching uranium or reprocessing spent fuel material abroad. Only a few days before the Brazilians first approached French and West German authorities on potential cooperation agreements, Kissinger told the Washington Energy Conference that, "within a framework of broad cooperation in energy, the United States is prepared to examine the sharing of enrichment technology, diffusion and centrifuge." Uncertainty about the regulatory framework governing nuclear technology exports was so widespread that, until 1975, U.S. private companies approached Brazilian officials to offer them sales of technologies and facilities the U.S.

<sup>19.</sup> On the Strauss and Haunschild proposal, see Camargo, *O fogo dos deuses*, pp. 274–275; Paulo Nogueira Batista, "O acordo nuclear Brasil-Alemanha," in José Guilhom de Albuqurque, ed., *Sessenta anos de política externa*, Vol. 2 (São Paulo: Lumen-Juris, 2013), p. 496; "Cooperação Brasil-RFA: Aeronáutica, Astronáutica e energia nuclear: Entendimentos com a casa Dornier," Paulo Nogueira Batista (Subsecretary for Political Affairs) to the Secretary-General of Itamaraty, AP/28, Top Secret, 19 June 1968, in PNB, pn a 1968.06.15; and Nogueira Batista to Magalhães Pinto, Viagem do Ministro Paulo Nogueira Batista à RFA, em setembro de 1968, "Relatório ao Senhor Ministro de Estado," Secret, 11 October 1968, in PNB, aq 1967.02.23. The Brazilian National Nuclear Energy Commission explicitly mentioned an interest in cooperating in the field of uranium enrichment in November 1968. See Federal Republic of Germany (FRG) Embassy, cable from Rio de Janeiro to Bonn, Deutsch-Brasilianische Wissenschaftlich-Technische Zusammenarbeit, 28 November 1968, in Politisches Archiv des Auswärtigen Amtes (PA/AA), 1346.

<sup>20.</sup> Maurício Grinberg, interview, Rio de Janeiro, 25 January 2012. Grinberg, who took part in negotiations with West Germany in 1975, was director of the CBTN/Nuclebrás from 1975 onward.

<sup>21.</sup> On Kissinger's declaration at the Washington Energy Conference, see Parker M. Bartlett (Vice President, Market Development—Garrett Corporation) to Carlos Syllus Martins Pinto (Superintendent and Director of the Technology Development Division of the CBTN/Nuclebrás), Garrett internal document, 24 June 1975, in PNB, pn c 1969.12.01 (2). See also "Excerpts from the Opening Address by Secretary Kissinger at the Oil Meeting in Washington," *The New York Times*, 12 February 1974, p. 20.

companies would not have been able to export. When the Brazilians turned away from the United States, the U.S. companies lost the promise of multibillion dollar contracts, feeding the notion in Washington that the FRG was fast becoming an avid competitor in the field.<sup>22</sup> West German officials, for their part, saw the Brazilian opening as a major opportunity to revive the Kraftwerk Union, a consortium of the FRG's Siemens and AEG-Telefunken, which was facing a severe cash crisis and growing pressure from unions to find new markets abroad.<sup>23</sup>

As early as May 1974, however, the FRG had to grapple with the inherent difficulties of providing nuclear assistance to a third party on such a scale. After months of intense negotiations, officials in Bonn decided not to export ultracentrifuge enrichment technology to Brazil. Instead, they began to develop an alternative proposal giving the Brazilians: the then-unproved jet nozzle method, a technique that at the time posed no major risk of producing weapons-grade fissile material.<sup>24</sup> However, West German officials did not communicate this to their Brazilian counterparts immediately. Part of the reason was probably commercial: Letting the Brazilians know that the FRG would not deliver the core technological component that had motivated the agreement in the first place might derail negotiations as a whole. But part of the reason may well have been the URENCO agreement among West Germany, the Netherlands, and the United Kingdom calling for secret classification of gas centrifuge technology. With the Brazilians in the dark about Bonn's decision not to sell enrichment technology, negotiations moved forward quickly from June to October 1974.<sup>25</sup>

When U.S. policymakers learned about the negotiations in late August 1974, they moved quickly to reassure Brazil they would find a solution to the

<sup>22.</sup> Elio Gaspari, *A ditadura encurralada* (São Paulo: Companhia das Letras, 2004), pp. 130–131.

<sup>23.</sup> Ibid.

<sup>24.</sup> Attitudes toward the jet nozzle changed a few years later, when South African scientists successfully managed to adapt the technology to the production of weapons-grade uranium. See J. D. L. Moore, South Africa and Nuclear Proliferation (London: Palgrave Macmilllan, 1987), p. 87. For a summary of the Brazilian–South African nuclear connection, see Carlo Patti, "Brazil–South Africa Nuclear Relations," electronic dossier, July 2013, http://ri.fgv.br/en/node/2039. Also see Carlo Patti, "The Forbidden Cooperation: South Africa–Brazil Nuclear Relations at the Turn of the 1970s," Revista Brasileira de Política Internacional, 61(2), e006. Epub 3 December 2018; and Waldo Stumpf and Carlo Patti, interview, Pretoria, 6 December 2012.

<sup>25.</sup> At this stage, the Brazilian nuclear architecture began to change. CBTN, a subsidiary of the Brazilian National Nuclear Energy Commission, was transformed into Nuclebrás (Empresas Nucleares Brasileiras, or Brazilian Nuclear Enterprises). The new company, which was modeled after the state-owned oil company Petrobras, acted as the core institutional anchor for Brazil's nuclear industry and was autonomous from the national nuclear energy commission. Its first chairman was Ambassador Paulo Nogueira Batista (1975–1982), who was the chief architect of the Brazil–West Germany nuclear deal.

thorny issue of U.S.-originated fuel supplies for the future Brazilian nuclearpower reactors. They even told the Brazilians the United States would find the fuel somehow—either from USAEC, private sources, or through the expansion of enrichment capacity in the United States.<sup>26</sup> Even if U.S. officials expected legislation governing nuclear exports to become ever more restrictive in the aftermath of India's nuclear explosion, concern endured about the financial and political implications if Brazil turned "elsewhere for its enrichment needs."27 When Brazilian officials saw Washington's reaction, they realized that the mere fact they were in negotiation with the FRG served as leverage in Brazilian nuclear-transfer talks with the United States. The Brazilian govvernment pressed U.S. policymakers to make enrichment technology available and thus become a major stakeholder in Brazil's future industrial complex.<sup>28</sup> In particular, John Crimmins, the U.S. ambassador to Brazil, strove to keep Washington engaged.<sup>29</sup> Despite Brazil's hope that the United States would at least offer a commitment to provide fuel for its future nuclear-power reactors, it soon became evident that none of the U.S. stakeholders were in a position to reassure their Brazilian clients.<sup>30</sup>

In early 1975, however, the major U.S. company Bechtel proposed an export package to Brazil that included nuclear power plants and an enrichment facility.<sup>31</sup> It was a formidable alternative to the deal with the FRG, but the

<sup>26.</sup> AmEmbassy Brasília to SecState, Cable 1974BRASIL06115, 14 August 1974, in DOS/CFP. On the issue of secrecy behind the Brazil–West Germany conversations, see Exposição de Motivos No. 055/74, 13 August 1974, in Conselho de Segurança Nacional, Secreto, in AAS, 1974.08.15 mre/pn (1/661). On U.S.–West German conversations, see AmEmbassy Bonn to SecState, Confidential, 12 September 1974, in DOS/CFP. See also Brenner, *Nuclear Power and Non-Proliferation*, p. 72.

<sup>27.</sup> For U.S. officials' expectations, see AmEmbassy Rio to SecState, Cable 1974BRASIL05295, 28 August 1974, in DOS/CFP; and SecState to AmEmbassy Brasília, Cable 1974STATE219652, 4 October 1974, in DOS/CFP. For U.S. officials ongoing concerns, see Carvalho, in a meeting with USAEC general manager Erlewine, in Rio de Janeiro on 27 August 1974; and SecState to AmEmbassy Brasília, Cable 1974STATE200011, 11 September 1974, in DOS/CFP.

<sup>28.</sup> AmEmbassy Brasília to SecState, Cable 1974BRASIL08604, Confidential, 14 November 1974, in DOS/CFP.

<sup>29.</sup> AmEmbassy Brasília to SecState, Cable 1975BRASIL01138, Confidential, 14 February 1975, in DOS/CFP.

<sup>30.</sup> AmEmbassy Brasília to SecState, Cable 1974BRASIL06115, 14 August 1974, in DOS/CFP. See also Ueki to Geisel, 29 August 1974, in EG, pr 1974.03.26/2. In late April, Ambassador Crimmins tried to prevent U.S.-Brazilian relations from declining further by telling Brazilian officials that a final decision on the provision of nuclear fuel had yet to be made in Washington. Ueki to Geisel, Despacho, 7 May 1975, in EG, pr 1974.03.26/2.

<sup>31.</sup> In January 1975, Westinghouse offered a similar package to Brazil. On the Westinghouse and Bechtel offers, see Patti, "Brazil in Global Nuclear Order," 2012, p. 124; and Norman Gall, "Atoms for Brazil, Dangers for All," *Foreign Policy*, No. 23 (Summer 1976), pp. 191–192.

U.S. State Department immediately intervened to clarify that no technology transfers would be permitted under the new U.S. legislation, in particular because Brazil was not a signatory of the NPT. By then it was clear that Brazil's refusal to become a member of the treaty would hurt U.S. commercial interests in the long run. Getting Brazil to switch gears and join the treaty would unlock the commercial potential in the bilateral relationship. Brazilian officials worried about losing the United States, too. Relying exclusively on the FRG was highly problematic for Brazil. Structuring a major nuclear program around West German provisions of technology and fuel was every bit as risky as making Brazilian nuclear policy dependent on the United States.<sup>32</sup> Brazilian officials were aware that the FRG, too, would soon have to face the expansion of a nonproliferation regime that was becoming more demanding, intrusive, and concerned with controlling transfers of sensitive technology to developing countries that might go the way of India.

In August 1974, a U.S. interagency estimate warned that Brazil's nuclear ambitions deserved close attention, alongside those of Israel, Argentina, South Africa, and Japan.<sup>33</sup> Three months later, Kissinger dispatched a policy planning team to Brazil to express concern about the country's nuclear intentions. The Brazilian response was defiant, insisting that Brazil could not possibly relinquish its quest to acquire nuclear fuel-cycle technologies when the United States thought it legitimate to suspend future nuclear fuel supplies. The Brazilians also expressed their irritation that the United States had not suspended similar contracts with Israel and Egypt, key allies in the Middle East. The U.S. delegation retorted that the ability of the United States to honor nuclear fuel contracts in the future would depend to some degree on the attitudes of recipient countries toward the use of fuel, an explanation the Brazilians found disingenuous.<sup>34</sup>

Knowing that progress with the Brazilians would be hard to come by, U.S. officials focused instead on engaging the FRG, where the Brazil deal was prompting new concerns within government ranks over how best to regulate the export of sensitive technologies. A contract then being drafted set out to

<sup>32.</sup> AmEmbassy Brasília to SecState, Cable 1974BRASIL08161, Confidential, 26 October 1974, in DOS/CFP; and Ueki to Geisel, 18 October 1974, in EG, pr 1974.03.26/2.

<sup>33. &</sup>quot;Prospects for Further Proliferation of Nuclear Weapons," Top Secret, Special National Intelligence Estimate, 24 August 1974, in NSArchive, https://nsarchive2.gwu.edu//NSAEBB/NSAEBB240/snie.pdf.

<sup>34.</sup> AmEmbassy Brasília to SecState, Cable 1974BRASIL08979, Confidential, 29 November 1974, in DOS/CFP; and "Relatório da Reunião entre Representantes da Assessoria de Planejamento do Departamento de Estado Americano e os Assessores do Ministro de Estado das Relações Exteriores," Confidential, n.d., in AAS, mre be 1974.04.16.

impose strict export safeguards that, in practice, would be more comprehensive than those in the NPT.<sup>35</sup> Or at least this is what West German officials told their counterparts in Washington as they prepared for the first round of talks to coordinate nuclear export controls with other members of the London Club (soon to become the Nuclear Suppliers Group). The FRG reassured other members of the group, including France, Japan, the United Kingdom, Canada, the Soviet Union, and the United States, that it would impose tight controls on Brazil because of that country's refusal to sign on to the NPT.<sup>36</sup>

The U.S. and West German governments cooperated closely in crafting regulations for technology transfers to Brazil, but the relationship was not free from tension. U.S. officials insisted that their West German counterparts consult with them before signing any agreements with Brazil. Also, the United States argued for "special constraint in supply of technology and equipment which directly result in weapon-usable material," stating that "the US feels that the export of reprocessing and enrichment technology is of particular concern and should be discussed among suppliers to reach common policies before any pending negotiations in this area are finalized."<sup>37</sup> U.S. pressure on the FRG worked.<sup>38</sup> Whereas Bonn had initially proposed to offer centrifuge technology for enriching uranium, it now retracted that offer. It also discarded the possibility of technology transfers resulting from West German scientific cooperation with its URENCO partners. But the West Germans left on the table a face-saving element for Brazil: the sale of the jet nozzle.<sup>39</sup> Officials

<sup>35.</sup> FRG Embassy in Brasília to Itamaraty, Confidential, 16 December 1974, in PNB, 1975.01.09.

<sup>36.</sup> SecState to AmEmbassy Bonn, Cable 1975STATE001068, Confidential, 3 January 1975, in DOS/CFP; AmEmbassy Bonn to SecState, Cable 1975BONN00309, Confidential, 8 January 1975, in DOS/CFP; AmEmbassy Bonn to SecState, Cable 1975BONN00332, Confidential, 8 January 1975, in DOS/CFP. During a meeting with a U.S. counterpart, a West German officer stated that negotiations with Brazil were slated to resume in late January or early February 1975. SecState to AmEmbassy Bonn, Cable 1975BONN00524, Confidential, 13 January 1975, in DOS/CFP; and SecState to AmEmbassy Brasília, Cable 1975STATE021069, Confidential, 29 January 1975, in DOS/CFP. The latter cable was effectively sent on 10 February 1975. On the origins of the Nuclear Suppliers Group, see William Burr, "A Scheme of 'Control': The United States and the Origins of the Nuclear Suppliers' Group, 1974–1976," *International History Review*, Vol. 36, No. 2 (2014), pp. 252–276. As noted by Bertrand Goldschmidt, a similar group of countries—the so-called Cashmere Group—gathered informally in the 1960s to discuss common rules on sensitive nuclear material and technologies. Bertrand Goldschmidt, *Le Complexe atomique: Histoire politique de l'énergie nucléaire* (Paris: Fayard, 1980), p. 308.

<sup>37.</sup> SecState to AmEmbassy Bonn, Cable 1975STATE048844, Secret, 5 March 1975, in DOS/CFP.

<sup>38.</sup> For a comprehensive study of U.S. pressure on West German nuclear policies more generally, see Gene Gerzhoy, "Alliance Coercion and Nuclear Restraint: How the United States Thwarted West Germany's Nuclear Ambitions," *International Security*, Vol. 39, No. 4 (Spring 2015), pp. 91–129.

<sup>39.</sup> Gray, "Commercial Liberties and Nuclear Anxieties"; and Fabian Hilfrich, "Roots of Animosity: Bonn's Reaction to U.S. Pressures in Nuclear Proliferation," *International History Review*, Vol. 36, No. 2 (2014), pp. 277–301.

in Bonn believed the jet nozzle technology would make it nearly impossible for Brazil to produce highly enriched uranium for nuclear weapons.<sup>40</sup> The Brazilian government agreed to purchase the jet nozzle project as part of a broader bilateral nuclear agreement with the FRG.

The West Germans had to worry about other members of the London Club, too, with France and the Soviet Union advocating alongside the United States for stronger nuclear-trade control and more safeguards for the Brazil deal than those that were eventually applied. Brazilian officials felt that the new set of regulations hatched in London constituted, in practice, an emerging nuclear-exports cartel. In the end, the FRG imposed safeguards on Brazil that were stricter than NPT provisions, covering safeguards on sensitive and non-sensitive nuclear material, equipment, installations, and the transfer of relevant technologies, plus exports and re-exports that might derive from the deal. On this understanding, Brazil would apply safeguards to all of its activities derived from West German cooperation, while remaining outside the NPT.41 In agreeing to the new set of rules, Brazil was creating a precedent: a major developing country that was not a party to the NPT formally agreed to some measure of self-restraint in exchange for foreign nuclear assistance. This allowed Brazilian and West German officials to argue that their agreement was in and of itself a major contribution to the global nonproliferation regime. Although the FRG and Brazil diverged on the issue of PNEs, they managed to make progress toward completion. 42 According to the NPT, nuclear-weapons states recognized as such by the treaty had the legal right to sell nuclear-explosion services internationally for big public or infrastructure works. The United States and other countries that promoted the NPT considered the autonomous development of PNEs by non-nuclear weapons states as an unquestionable instance of proliferation. Officials in Washington made it a point to state that there was no difference between peaceful and military nuclear explosives. The U.S.-Brazilian disagreement over PNEs began during negotiations on the Treaty of Tlatelolco, when Brazil advanced an interpretation that the treaty should legally permit the use of PNEs. This disagreement

<sup>40.</sup> Gray, "Commercial Liberties and Nuclear Anxieties," p. 453.

<sup>41.</sup> Batista to FRG Embassy in Brasília, Confidential, 9 January 1975, cited in "Draft Agenda for Discussion on Government Level—Preparation of an Agreement on Collaboration between the Federal Republic of Germany and Brazil on the Peaceful Uses of Nuclear Energy," Secret, n.d., in PNB, 1975.01.09. For the Brazilian version of the draft treaty, see "Anteprojeto de um acordo entre o governo da República Federal de Alemanha e o governo da República Federativa do Brasil sobre cooperação no setor dos usos pacíficos da energia nuclear," Secret, n.d., in PNB, 1975.01.09. See also Brasília to Bonn, Secreto Exclusivo, in 6 February 1975, PNB, 1975.01.09; and AmEmbassy Bonn to SecState, Cable 1975BONN02897, Confidential, 20 February 1975, in DOS/CFP.

<sup>42.</sup> AmEmbassy Bonn to SecState, Cable 1975BONN02897.

was carried over to the NPT negotiations. However, the U.S. and Soviet position prevailed, and the text of the NPT never authorized non-nuclear weapons states to develop PNEs. Brazilians saw this as yet another ploy on the part of the industrial North to limit developing-country access to a lucrative market.<sup>43</sup>

The military regime running Brazil at the time avoided mentioning PNEs and any possible non-civilian use of nuclear energy. Brazilian authorities excluded military officers from the talks with Bonn while marketing the agreement with FRG as a major success for the peaceful use of the atom. 44 They defined their quest for *nuclearização* (nuclearization) as the development of indigenous fuel-cycle capability, not weaponization, and they framed the agreement as an exercise in global nuclear justice, arguing that assistance from West Germany would grant Brazil "the effective exercise of the right of nuclearization [*nuclearização*]—the objective of our policy."45 Furthermore, officials in Brasília never described nuclear-technology acquisition as a merely technological development but as an instrument of its rising status in world politics. Acquiring enrichment technology, in this view, would propel Brazil upward in global hierarchies and thwart attempts by the industrialized West to prevent large developing states from breaking the technological glass ceiling above them.

The West German government, for its part, presented the deal at home as an innovation in a field where the governing rules were in a state of flux, with little consensus emerging from major suppliers. As Peter Hermes, secretary of state in the FRG Foreign Ministry, told his U.S. counterparts, "Since an understanding among the most important supplier-nations has not yet been achieved . . . it will not be possible to obtain further concessions from the Brazilians." <sup>46</sup> The ones they had already secured would have to suffice.

The U.S. government remained concerned about the reprocessing and storing of spent fuel in Brazil. From the U.S. perspective, even if the agreement with the FRG was under safeguards, Brazil could eventually use spent

<sup>43.</sup> Ibid. For a discussion of PNEs, see Glenn T. Seaborg, *Stemming the Tide: Arms Control in the Johnson Years* (Lexington, KY: Lexington Books, 1987), pp. 258–259; and Patti, "Brazil in Global Nuclear Order," p. 72.

<sup>44.</sup> Gaspari, A ditadura encurralada, p. 131.

<sup>45.</sup> Bonn to Brasília, Secreto Exclusivo Muito Urgente, 12 February 1975, in PNB, 1975.01.09. For a full, detailed account of Nogueira Batista's mission to West Germany, see "Relatório da Missão à Alemanha (RFA) (1 a 15 de Fevereiro 1975)," Secreto, Nuclebrás, in PNB, 1975.01.09. See also Ueki and Silveira to Geisel, Secreto Exclusivo, Informação para o Senhor Presidente da República, 19 February 1975, in PNB, 1975.01.09.

<sup>46.</sup> Peter Hermes discussed the West German-Brazilian nuclear agreement with U.S Ambassador Martin J. Hillenbrand in Bonn on 20 February 1975. AmEmbassy Bonn to SecState, Cable 1975BONN02897.

fuel to produce plutonium suitable for military use, a precedent that could potentially derail ongoing negotiations between the United States and South Korea, Iran, and Pakistan. U.S. policy was to avoid the spread of reprocessing facilities worldwide, and now Brazil was bent on building its own reprocessing plant. U.S. officials could see no economic rationale for such a facility: the United States had more than 50 nuclear reactors in operation but no reprocessing plant. Why did Brazil need one?<sup>47</sup> The response was straightforward: Brazil wanted to master the *entire* nuclear fuel cycle.<sup>48</sup>

Starting in April 1975, the United States sought to build consensus among nuclear suppliers to place the Brazil deal under International Atomic Energy Agency (IAEA) safeguards, as France was doing with its own nuclearassistance deal with South Korea.<sup>49</sup> There were other precedents as well. The United States had inserted a clause in its agreements with Egypt and Israel requring that safeguards be applied to all nuclear facilities in the recipient state and that suppliers consent before a recipient state could enrich, reprocess, build, or store materials that could be used in nuclear weapons.<sup>50</sup> U.S. officials also wanted the FRG to place additional controls on sensitive materials in its nuclear technology agreement with Iran.<sup>51</sup> The West German government resisted the idea of additional controls and negotiated a draft treaty with Brazil in secret. Even if U.S. nuclear negotiators were aware that negotiations were evolving and were worried about the overall direction of the deal, Kissinger kept the issue off the agenda in his conversations with Chancellor Helmut Schmidt.<sup>52</sup> Kissinger also kept silent about the issue in his conversations with Brazilian officials, and it fell on Brazilian Foreign Minister Antônio Azeredo da Silveira to bring up the subject in the press conference he gave after meeting Kissinger in May 1975. Nuclear cooperation with the FRG, he said, had peaceful purposes only, and Brazil would abide by its bilateral safeguards commitments.<sup>53</sup> In policy circles in Washington, suspicion about the real purposes

<sup>47.</sup> SecState to AmEmbassy Bonn, Cable 1975STATE066020, Secret, 24 March 1975, in DOS/CFP. 48. On Geisel's position see Ueki to Geisel, Despacho, 17 March 1975, in EG, pr 1974.03.26/2; and AmEmbassy to SecState, Cable 1975BRASIL02224, Secret, 25 March 1975, in DOS/CFP.

<sup>49.</sup> From 28 March to 1 April 1975, there was an intense exchange of telegrams between Washington and Bonn. On 28 March, high-ranking officials of various U.S. agencies met with West German representatives. On the possible trilateral "safeguarding technology agreement," see U.S. Mission IAEA Vienna to SecState, Cable 1975IAEAV02748, Confidential, 2 April 1975, in DOS/CFP.

<sup>50.</sup> U.S. Mission IAEA Vienna to SecState, Cable 1975IAEAV04445, 22 May 1975, in DOS/CFP; and SecState to AmEmbassy Brasília, Cable 1975STATE106059, 6 May 1975, in Secret, in DOS/CFP.

<sup>51.</sup> SecState to AmEmbassy Bonn, Cable 1975STATE133585, Secret, 7 June 1975, in DOS/CFP.

<sup>52.</sup> Gray, "Commercial Liberties and Nuclear Anxieties," pp. 460-461.

<sup>53.</sup> AmEmbassy Brasília to SecState, Cable 1975BRASIL03786, 14 May 1975, in DOS/CFP.

of the treaty was widespread. After all, Brazil was a staunch critic of the NPT and had refused to become a signatory. Brazilian diplomats argued for the legality of PNEs. West Germany, in turn, ratified the NPT on 2 May 1975, but only after much hesitation and against the continuing reluctance of conservative parties.

#### **Kissinger's Policy of Accommodation**

A weekly report published by the U.S. Central Intelligence Agency (CIA) in June 1975 stated: "Brazil's intention to become a nuclear power poses a fundamental challenge to traditionally amicable U.S.-Brazil relations." According to the agency, Brazil might seek to use its cooperation with West Germany to divert technologies for non-peaceful uses. Kissinger disagreed. From his perspective, Brazil and the FRG had acted in good faith, establishing that all assistance activities conducted through the agreement would operate under bilateral safeguards and under a special safeguards arrangement between Brazil, West Germany, and the IAEA that was signed in February 1976. For all practical purposes, this meant that even if Brazil was not a signatory of the NPT, its activities with the FRG would be governed by the safeguards framework that normally applied to treaty members.

The biggest challenge to Kissinger's thesis came from the U.S. Congress. Senator John Pastore, the chairman of the Special Committee on Atomic Energy, wanted the administration to push for the postponement of the West German–Brazilian agreement "until an adequate system of controls concerning the fabrication of nuclear weapons is established." He urged President Gerald Ford and Secretary Kissinger to block any supply of nuclear reactors and enrichment facilities to Brazil that "could contribute to the fabrication"

<sup>54. &</sup>quot;Brazil-U.S.: Nuclear Plans Pose Problems," Secret, CIA Weekly Report, 20 June 1975, in Declassified Documents Reference System (DDRS).

<sup>55.</sup> On the safeguards to be applied to the Brazil–West Germany deal, see Brazilian Minister of Mines and Energy to FRG Embassy in Brasília, Secret, 4 June 1975, in AAS, mre pn 1974.08.15; and AmEmbassy Brasília to SecState, Cable 1975BRASIL04803, Confidential, 16 June 1975, in DOS/CFP. On the Argentine reaction, see AmEmbassy Buenos Aires to SecState, Cable 1975BUENOS03762, Confidential, 3 June 1975, in DOS/CFP. See also AmEmbassy Brasília to SecState, Cable 1975BRASIL04372, Confidential, 3 June 1975, in DOS/CFP. For Kissinger's instructions to the U.S. embassy in Bonn, see SecState to AmEmbassy Bonn, Cable 1975STATE128064, 3 June 1975, in DOS/CFP. The safeguards agreement was based on IAEA Information Circular (INFCIRC) 66/Rev 2, 16 September 1968, https://www.iaea.org/sites/default/files/publications/documents/infcircs/1965/infcirc66r2.pdf.

<sup>56.</sup> AmEmbassy Brasília to SecState, Cable 1975BRASIL04414, 4 June 1975, in DOS/CFP.

of an atomic bomb if [Brazil] so desires."<sup>57</sup> Pastore's objections were made against a background of greater congressional influence and authority over nuclear trade regulations.<sup>58</sup> Pastore was getting in the way of Kissinger's policy of accommodation by drawing attention to the issue of Brazilian nuclear ambitions and by expanding the role of the legislative branch.<sup>59</sup> The press echoed the view that the new nuclear agreement was dangerous. *The Washington Post* insisted that the nuclear accord "can and must be modified." According to a report, ACDA officials were concerned that Brazil might seek to acquire bomb-making capabilities.<sup>60</sup> *The New York Times* published an editorial titled "Nuclear Madness," decrying the deal as "a reckless move that could set off a nuclear arms race in Latin America, trigger the nuclear arming of half a dozen nations elsewhere and endanger the security of the United States and the world as a whole."<sup>61</sup> Kissinger was livid:

We are not a nonproliferation agency. Before we go around trying to stop sales to major countries, and then leaking it to the newspapers, they are entitled to be told from us. The logical way to start would have been with the Brazilians and see whether they are willing to accept some safeguards.<sup>62</sup>

He instructed his advisers to convey to Brazil that it was "the missionary branch of the Department that started this," and later on he apologized to his Brazilian counterparts in person.<sup>63</sup> The U.S. ambassador in Brasília followed suit, telling Foreign Minister Silveira that press reports did not reflect the official government position.<sup>64</sup> Kissinger discussed the issue with President Ford: "This is a real mess. We have leaked all over, we have a problem with [West] Germany, and we have a problem with Brazil. And the Congress is upset. But we have absolutely no control over it."

<sup>57.</sup> Ibid.

<sup>58.</sup> Brenner, Nuclear Power and Non-Proliferation, p. 89.

<sup>59.</sup> SecState to AmEmbassy Brasília, Cable 1975STATE138496, 13 June 1975, in DOS/CFP.

<sup>60. &</sup>quot;A Message for President Scheel," *The Washington Post*, 16 June 1975, p. A22; and L. H. Diuguid, "Brazil Nuclear Deal Raises U.S. Concern," *The Washington Post*, 1 June 1975, p. A1.

<sup>61. &</sup>quot;Nuclear Madness," The New York Times, 13 June 1975, p. 36.

<sup>62.</sup> Proceedings, Secret, 13 June 1975, in NARA, RG 59, General Records of the Department of State, Office of the Secretary of State Henry Kissinger's Staff Meetings, 1973–1977, Box 7.

<sup>63.</sup> SecState to AmEmbassy Brasília, Cable 1975STATE146237, Confidential, 20 June 1975, in DOS/CFP.

<sup>64.</sup> On the conversation between Crimmins and Silveira, see Spektor, Kissinger e o Brazil, p. 112.

<sup>65.</sup> Conversation Ford-Kissinger, Secret/Nodis, 13 June 1975, in Gerald R. Ford Presidential Library (GRFPL), NSA, Memcoms, Box 12.

What the Ford administration *could* control was the message it conveyed to the FRG and Brazil. In a conversation with West German President Walter Scheel and Foreign Minister Hans-Dietrich Genscher on 16 June 1975, President Ford made his attitude clear, avoiding the nuclear issue altogether while the secretary of state "essentially agreed to disagree, neither endorsing the Brazil treaty nor continuing to make an issue of it." 66 U.S. Senator Walter Mondale criticized Kissinger, calling for an "immediate moratorium on the transfer of enrichment and reprocessing technology and installations." But on 27 June 1975, Brazil and the FRG finally signed the agreement. Back in Brasília, an internal memorandum reported that "Brazil's accession to the nuclear era—conducted under the terms of greatness . . . will contribute to fulfilling our access to the category of [developed countries.] . . . Peaceful nuclearization . . . will transform Brazil's international status."

The agreement was an impressive achievement. Here was a deal between an NPT member and a non-NPT member that explicitly closed the loopholes that had previously been in place in the case of India. (The FRG's agreement with Brazil banned the unsafeguarded transfer of reactors, technologies, and materials.)<sup>69</sup> Observers were also stunned by the sheer size of the deal. Brazil would purchase up to eight nuclear reactors, finance the creation of binational joint-venture companies to promote an indigenous nuclear industry on Brazilian territory, and receive assistance in uranium enrichment and spent-fuel reprocessing technologies. The largest technology sale ever from an industrialized country to an industrializing state in the developing world, the deal promised to rescue the West German nuclear industry from the financial troubles it was facing.<sup>70</sup>

Soviet press agency TASS called the agreement a "dangerous precedent," and Moscow argued for safeguarding all the equipment Brazil might eventually develop through West German assistance.<sup>71</sup> In a meeting with Kissinger, Soviet Foreign Minister Andrei Gromyko expressed concern "that Brazil is on

<sup>66.</sup> On the U.S.-West German meetings, see Gray, "Commercial Liberties and Nuclear Anxieties," p. 458. For the text of Kissinger's letter, see SecState to AmEmbassy Brasília, Cable 1975STATE146237.

<sup>67.</sup> On Mondale's declaration, see Jaime Dantas, "URSS vê perigo no acordo Brasil-RFA," *Jornal do Brasil* (Rio de Janeiro), 20 June 1975, p. 6. On the distance between the State Department and Mondale's words, see AmEmbassy Brasília to SecState, Cable 1975BRASIL05062, 21 June 1975, in DOS/CFP.

<sup>68.</sup> Nogueira Batista to Geisel, Secreto, 20 August 1975, in PNB, pn a 1975.01.09.

<sup>69.</sup> AmEmbassy Bonn to SecState, Cable 1975BONN10770, 2 July 1975, in DOS/CFP.

<sup>70.</sup> Gray, "Commercial Liberties and Nuclear Anxieties," p. 450.

<sup>71.</sup> On the position of Soviet delegate Igor Morokhov during a meeting with U.S. representatives, see SecState to AmEmbassy Tripoli, Cable 1975STATE157800, Secret, 3 July 1975, in DOS/CFP.

the path to the production of nuclear weapons and wants to use the help provided by West Germany. . . . Incidentally, [West] Germany is party to the NPT but Brazil is not." Kissinger retorted that he did

not believe Brazil has decided to build nuclear weapons, but this deal creates the possibility and we are concerned for the future. When a complete fuel cycle is provided, it provides the possibility to obtain fuel. But we are concerned and have expressed our concern publicly.<sup>72</sup>

The international community, Kissinger added, would have a say in accepting the safeguard arrangement. If no multilateral solution emerged, he said, then Washington and Moscow should "exchange views bilaterally."<sup>73</sup>

In Brazil as well, plenty of criticism surfaced. Both the Brazilian Society of Physics and the Brazilian Society for the Progress of Science—two influential bodies that had the ability to shape public debate—took issue with the choice of enriched-uranium as a fuel for future reactors, given the unpredictability and unreliability of future fuel imports from abroad. They argued that a more suitable choice would be reactors fueled by natural uranium, which Brazil possessed in vast quantities. Many scientists also questioned the utility of launching an ambitious nuclear program for energy production, given the hydroelectric potential of the country. In addition, prominent voices in the scientific community, such as the University of São Paulo's nuclear physicist José Goldemberg, warned authorities of the risks inherent in accepting West Germany's offer of assistance with the jet nozzle.<sup>74</sup>

Even though Bonn and Brasília had signed the deal, many loose ends remained that required additional negotiation. The two parties had yet to define the terms of ownership and operation of the reprocessing plant they planned to build (the Brazilian proposal was to place the pilot reprocessing plant under the authority of Nuclebrás, with West Germany retaining 25 percent of the investment), and they had yet to nail down the nature and scope of safeguards with the IAEA.<sup>75</sup> Brazilian Minister of Mines and Energy Shigeaki Ueki told U.S. Deputy Secretary of State Charles Robinson that the nuclear agreement with West Germany was "not so great" and that Brazil was keen to explore research and development with the United States on a high-temperature

<sup>72.</sup> Meeting between Kissinger and Gromyko, Memorandum, Secret, 11 July 1975, National Security Council, Digital National Security Archive (DNSA).

<sup>73.</sup> Ibid.

<sup>74.</sup> Patti, O programa nuclear brasileiro, pp. 239-240; and Gaspari, A ditadura encurralada, p. 134.

<sup>75.</sup> Ueki to Geisel, Despacho, 3 July 1975, in EG, pr 1974.03.26/2.

gas-cooled reactor.<sup>76</sup> Brazil also wanted to purchase a fast breeder reactor from the United States. Ueki also told Robinson that if the United States failed to supply enrichment services, Brazil would have no choice but to seek out contracts with URENCO, Eurodif, or even the Soviet Union. The U.S. embassy in Brasília estimated that the minister's utterances about the Soviet Union were a bluff, given Cold War sensitivities in the regime. Indeed, when Nuclebrás's Carlos Syllus Pinto contacted Soviet counterparts to discuss a potential contract for the acquisition of low-enriched uranium, both Minister Ueki and President Geisel rebuffed him, banning further negotiations with Moscow. But Brazil remained interested in expanding its network of nuclear agreements, and the difficulties inherent in rolling out the deal with West Germany provided additional reason to pursue new suppliers at a fast pace.<sup>77</sup>

Robinson was aware of how sensitive the issue of Brazilian nuclear policy had become in Washington. He replied to the Brazilian overtures by reassuring his counterparts that the United States would not push Brazil and the FRG to establish stricter controls out of its own national commercial interests. Rather, Robinson insisted, the United States was motivated by "reasons of the highest policy," adding that any nuclear matters should be discussed through official diplomatic channels only.<sup>78</sup> Given how far countries such as Japan, South Korea, and Brazil seemed willing to go in their quest for nuclear fuel, the State Department in September 1975 publicized a proposal whereby multinational centers for spent-fuel reprocessing would provide fuel to select countries around the globe, hoping that such an endeavor would reduce the threat of proliferation (thereby averting another India).<sup>79</sup> The IAEA prepared a study for a Brazil-based "regional center" in South America, but the initiative never gained traction.<sup>80</sup>

From November 1975 through March 1976, the IAEA in Vienna saw frantic negotiations over the terms of a draft trilateral agreement with Brazil and the FRG. U.S. officials were pressuring the West Germans to agree to

<sup>76.</sup> Brazilian National Security Council (CSN) to Geisel, Secreto, 15 October 1975, in AAS, mre pn 1974.08.15.

<sup>77.</sup> For a U.S. assessment of Brazil's reluctance to contract Soviet enrichment services, see AmEmbassy Brasília to SecState, Cable 1975BRASIL05792, Confidential, 14 July 1975, in DOS/CFP. On Brazilian authorities banning negotiations over purchases of enriched uranium from Moscow, see Patti, O programa nuclear brasileiro, p. 57.

<sup>78.</sup> AmEmbassy Brasília to SecState, Cable 1975BRASIL05792.

<sup>79.</sup> For Kissinger's speech, see U.S. Mission New York to SecState, Cable 1975USUNN04426, 23 September 1975, in DOS/CFP.

<sup>80.</sup> U.S. Mission Vienna to SecState, Cable 1975IAEAV08465, 3 October 1975, in DOS/CFP. The possibility to create multinational regional enrichment facilities was discussed for several years, but the idea was abandoned in the early 1980s when the global nuclear market was in crisis.

report to the IAEA on any transfers of materials to Brazil.<sup>81</sup> The Brazilians were arguing for a model whereby the IAEA would safeguard and inspect all technologies transferred from West Germany to Brazil but not apply any safeguards to national facilities or nationally developed technologies.<sup>82</sup> Under mounting pressure from Bonn and Washington, the Brazilian government moved to try to get a seat in the London Club (an invitation to join never arrived).<sup>83</sup>

When West Germany and Brazil sent the draft trilateral agreement to Vienna for approval in January 1976, it proved to be a remarkable text: it was the first agreement ever to apply uranium enrichment safeguards to a country that was not part of the NPT, as well as the first-ever accord to bind the IAEA together with a non-weapon NPT signatory and a non-NPT state. He Brazilians got what they wanted. Indigenous facilities—that is, facilities built outside the purview of the deal—would not be safeguarded or inspected by the IAEA. The vote in Vienna to approve the safeguards agreement was scheduled for 24 February 1976, and Brazil and West Germany knew they needed U.S. support to get it passed. Securing support for Brazil from other developing countries would be relatively easy, but there was a real risk that the Soviet Union, alongside the United States, might request the parties to make the text conform to the new guidelines for nuclear exports established at the London Club a month earlier, or to get the IAEA Board of Governors to postpone the vote.

In the run-up to the crucial date, two conflicting views emerged within the Ford administration. The State Department and ACDA were against

<sup>81.</sup> SecState to AmEmbassy Brasília, Cable 1975STATE277689, Confidential, 24 November 1975, in DOS/CFP

<sup>82.</sup> CSN to Geisel, Secreto, 6 December 1975, in AAS, mre pn 1974.08.15.

<sup>83.</sup> Brazil wanted the London Club to expand from a small group of nuclear suppliers to include large providers of nuclear minerals such as uranium and thorium. The Carter administration in 1977 discussed enlargement plans that included both Brazil and South Africa, but to no avail. On the 1975 proposal, see AmEmbassy Brasília to SecState, Cable 1975BRASIL10250, Confidential, 26 November 1975, in DOS/CFP. On 1977, see Patti, *O programa nuclear brasileiro*, p. 171.

<sup>84. &</sup>quot;Opening Statement at Brazil/FRG/IAEA Negotiation," 12 January 1976, in PNB 1975.01.09.

<sup>85.</sup> Brazilian Embassy (BrazEmbassy) Vienna to Brasília, Secreto Urgente, 13 January 1976, in PNB, 1975.01.09; and BrazEmbassy Vienna to Brasília, Secreto Urgente, 17 January 1976, in PNB, 1975.01.09.

<sup>86.</sup> BrazEmbassy Vienna to Brasília, Secreto Urgentíssimo, 16 February 1976, in PNB, pn a 1975.01.09; and FRG Embassy in Brasília to the Brazilian Ministry of Foreign Affairs, Aide-Mémoire, 17 February 1976, in PA/AA, Bd. 13209.

<sup>87.</sup> U.S. Mission Vienna to SecState, Cable 1976IAEAV01168, Confidential, 13 February 1976, in DOS/CFP.

approval, whereas the U.S. envoy to the IAEA was for it.<sup>88</sup> National Security Adviser Brent Scowcroft wanted to postpone any consideration of the agreement, suggesting instead that low-key exploratory talks with Brazil begin to examine tighter safeguards.<sup>89</sup> Scowcroft worried that unless strong proliferation restraints were imposed, the Ford administration would face problems in Congress.<sup>90</sup> However, on the eve of Kissinger's talks with the Brazilians, an interagency report recommended that he support the trilateral agreement as it reached the floor in Vienna. Even if the Soviet Union wanted to delay the vote, the United States should not risk undermining its own relations with the Brazilians and West Germans. The report emphasized that the British delegates to Vienna adopt the same line.<sup>91</sup> President Ford also suggested that the United States should resume negotiations for a potential bilateral nuclear deal with Brazil.<sup>92</sup>

To eliminate any doubts about the U.S. position, Kissinger traveled to Brazil in February 1976. In the first set of conversations he had with his hosts, he assured them of U.S. support for the Brazil–West Germany–IAEA agreement "without reservations." With U.S. support, the IAEA board passed the deal on 26 February 1976 (France, which was negotiating its own safeguard agreement with Pakistan, voted against it). Kissinger told the U.S. representative to Vienna that approving the deal was necessary for reestablishing a climate of mutual trust between the United States and Brazil. Approval "did not necessarily imply U.S. approval of transfers to which the agreement related," U.S. diplomats clarified. But the overall political relationship with Brazil was at stake.

<sup>88.</sup> For the statements of U.S. representatives, see BrazEmbassy Vienna to Brasília, Secret/Urgent, 6 February 1976, in PNB, 1975.01.09.

<sup>89.</sup> Spektor, *Kissinger e o Brasil*, pp. 138–139; and Scowcroft to Ford, Secret, 14 February 1976, GRFPL, White House, National Security Adviser, Presidential Country Files for Latin America, Box 2.

<sup>90.</sup> Spektor, Kissinger e o Brasil, pp. 135-156.

<sup>91.</sup> SecState to U.S. Mission IAEA Vienna, Cable 1976STATE038742, Confidential, 18 February 1976, in DOS/CFP.

<sup>92.</sup> SecState to U.S. Mission IAEA Vienna, Cable 1976STATE039078, Secret, 18 February 1976, in DOS/CFP.

<sup>93. &</sup>quot;Resumo das conversações com o Secretário de Estado Henry Kissinger," Secret, Informação ao Senhor Presidente da República No. 79, 27 February 1976, in AAS, mre d 1974.03.26. Ingersoll also informed the West Germans about Kissinger's instructions. Washington to Bonn, "Trilaterales Kontrolluebereinkommen IAEO-BRD-Brasilien," 20 February 1976, in PA/AA, Bd. 13209.

<sup>94.</sup> AmEmbassy Paris to SecState, Cable 1976PARIS06923, Secret, 8 March 1976, in DOS/CFP.

<sup>95.</sup> Brazilian Mission Vienna to Brasília, Urgentíssimo, 25 February 1976, in PNB, pn a 1975.01.09; and U.S. Mission IAEA Vienna to SecState, Cable 1976IAEAV01878, Confidential, 10 March 1976, in DOS/CFP.

#### Jimmy Carter's Campaign

The White House and Congress had been fighting over nuclear-related legislation since 1974. Congress emphasized the need to exercise tighter controls over nuclear exports, particularly after the India explosion. 96 Senator Abraham Ribicoff (D-CT), an active nonproliferation advocate, suggested in March 1976 that if countries such as France and West Germany "did not agree to stricter export policies the United States should apply pressure by withholding reactor fuel from them."97 Four months later, the Symington amendment to the International Security Assistance and Arms Export Control Act of 1976 restricted U.S. economic and military assistance to any country supplying or receiving nuclear enrichment or reprocessing equipment, materials, or technology unless the supplier and recipient agreed to accept IAEA safeguards on everything transferred and on all nuclear fuels and facilities in the recipient country. 98 Thus, the administration's room for maneuver to engage Brazil was narrowing. To complicate things further, the administration faced increasing criticism in Congress, where Democrats sharply criticized human rights abuses perpetrated by the ruling military in Brazil. By mid-1976, Carter had turned the Brazil deal into a campaign issue. In his first campaign speech on Latin America, he referred to Kissinger's policy of engagement with Brazil as reckless, and in a lengthy *Playboy* interview he summarized the policy as a "slap on the face of the American people."99

During a UN General Assembly conference on 13 May 1976, Carter expounded on his views on global nuclear governance. <sup>100</sup> He attacked the Ford administration for what he described as a laissez-faire approach to the sale of facilities suitable for producing weapons-grade material and nuclear fuel, and he argued that it was essential to arrest the transfer of reprocessing and enrichment technologies. Carter also urged supplier countries to join in a "voluntary moratorium" on the transfer of such facilities. <sup>101</sup> Brazilian officials realized that

<sup>96.</sup> J. Samuel Walker, "Nuclear Power and Nonproliferation: The Controversy over Nuclear Exports, 1974–1980," *Diplomatic History*, Vol. 25, No. 2 (Spring 2001), p. 222.

<sup>97.</sup> Abraham Ribicoff, "Trading in Doom," The New York Times, 26 March 1976, p. 30.

<sup>98.</sup> Michael A. Bauser, "United States Nuclear Export Policy: Developing the Peaceful Atom as a Commodity in International Trade," *Harvard International Law Journal*, Vol. 18, No. 2 (Spring 1977), pp. 244–248.

<sup>99.</sup> Robert Scheer and Jimmy Carter, "The Playboy Interview," Playboy, November 1976.

<sup>100.</sup> Carter, Why Not the Best? The First Fifty Years (Fayetteville: University of Arkansas Press, 1996). "Roteiro dos pronunciamentos políticos de autoridades governamentais norte-americanas sobre assuntos nucleares, especialmente o acordo Brasil-RFA," 18 February 1977, in AAS, mre pn 1974.08.15.

<sup>101.</sup> Brenner, Nuclear Power and Non-Proliferation, pp. 117-118.

their nuclear program was becoming an object in the U.S. domestic debate about proliferation.

Under pressure from both Congress and the Carter campaign, the White House and the State Department revised the administration's nonproliferation strategy in adopting a presidential statement on nuclear exports and safeguards. By all indications, the U.S. elections played a central role in the domestic debate, spurring the Ford administration to compare "Carter's promises" with the "President's performance." 102 Ford's advisers recognized that he had achieved far-reaching results on the nuclear front, including the initiative to convene the London group of nuclear suppliers; the accession of sixteen countries to the NPT; and the successful pressure on South Korea to refrain from acquiring a reprocessing plant from France. However, they maintained that Ford should take stronger action on nuclear exports, safeguards, and plutonium reprocessing in response to increasing public concern. The White House, the State Department, the Energy Research and Development Administration (ERDA)—one of the successor agencies to the USAEC worked all summer to carry out a detailed and extensive interagency review that became known as the "Robert Fri Report," named after the then-deputy administrator of the ERDA. 103 The study pointed out the flaws in the administration's nuclear policy and proposed a series of responses. Resolution of U.S.-Brazilian friction was a priority, as was the smoothing over of concerns that U.S. officials had with regard to the Franco-Pakistani deal. Carter, for his part, condemned both agreements and, during the last stretch of the presidential campaign, reiterated his proposal for a moratorium on the sale or purchase of nuclear fuel enrichment or reprocessing plants. He also argued in early October 1976 that such a moratorium "should apply retroactively" to existing agreements, declaring that "the contracts have been signed, but the deliveries need not to be made." He then proposed that the United States stop West Germany's and France's sales of reprocessing plants to Brazil and Pakistan respectively:

If we continue under Mr. Ford's policy by 1985 or 90 we'll have 20 nations that have the capability of exploding atomic weapons. This has got to be stopped.

<sup>102.</sup> Comparison of "Carter Promises" and "President's Performance," n.d., in GRFPL, Ford Papers, Domestic Council—Glenn R. Schleede Files, Box 27 (Nuclear Policy, 1976: Background Material)GRFPL, quoted in Walker, "Nuclear Power and Nonproliferation," p. 235.

<sup>103.</sup> The USAEC split in 1975 into the Nuclear Regulatory Commission and ERDA. The latter was subsequently merged with the Federal Energy Administration to form the Department of Energy. See Brenner, *Nuclear Power and Non-Proliferation*, pp. 101–108.

That is one of the major challenges and major undertakings that I will assume as the next president. 104

The Brazilian reaction was not optimistic. Foreign Minister Silveira warned President Geisel that a Carter victory would bring its own risks to Brazil's nuclear program. Kissinger and West German Foreign Minister Genscher discussed how a Carter administration might derail West German–Brazilian cooperation and reverse the nuclear suppliers' policies instituted by the United States during the Ford administration. One of the U.S. delegates told the West Germans: "Under the Carter proposal, you will automatically be subject to sanctions because of the Brazilian agreement."

On 28 October, just a few days before the 1976 presidential elections, Ford issued a new nonproliferation strategy. The president set forth a long, detailed plan, using Fri's report recommendations:

There is no doubt that nuclear energy represents one [of] the best hopes for satisfying the rising world demand for energy with minimum environmental impact. . . . Unfortunately—underlined the President—the same plutonium produced in nuclear power plants can, when chemically separated, also be used to make nuclear explosives. <sup>107</sup>

To that end, Ford proposed "an international cooperative effort involving many nations, including both nuclear suppliers and customers," along the lines of the London Club. The rationale was similar to that coming out of Paris in 1975, when oil consumers sought to find solutions to the energy crisis. Ford also announced that if any country violated safeguards agreements, "especially the diversion of nuclear material for use in making explosives," the United States would respond "at a minimum" by immediately cutting off its shipments of nuclear fuel. <sup>109</sup> He declared that the United States would apply

<sup>104.</sup> Charles Mohr, "Carter Vows a Curb on Nuclear Exports to Bar Arms Spread," *The New York Times*, 26 September 1976, p. 1.

<sup>105.</sup> For Silveira's warning, see Silveira to Geisel, Paris, Secret/Urgent, 7 October 1976, in AAS, mre be 1974.03.26.

<sup>106. &</sup>quot;Top Secret Memorandum of Conversation between Kissinger, Genscher, Von Staden, Hartman, Wolff, Rodman and Sonnenfeld. Subject: American Elections, Place: Waldorf Tower, Secretary's Suite 35 A, New York City," 7 October 1976, in DNSA.

<sup>107. &</sup>quot;Nuclear Policy Statement by President Gerald R. Ford," 28 October 1976, quoted in Brenner, *Nuclear Power and Non-Proliferation*, p. 270.

<sup>108.</sup> Ibid.

<sup>109.</sup> Ibid., p. 277.

stricter standards on nuclear exports by limiting them, except in rare cases, to countries that had signed the NPT or accepted full-scope safeguards.<sup>110</sup>

Brazilian officials feared that the new political climate in Washington was bound to complicate the FRG's ability to implement the nuclear deal, and they started to contemplate two options. First, "to accelerate the national projects of enrichment and reprocessing (if possible with naturalized West German expatriates), or to consider the possibility of [developing] natural uranium reactors [that would not create dependence on enriched-uranium imports]."

The second option was to step up the diplomatic battle against the Carter offensive. 

Brazil could try to rally the support of other countries that feared a new era of nuclear restrictions. How seriously and to what extent Brazil's military rulers discussed these options is unknown. Regardless, they did not have a chance to react because the Ford administration took the opportunity of the transition period before Carter's inauguration to give the negotiation with Brazil one more chance.

#### **Presidential Transition in the White House**

The nuclear suppliers were scheduled to meet in mid-November 1976. Kissinger and the Carter transition team had agreed that the "key to progress is persuasion and not coercion of our nuclear partners" (e.g., France and West Germany). To "maximize . . . the confidence" of those involved, the United States also backtracked on the previous policy of suspending future supply contracts. Policy Planning Director Winston Lord wanted countries like Brazil to "rely on fuel-cycle services instead of the technology that can be used for weapons options." Rather than imposing solutions, the United States should encourage responsible behavior on the part of the major suppliers.

In the meantime, Kissinger started talks to convince France not to transfer any nuclear technology to Pakistan. In exchange, West Germany would commit not to go ahead with the most sensitive elements in the Brazil deal. These talks started in 1975, and a year later they were gathering momentum

<sup>110.</sup> Ibid.

<sup>111.</sup> Ueki to Geisel, Despacho, 4 November 1976, in EG, pr 1974.03.26/2.

<sup>112.</sup> Ibid.

<sup>113.</sup> Lord to Kissinger, "Your Meeting with Senator Ribicoff," Confidential, 4 November 1976, in NARA, RG 59, CWR Memos to the Secretary, October 1976–January 1977, Lot 77D117, Box 5, Entry 5176,.

quickly. According to the U.S. assessment, the FRG had "apprehensively [begun] to sense" that if France were to take the bait regarding its Pakistan agreement, then West Germany would have to follow suit vis-à-vis Brazil.<sup>114</sup>

The State Department negotiated directly with France, Pakistan, the FRG, and Brazil from November 1976 until Carter's inauguration in January 1977. The coordinator of U.S. efforts was Deputy Secretary of State Robinson, who came to oversee a "nuclear group" in Foggy Bottom. Rather than insist on a moratorium on sales, as Carter had advocated during the campaign, the Ford administration set out to engage in direct talks with both Pakistan and Brazil, handling them "bilaterally, confidentially and at high political level." In November the United States offered to provide economic assistance and nuclear fuel if Brazil agreed not to acquire sensitive technologies from the FRG. In reassuring Brazil that the United States would honor nuclear fuel supplies after all, the State Department was effectively reversing the decision made in Washington back in August 1974. 117

The Brazilians felt the pressure, especially because rumor had it that the FRG might renounce the deal altogether and the Dutch had launched a campaign to cancel URENCO enrichment services (crucial for fueling the Brazilian power plants). Hence, the Brazilian government accommodated Washington's demands by telling U.S. officials that "outright cancellation" would be too difficult from a political standpoint. But they signaled that "some arrangement for a moratorium on this agreement could prove to be an acceptable solution." Brazil's change of course was a big victory for the U.S. team, which asked Kissinger to brief Carter on the status of the conversations "with a view to making him aware that public threats may only serve to harden French-Pakistani and West German–Brazilian political positions." 120

<sup>114.</sup> Vest to Kissinger through Robinson, "French and German Positions on Non-proliferation Issues at London Nuclear Suppliers Meeting," Secret Memorandum, 15 November 1976, in NARA, RG 59, Lot 77D117, Box 3, Entry 5176.

<sup>115.</sup> The nuclear group, which actively supported implementation of the Fri Review, consisted of George Vest (political-military affairs), Lou Nosenzo and Gerald Oplinger, Jerome Kahan and Jan Kalicki (policy planning), and Myron Kratzer (oceans, environment, and science).

<sup>116.</sup> Lord to Kissinger, "Non-Proliferation Paper for Meeting with President-Elect," Secret, 19 November 1976, in NARA, RG 59, Lot 77D117, Box 5, Entry 5176.

<sup>117.</sup> Robinson to Kissinger, "Your Meeting with Secretary Designate Vance: Pakistan/Brazil, Memorandum," 20 December 1976, in NARA, RG 59, Lot 77D117, Box 5, Entry 5176.

<sup>118.</sup> Gray, "Commercial Liberties and Nuclear Anxieties," p. 462,

<sup>119.</sup> Robinson to Kissinger, "FRG/Brazil Reprocessing Plant," Confidential Memorandum, 17 November 1976, in NARA, RG 59, Lot 77D117, Box 5, Entry 5176.

<sup>120.</sup> For Brazilian attitudes toward the Ford-Carter presidential transition, see Spektor, Kissinger e o Brasil, pp. 153–159.

By December 1976, the United States had also secured the commitment of Pakistani Prime Minister Zulfikar Ali Bhutto for an indefinite deferral of the nuclear deal with France (in exchange for U.S. approval of A-7 aircraft sales to Pakistan).

Negotiations with Brazil moved along two tracks: one official and in the public eye, the other private and secret. Washington's hope was that emissaries could secure a deal informally before official diplomatic negotiations began. On 28 December 1976, Seymour Rubin, a U.S. jurist who had collaborated with Democratic administrations from the 1940s thorugh the 1960s and was personally close to Carter, flew to Brasília to meet with General Golbery do Couto e Silva, chief of staff and right-hand man to the Brazilian president. Rubin traveled as a private emissary of both Ford and Carter, and his meetings with the Brazilians were kept secret (even from the Brazilian foreign minister). 121 Rubin asked for a Brazilian moratorium on purchases of reprocessing and enrichment technologies in return for a U.S. commitment to supply both reactors and nuclear fuel. Couto e Silva reacted positively but deferred the final say to President Geisel. 122 In early January 1977, Robinson traveled to Brasília for further talks, now with President Geisel himself, and they agreed to hold additional confidential negotiations over specifics. Geisel insisted that the informal agreement be kept secret until its final terms were settled. This was understandable, insofar as Brazilian officials were increasingly concerned about potential congressional action (with the support of the incoming Carter administration) against the Brazilian nuclear program. Geisel was also highly sensitive to the nuclear issue for his own domestic reasons. Having committed to liberalize the authoritarian system further, he held out the hope of eventually return power to a civilian government. To that end he had to keep the hardliners in the military in check. Public disclosures of secret talks with the United States regarding the potential abandonment of Brazil's nuclear plans could be disastrous for his own image and standing among the armed forces. 123

<sup>121.</sup> The visit was probably decided on 2 December 1976 when Robinson, Lord, Rubin, and Lincoln Gordon met. On the same day, Robinson met Gerard Smith, who was soon to become Carter's ambassador-at-large for nonproliferation. See Robinson to Kissinger, Daily Activities Report, Memorandum, Confidential, 2 December 1976, in NARA, RG 59, Lot 77D117, Box 5, Entry 5176. Ambassador Crimmins informed Robinson of the meeting. See SecState to AmEmbassy Brasília, Cable 1976BRASIL10511, Secret, 23 December 1976, in DOS/CFP; and AmEmbassy Brasília to SecState, Cable 1976STATE309641, Secret, 23 December 1976, in DOS/CFP.

<sup>122.</sup> AmEmbassy Brasília to SecState, Cable 1976BRASIL10592, Secret, 29 December 1976, in DOS/CFP.

<sup>123.</sup> Charles W. Robinson and Carlo Patti, telephone interview, 1 July 2010. We could not locate any documents to confirm the visit. On the meeting between Robinson and Geisel, see also a personal

The secret meeting reveals a new side to Geisel, who is normally portrayed as fundamentally anti-American. Facing an inflation rate of 45 percent per annum and grappling with a major economic slump, he was in a pragmatic mood. He was also receiving information that the the FRG might choose to placate the nonproliferation policies of the incoming U.S. president by rescinding the deal with Brazil. On 7 January 1977, Robinson summarized the state of affairs to Kissinger:

We have made significant progress with Pakistan, France, West Germany, and Brazil in moving forward our nonproliferation objectives. We are now at a point where we can take further significant steps. . . . The underlying approach on all of these cases involves inducing the parties to accept indefinite deferral of sensitive nuclear projects in return for assured nuclear supply and fuel services, under US guarantees and credits if desired. It aims to put none of the parties at economic disadvantage and to fully meet their energy needs. 125

The challenge was to get the West Germans on board. For this, it was paramount to bring incoming Secretary of State Cyrus Vance into the loop, He was the one who would have to approve the decision "to move our Brazilian probe to official channels." Although Kissinger thought any serious moves "should now wait for the 20th [of January]," Vance went ahead and approved the proposal. <sup>126</sup> Brazil was at the heart of the conversation between Lord, Robinson, George Vest (the head of politico-military affairs at the Department of State), and two incoming Carter administration officials, Joseph Nye (the deputy to the undersecretary of state for security assistance, science, and technology and chairman of the National Security Council Group on Nonproliferation of Nuclear Weapons) and Lucy Benson (deputy secretary of state). Nye and Benson were "surprised and enormously pleased with the progress made," lending credence to the notion that the Ford administration had created a framework for nuclear nonproliferation dialogue that the Carter

communication from June 2010, which can be found in A. David Rossin's forthcoming book on U.S. nuclear policy under Presidents Ford and Carter.

<sup>124.</sup> For Geisel's own take on these issues, see Maria Celina d'Araújo and Celso Castro, eds., *Ernesto Geisel* (Rio de Janeiro: FGV, 1997). On possible financial loans, see Robinson to Kissinger, Daily Activities Report, 7 Confidential Memorandum, September 1976, in NARA, RG 59, Lot 77D117, Box 5, Entry 5176.

<sup>125.</sup> Robinson to Kissinger, "Pakistan/Brazil Points for Your Meeting with Cy Vance," Top Secret/Nodis, Memorandum, 7 January 1977, NARA, RG 59, Lot 77D117, Box 5, Entry 5176; and "Non-proliferation—Next Steps on Pakistan and Brazil," Memorandum of Conversation, Top Secret, 7 January 1977, in DNSA.

<sup>126.</sup> Robinson to Kissinger, "Next Steps on Pakistan and Brazil," Top Secret, 11 January 1977, in NARA, RG 59, Lot 77D117, Box 5, Entry 5176.

administration could carry forward.<sup>127</sup> In the meantime, the Brazilians agreed to receive an official emissary of the Carter administration to negotiate the terms of the agreement, while keeping the private talks running until late February.<sup>128</sup>

Rubin arrived in Brazil on 19 January 1977 for a new round of conversations with Couto e Silva, who insisted on keeping the secret talks unofficial for the time being and appointed retired ambassador Vasco Leitão da Cunha as Brazilian representative. Leitão da Cunha had served as ambassador to the United States and as foreign minister in the military junta that took power in 1964, and he enjoyed good personal ties with Lincoln Gordon (who had served as U.S. ambassador to Brazil during the 1964 coup) and Rubin. The Brazilians, however, were slowly bringing more of their own participants on board, as Foreign Minister Silveira became privy to Rubin's mission. In a private meeting on 25 January, Rubin confirmed the new administration's support of the previous December's action plan and also agreed to meet Leitão da Cunha in subsequent days.

But as discussions began, any sense of trust between the two sides was shaken by an off-the-record comment Nye made to the U.S. press to the effect that negotiations were under way to persuade West Germany to stop all technology transfers for enrichment and reprocessing to Brazil, in exchange for a guarantee on U.S. fuel deliveries. The Brazilians were furious. The U.S. ambassador warned Vance of the damage of Nye's leak. Still, negotiations kept moving forward. During a final meeting with Rubin in Rio de Janeiro, Leitão da Cunha declared that Brazil was not Pakistan (i.e., the Brazilian nuclear program had peaceful intentions exclusively) and that the Brazilian government wanted to avoid U.S. congressional action against its nuclear plans.

<sup>127.</sup> Robinson to Kissinger, "Non-proliferation Letter to de Guiringaud," Top Secret, 11 January 1977, in NARA, RG 59, Lot 77D117, Box 5, Entry 5176.

<sup>128.</sup> Robinson to Kissinger, "Next Steps on Pakistan and Brazil."

<sup>129.</sup> SecState to AmEmbassy Brasília, Cable 1977STATE012266, Secret Eyes Only, 19 January 1977, in DOS/CFP; and AmEmbassy Brasília to SecState, Cable 1977BRASIL00689, Secret Eyes Only, 25 January 1977, in DOS/CFP.

<sup>130.</sup> AmEmbassy Brasília to SecState, "Nye Interview on Brazil-FRG Nuclear Cooperation," Confidential, 25 January 1977, in Remote Archive Capture (RAC)/Jimmy Carter Library (JCL), NLC-133-121-2-54-8. Brazilians had been talking to the incoming administration about the need to differentiate Brazil from Pakistan, noting that Brazil in its agreement with the FRG had renounced all intention to produce a nuclear device. See BrazEmbassy Washington to Brasília, "Política: EUA: Não-Proliferação Nuclear," Top Secret, n. 274, 27 January 1977, in AAS, mre pn 1975.09.25.

<sup>131.</sup> AmEmbassy Brasília to SecState, Cable 1977BRASIL00696, Secret, 25 January 1977, in DOS/CFP.

Within days, however, the tenuous understanding between the United States and Brazil came under additional pressure. President Carter sent Vice President Mondale to Bonn to inform the West German government in private that the United States was "unalterably opposed" to any nuclear transfers to Brazil. When the Brazilians learned that the incoming administration was putting pressure on Bonn to cancel the West German–Brazilian agreement without involving Brazil itself in the conversations, they again showed anger. They agreed to open another "quiet channel" with a U.S. emissary for further conversation. However, talks between the United States and Brazil over the nuclear issue unraveled for good when the U.S. State Department circulated a press release claiming that the Brazilians had agreed to renegotiate the nuclear deal. In reality they had not agreed to any such thing—at least not officially or in public. 134

Hermes, the West German architect of the nuclear deal, told Brazilians that the FRG would keep the agreement alive and guarantee fuel supply for Brazilian power plants. In mid-February, Leitão da Cunha met with U.S. emissaries and informed them that Brazil was no longer interested in talks. Herazil would engage in general issues of global nonproliferation with the the United States, but it refused to discuss its own nuclear program. President Geisel told his advisers that no Brazilian diplomats should discuss or even mention the nuclear program in talks with the U.S. nonproliferation team that was scheduled to fly to Brasília in subsequent weeks. In Unsurprisingly, the meetings between the Brazilian foreign minister and U.S. Deputy Secretary of State Warren Christopher in March 1977 came to nothing. The two delegations talked past each other. The Brazilians stated clearly that Christopher's trip was pointless and should, therefore, be cut short. Although the

<sup>132.</sup> Craig R. Whitney, "Schmidt May Modify Rio Atom Pact," *The New York Times*, 27 January 1977, p. 4. See also BrazEmbassy Washington to Brasília, "Política: EUA: Não-proliferação nuclear."

<sup>133.</sup> AmEmbassy Brasília to SecState, "Brazilian Nuclear Debate: Foreign Minister Defends Brazil's Right to Its Destiny," Confidential, 26 January 1977, in RAC/JCL, NLC-133-121-2-54-8; Vance to Silveira, Secreto Exclusivo, 27 January 1977, in AAS, mre be 1977.01.27; and SecState to AmEmbassy Brasília, "Message from the Secretary to Foreign Minister Silveira," Confidential, 27 January 1977, in RAC/JCL, NLC-133-120-7-46-3.

<sup>134.</sup> AmEmbassy Brasília to SecState, "U.S.-Brazil Nuclear Relationship," Secret, 2 February 1977, in RAC/JCL, NLC-133-121-2-54-8.

<sup>135.</sup> Silveira to Geisel, "Cooperação nuclear Brasil-RFA: Visita do embaixador alemão," Informação ao Senhor Presidente da República, Secreto Exclusivo, 15 February 1977, in AAS, mre pn 1974.08.15.

<sup>136.</sup> SecState to AmEmbassy Brasília, Cable 1977STATE035757, Secret, 20 February 1977, in DOS/CFP.

<sup>137. &</sup>quot;Analise tática da consulta com os norte-americanos," Secreto, 25 February 1977, in AAS, mre 1974.08.15.

nuclear issue remained the dominant concern for both sides, the United States also hoped to use the trip to put sustained pressure on the Brazilian regime's record of gross human rights violations, including torture, killings, and forced exile. Whatever room for accommodation had once existed, it now disappeared, leading to acrimony and long-lasting friction between the two countries—as well as between the United States and West Germany—over sensitive nuclear exports to Brazil. 138

Even as U.S. officials increasingly came to see Brazil as a nuclear proliferation risk, they sought to remain the main supplier of sensitive technologies and to keep Brazil as a major political and diplomatic ally in the Latin American Cold War. However, the Nixon and Ford administrations, and Kissinger in particular, failed in this regard. The expanding global nonproliferation regime and the change it brought to the U.S. government, alongside growing resistance within the U.S. political system to any policy of rapprochement with dictatorial governments in the developing world, complicated Kissinger's attitude of accommodation vis-à-vis Brazil. As the Brazilian nuclear posture became increasingly tied to national pride, Kissinger tried to avoid open confrontation. He understood that his own geopolitical design would suffer if he lost his key partner in South America, and he was also fully aware that a rift between the United States and Brazil could benefit other technology suppliers, such as West Germany.

Kissinger tried but failed to ensure that the presidential transition team under Carter struck a deal to preserve the political and commercial connections that the Nixon and Ford administrations had set out to build and retain with Brazil. Kissinger chose to suspend overt opposition to the 1975 Brazil–West Germany nuclear agreement to avoid alienating the Brazilian government, while also seeking a formal commitment from Brazil to renounce sensitive technologies and urging the FRG to impose a moratorium on the export of reprocessing technologies to Brazil. As Carter took over, both the White House and the State Department morphed into the "nonproliferation agencies" that Kissinger had warned against. Within a year, the Brazilian regime authorized the beginnings of a covert program to enrich uranium outside any international safeguards.

<sup>138.</sup> On the meeting in Brasília, see Silveira to Geisel, "Programa nuclear Brasileiro: Entendimentos com os EUA e com a Holanda," Secreto Exclusivo, Informação ao Senhor Presidente da República, n. 48, 2 March 1977, in AAS, mre pn 1975.04.25. See also AmEmbassy Brasília to SecState, Cable 1977BRASIL01616, Secret, 3 March 1977, in DOS/CFP.

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