

ABSTRACT

HAM, OLIVER BENJAMIN. *A Change in German-American Relations: The German Nuclear Deal with Brazil, 1977*. (Under the direction of committee chair Nancy Mitchell).

The German-Brazilian nuclear deal was the first of its kind. The Federal Republic of Germany (FRG) planned to export a full-nuclear cycle to Brazil, a non-nuclear nation. As a result, Brazil, which had not ratified the Nonproliferation Treaty (NPT), would obtain reprocessing facilities that gave it the potential to produce weapons-grade plutonium. For that reason, President Jimmy Carter, who had campaigned against nuclear proliferation, was opposed to the deal.

Carter believed that Washington had the power to impose its will on Bonn and Brasilia. The resistance of both nations to the President's entreaties proved this to be incorrect. German Chancellor Helmut Schmidt, despite being pressured by Washington, did not cancel the deal with Brazil. Moreover, Washington's heavy-handed approach raised questions about viability and effectiveness of the NPT itself.

As a result of the conflict over the German-Brazilian nuclear deal, Carter launched the International Nuclear Fuel Cycle Evaluation (INFCE) and passed the Nuclear Nonproliferation Treaty (NNPT). The Carter administration's push to discourage the developed world from reprocessing spent nuclear fuel led to resistance not just from West Germany, but also from Britain, France and Japan. Despite the tensions, the spread of reprocessing technology was curbed.

This is the first thorough analysis of the diplomatic wrangle that ensued as Carter attempted to break the nuclear contract between the FRG and Brazil. It is based on research in the Federal Archive in Koblenz, the Political Archive of the Foreign Office in Berlin and

the Jimmy Carter Library in Atlanta. The documents uncover the so-far untold roles played by France, Great Britain and the Netherlands in the power-play between Washington and Bonn over the nuclear deal. The documents also show the repercussions of the clash for nations such as Japan, which relied on reprocessing.

The documents furthermore highlight a change in the relationship between West Germany and the United States. The shadows of World War II as well as the Cold War had turned Bonn's foreign policy up until the 1970s into a delicate balancing act that consisted mainly of bowing to the leadership of the United States. Emboldened by its economic achievements and its successful integration into the Western Alliance, Bonn in the late 1970's sought greater independence from the United States by directly defying the will of Washington and refusing to cancel its nuclear deal with Brazil.

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A Change in German-American Relations: The German Nuclear Deal with Brazil, 1977

by
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DEDICATION

This work is dedicated to my daughter Emeline, my wife Margaret, and my mother Anni.

BIOGRAPHY

Oliver Ham completed his Masters in History from North Carolina State University in August 2012. His principal field of study is Diplomatic History with a minor in European History. His MA thesis analyzes the German-Brazilian nuclear deal. It is a case study of the collision between the Federal Republic of Germany and the United States over nonproliferation policies, and it sheds light on the change in the relationship between the Atlantic partners in the 1970s. Mr. Ham is currently employed as an instructor of German in the Foreign Language Department at North Carolina State University in Raleigh, North Carolina. He worked as a teaching assistant at the University of North Carolina at Chapel Hill while attaining his Masters in Germanic Literature and Languages. He taught as an instructor at Duke University and the University of North Carolina at Greensboro. He has been teaching and developing courses at the university level for the last seven years.

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LIST OF ACRONYMS

CDU	Christian Democratic Party of Germany
Euratom	European Atomic Energy Community
FDP	Liberal Party of Germany
FRG	Federal Republic of Germany
IAEA	International Atomic Energy Agency
INFCE	International Fuel Cycle Evaluation
KEWA	Kernbrennstoff-Wiederaufbereitungs-Gesellschaft
KWU	Kraftwerkunion
MDM	Brazilian Democratic Movement
NNPT	Nuclear Nonproliferation Treaty
NPT	Nonproliferation Treaty
NSC	National Security Council
Uhde	A subsidiary of ThyssenKrupp
PRMS	Presidential Review Memorandas
SALT	Strategic Arms Limitation Treaty
SPD	Social Democratic Party of Germany

INTRODUCTION

Put off by the smell of a dead mouse in the walls of the White House, Jimmy Carter told his staff to get rid of the problem. The General Service Administration, responsible for janitorial service in the White House, refused to do so. It argued that it had killed all the resident White House mice and that the dead rodent must have crawled in from the outside. Consequently, it was not their problem but that of the Department of the Interior, responsible for all mice outside the White House. The Department of the Interior in turn argued that since the mouse had died in the interior of the White House, it was not their problem anymore. Carter, fed up by the absurdity of the situation, called in officials from both bureaux and yelled at them: "Apparently, I am not even able to to get a miserable mouse out of my office."¹

This scathing anecdote was included in an article published in the German magazine *Der Spiegel* after Jimmy Carter decided against continuing the development of the neutron bomb. As the negative tone of the anecdote indicates, relations between the United States and the Federal Republic of Germany had reached a low point. Jimmy Carter, as the article put it, "frazzled his allies with his all-mightiest, 'No!' [to the neutron bomb]". The reaction of the Bonn government to Carter's decision was comparable to a "kind of twilight of the gods in the face of the lack of consideration which the God in the White House had shown to his believers from the Rhine river." Carter's decision, to "wipe the neutron bomb with a dramatic 'No' from the table", made any further discussion useless. The article quoted an anonymous

¹ "“Was Ist Das Nur Für Eine Führung?” - Die Politik Des Unberechenbaren Jimmy Carter,” *Der Spiegel*, April 1978.

source from Carter's own administration who noted "sarcastically that Jimmy Carter might have gotten advice from God again."²

Carter's neutron bomb decision was not the only point of contention responsible for the ill-will displayed in the *Spiegel* article. Only a year into Carter's presidency there were, on both sides of the Atlantic, many reasons for hostility. One of the first contentious issues that arose between Washington and Bonn, setting the negative tone for their future relationship, centered on Carter's attempt to stop the nuclear export deal between Bonn and Brasilia.³

The altercation between the Carter and Schmidt administrations over the Brazilian-German nuclear export deal, which had started in earnest in November 1976, months before President Carter's inauguration, was over by the end of June 1977. The conflict revolved around the first-ever export from West Germany to Brazil of a full nuclear cycle to a non-nuclear state. The FRG's promised delivery of a full nuclear cycle meant that Brazil would have reprocessing technology at its disposal that could produce fissile U-235 or plutonium (PU-239), the main ingredients for the fabrication of nuclear weapons. Washington, to the chagrin of Bonn, opposed the inclusion of reprocessing facilities in the export deal. The situation further deteriorated when Carter attempted to forbid reprocessing for the nuclear industries of the developed world.⁴

² Ibid.

³ On US-German relations in the Carter years, see: Klaus Wiegrefe, *Das Zerwürfnis : Helmut Schmidt, Jimmy Carter und die Krise der Deutsch-Amerikanischen Beziehungen* (Berlin: Propyläen, 2005); Christian Hacke, "The United States and the German Question," in *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. vol. 2 (New York, N.Y.: Cambridge University Press, 2004), 18–25.

⁴ Riordan Roett and William Perry, "Recent Trends in Brazilian Foreign Policy," *The World Today* 33, no. 8 (1977): 298.

What had started as domestic energy policy in West Germany, triggered by the oil crisis, not only bloomed into a serious altercation with the United States, but instigated a world-wide discussion of far-reaching global issues: the validity and status of the Nonproliferation Treaty (NPT), the future of the world-wide commercial nuclear industry, and the power of the United States over it. When at the end of June 1977, after months of intense negotiations, Bonn announced a moratorium on the future export of sensitive nuclear technology (excluding the Brazil deal), the Carter administration abandoned its public criticism of the German-Brazilian deal. The fight over stricter NPT regulations and the safety of reprocessing technology would continue, however. Carter, unable to stop the developed nations from using reprocessing technology, would launch an International Nuclear Fuel Cycle Evaluation (INFCE) and pass the Nuclear Nonproliferation Treaty (NNPT), which required recipients of American nuclear fuel to comply to further nonproliferation rules in the form of full-scope safeguards.

The German-Brazilian deal is an important case study of the collision between the Federal Republic of Germany and the United States over nonproliferation policies. More importantly, the conflict gives insight about the changes that the relationship between the Atlantic partners experienced throughout the 1970s when Bonn was politically and economically strong enough to withstand pressure from Washington and began to pursue, together with its European allies, a more independent course.

The conflict over the German-Brazilian nuclear deal and its consequences for future worldwide nonproliferation policies raised uncomfortable questions: How effectively could the United States interfere in the domestic agendas of sovereign nations? Did the context of

the Cold War and the specter of nuclear war justify U.S. interference in Brazil's domestic energy agenda? Did the threat of future proliferation establish sufficient grounds to interfere in a legally binding - and International Atomic Energy Agency (IAEA) approved - contract between two sovereign states? The conflict highlighted and questioned the power that nuclear states wielded over non-nuclear states which is inherent in the NPT.

My research further shows that the U.S.-German conflict was closely watched by other European nations that were interested both in future lucrative nuclear export deals, and directly involved with the West-German-Brazilian deal. While the governments of the Netherlands and Great Britain were directly involved with the German-Brazilian deal, the French profited indirectly.⁵ Moreover, France, taking the German-Brazilian deal as a model, had worked out similar deals involving full nuclear fuel cycles with South Korea and Pakistan.

In the end, Carter was unable to persuade Great Britain, France, Japan and West Germany to follow his moratorium on reprocessing. They would openly defy the wishes of Carter and continue to develop reprocessing technology. Despite this international resistance, Carter created the International Nuclear Fuel Cycle Evaluation (INFCE) and then passed the Nuclear Nonproliferation Treaty (NNPT) as a direct response to the dangers he saw inherent in the German-Brazilian treaty. Both initiatives shaped the current international framework of nonproliferation policies.

⁵ Pierre Lellouche, "Breaking the Rules Without Quite Stopping the Bomb: European Views," *International Organization* 35, no. 1 (January 1, 1981): 41. Eurodif's full name was European Gaseous Diffusion Uranium Enrichment Consortium and it was an uranium enrichment plant in Pierrelatte/Drome. Eurodif was a subsidiary of the French company AREWA. Urenco is a reprocessing facility in Almelo, Netherlands run by the Troika, a joint committee consisting of two German private firms and the Dutch and British governments.

Historiography

This thesis is based on primary research. I spent almost eight weeks in Berlin looking through the Archiv des Auswaertigen Amts and one week in Koblenz, looking through the Bundesarchiv. I spent five days in Atlanta, Georgia looking through the Jimmy Carter Library (JCL). Most of the primary documents that I use in the thesis come from the Berlin archive, which was a treasure trove. This means that my thesis is written largely from the perspective of the German Foreign Office.

The conflict surrounding the Brazil deal was, due to the public feud between Schmidt and Carter, often prominently covered by the press. Hence, it was not difficult to find German and American newspaper and magazine articles dedicated to the altercation between Washington and Bonn. These articles, from a variety of sources such as *The New York Times*, *The Economist* and *der Spiegel*, were very helpful and often provided background information not contained in the primary documents. More importantly, they armed me with dates and events which provided the points of references necessary to locate important documents in the archives.

The relationship between the United States and Germany set the tone for the conflict over the Brazil deal. Detlef Junker's essay collection *The United States and Germany in the Era of the Cold War* gives an excellent overview of the German-American relationship from 1945 until 1990.⁶ The essay collection, *The Strained Alliance*, edited by Thomas Schwartz and Matthias Schulz focuses, as the title suggests, on the strained relationship between the FRG and the United States during the administrations of Richard Nixon and Jimmy Carter.

⁶ Detlef Junker, *The United States and Germany in the Era of the Cold War : a Handbook. Volume 2, 1968-1990*, edited by Detlef Junker. (Cambridge: Cambridge University Press, 2010).

Its essays deal with the tensions between American-led detente and German Ostpolitik and describe how the ongoing Europeanization and the collapse of the Bretton Woods regime heightened the economic competition between the Atlantic partners. The essays in its last section deal mainly with the demise of detente and attempt to explain the uneasy relationship between Helmut Schmidt and Jimmy Carter.⁷

Wolfram F. Hanrieder's essay, "The German-American Connection in the 1970s and 1980s: The Maturing of a Relationship", which can be found in *Shepherd of Democracy? America and Germany in the Twentieth Century*, was of utmost importance to me. Hanrieder describes how, throughout the 1960s and 1970s, Germany's self-assertion in specific policies, such as Ostpolitik, led to greater diplomatic maneuverability for the FRG, which had "carried with it heavy political and psychological risks," in the past. The conflict over the Brazil deal is a perfect example of Germany's newfound self-assertiveness towards the United States.⁸

Finding secondary accounts of the nonproliferation policies and efforts of the Nuclear Suppliers Group proved to be easy. With the Cold War lumbering in the background, many historians and political scientists very carefully watched and analyzed nonproliferation. The works by Karl Kaiser, Lothar Wilker and William C. Potter give general accounts of nonproliferation throughout the 1970s. Karl Kaiser edited *Reconciling Energy Needs and Non-Proliferation: Perspectives on Nuclear Technology and International Politics*, which contains essays presented at the International Conference on Reconciling Energy Needs and

⁷ Matthias Schulz, Thomas Alan Schwartz. *The Strained Alliance: U.S.-European Relations from Nixon to Carter*, edited by Matthias Schulz and Thomas Alan Schwartz. (New York: Cambridge University Press, 2010).

⁸ Wolfram F. Hanrieder, "The German-American Connection in the 1970s and 1980s: The Maturing of a Relationship," in *Shepherd of Democracy? : America and Germany in the Twentieth Century*, ed. Carl Cavanagh. Hodge and Cathal J. Nolan (Westport, Conn.: Greenwood Press, 1992), 93.

Non-Proliferation in May 1979 in Bonn, Germany, organized by the Deutsche Gesellschaft für Auswärtige Politik. It offers an interesting overview of how the future of nonproliferation and the commercial use of nuclear energy were viewed by experts in the late 1970s.⁹ Lothar Wilker's *Nuklearpolitik im Zielkonflikt: Verbreitung d. Kernenergie zwischen nationalem Interesse u. internationaler Kontrolle*, is an excellent account of the conflict between a nation's domestic goals and its foreign policy in terms of nonproliferation.¹⁰ *International Nuclear Trade and Nonproliferation: the Challenge of the Emerging Suppliers*, edited by William Potter, deals with emerging nuclear nations, such as Brazil, and the difficulties of integrating them into the international trade system.¹¹

Three scholars have dealt specifically with the German-Brazilian deal, and their work was immensely important to me. It provided me with the background information and helped me understand the interconnectedness and complexity of the decades-long nonproliferation dilemma. They describe how the nuclear deal between Brazil and Germany created obstacles that could have weakened the NPT and hindered Washington in implementing secure nonproliferation policies.¹² Jon Rosenbaum and Glenn M. Cooper, in “Brazil and the Nuclear Non-Proliferation Treaty”, argue that Brazil, due to economic considerations, contributed to rendering the NPT impotent by pushing for nuclear

⁹ Karl Kaiser et al., “Reconciling Energy Needs and Non-proliferation : Perspectives on Nuclear Technology and International Politics” (Bonn: Europa Union Verlag, 1980).

¹⁰ Lothar. Wilker, *Nuklearpolitik Im Zielkonflikt : Verbreitung D. Kernenergie Zwischen Nationalem Interesse U. Internationaler Kontrolle* (Köln: Verlag Wissenschaft u. Politik, von Nottbeck, 1980).

¹¹ William C. Potter, “International Nuclear Trade and Nonproliferation : the Challenge of the Emerging Suppliers” (Lexington, Mass.: Lexington Books, 1990).

¹² For more information, see: Jack N. Barkenbus, “Nuclear Power Safety and the Role of International Organization,” *International Organization*. - 413 (1987): 475–490. Clarence D. Long, “Nuclear Proliferation: Can Congress Act in Time?,” *International Security* 1, no. 4 (April 1, 1977): 52–76.

development without taking its consequences into account.¹³ Matthias Schulz believes that the fiasco of the Brazil deal was mainly the fault of Bonn. He asserted that Bonn's readiness to assume greater responsibilities and to share global leadership on nonproliferation occurred at a time when Washington “seemed insecure and focused on domestic issues.”¹⁴ Thomas Schwarz blames Washington. He saw Carter's abrupt and unilateral policy changes as well as his leadership style as reasons for the deterioration in the Atlantic relationship. Schwarz viewed Carter's intervention in the Brazil deal as a “maladroit attempt” that “demonstrated both a lack of diplomatic tact and problematic understanding of the United States' competence to set policies for other countries.”¹⁵

All those secondary sources were written before the documents dealing with the Brazil deal were declassified. My research, by using newly released German and U.S. documents, presents a detailed account of the Brazil deal from the perspective of the Schmidt administration. The only other account to use primary documents is Klaus Wiegrefe's *Das Zerwürfnis: Helmut Schmidt, Jimmy Carter und die Krise der Deutsch-amerikanischen Beziehungen*, published in 2005, and his description of the Brazil deal awakened the interest that would lead me to writing this thesis. Wiegrefe, however, dealt with the Brazil deal only in passing (23 pages), while I had the luxury of focusing on it. This allowed me to clarify, for example, the role of Peter Hermes, who was the Secretary of State at the German Foreign Office. Wiegrefe asserted that Hermes failed to explain to Washington that Bonn was

¹³ H. Jon Rosenbaum and Glenn M. Cooper, “Brazil and the Nuclear Non-Proliferation Treaty,” *International Affairs (Royal Institute of International Affairs 1944-)* 46, no. 1 (January 1, 1976): 74–90.

¹⁴ *Ibid.*, 307.

¹⁵ Matthias Schulz and Thomas Schwartz A., “The Superpower and Union in the Making: U.S.-European Relations, 1969-1980,” in *The Strained Alliance*, edited by Matthias Schulz and Thomas Alan Schwartz. (New York, N.Y.: Cambridge University Press, 2010), 366.

looking for a compromise. The Schmidt administration, although set to continue its deal with Brazil, was ready to stop all further exports that included sensitive technology such as reprocessing facilities. I found several documents that proved that Hermes did in fact tell Washington that Bonn was willing to compromise. This reveals the important point that Washington was not interested in compromise.

Synopsis

The first chapter chronicles the events from November 1976 until March 1977. Beginning with the Ford administration and then continuing with Carter, Washington pressured Bonn to not grant the export licenses for reprocessing facilities to Brazil. The chapter focuses on the German perspective, as Bonn assesses how to respond to Carter's demands. The chapter highlights the complexity of the issue, describing how it touched on economics, nationalism and politics in the German Republic. Moreover, other European nations were following the disagreement intensely. French officials were interested because they had similar export deals pending themselves, while Great Britain and the Netherlands were directly involved with the Brazil deal. Amsterdam and London, like Bonn, were struggling to develop a response to Washington's attempt to nix the deal.

The focus of the next chapter shifts to Carter's attempt to forbid the industrialized nations to continue developing reprocessing technology. The chapter explains the negative reaction from Bonn. Furthermore, it describes, from a German perspective, how France and Brazil reacted to Carter's nonproliferation policies. The chapter climaxes in the G7 meeting in May of 1977. During the meeting France, Great Britain, Japan and the FRG agree with the

United States to not export reprocessing technology anymore. At the same time, Carter's plan to prohibit reprocessing as a component for commercial nuclear use is not accepted and openly opposed.

The conclusion explains why and how the FRG withstood American pressure and continued with its Brazilian deal. While there are many reasons for the FRG's stubbornness, the conclusion offers the theory of economic “diplomatic vocabulary” as an explanation. Wolfram Hanrieder coined the term “diplomatic vocabulary” to describe how economics and nationalism became intertwined in the FRG to foster not only political gain but also to symbolize a newly awakened nationalism.

Aliquam Tabula – Setting the Board

On August 6, 1945, the United States dropped 'Little Boy' onto Hiroshima. The atomic age had begun with a bang. For the next four years, the United States was the sole nuclear power in the world. Then, in 1949, the Soviet Union tested its first bomb. The nuclear club had doubled. For the next six years, the superpowers attempted to keep nuclear weapons from spreading to other nations.¹⁶ On the morning of February 13, 1960, this nuclear equilibrium was shaken. The nuclear Pandora had fled its box.¹⁷

The French government, under Charles de Gaulle, had detonated the first French atomic bomb in the Sahara. The political upheaval after the detonation was enormous, since this was the first time that a nation, independent from and against the will of the two

¹⁶ Great Britain acquired the bomb in 1954, but only with the assistance of the United States.

¹⁷ Jozef Goldblat and International peace research institute. *Arms Control* (London; Thousand Oaks; Oslo: Sage publications; PRIO, International peace research institute, 2002), 22.

superpowers, had developed its own bomb. Only five days later, on 18 February, the Eisenhower administration issued a statement that declared the proliferation of nuclear weapons was the “chief risk within the continuing armaments race.” Would the French explosion start an avalanche of proliferation? Schmidt, who at the time was the Minister of the Interior, wrote in 1961 that “in Washington [people recognized] clearly that the establishment of an independent French nuclear military force . . . would with a measure of certainty induce Germany, Italy and perhaps other NATO partners to follow in her footsteps.” The fears of nuclear proliferation raised by the French explosion caused the international community, with leadership of the United States, to develop a universal regime against the proliferation of atomic weapons.¹⁸ The main elements of this regime were the Nonproliferation Treaty (NPT) and the International Atomic Energy Agency (IAEA).

The IAEA was an intergovernmental organization that made sure that nuclear items, obtained by non-nuclear nations, were not used for military purposes. The IAEA monitored the availability of weapons-grade fissile material and the construction and supervision of new or already built enrichment and reprocessing facilities of non-nuclear nations.¹⁹ Later, when the Nonproliferation Treaty (NPT) came into existence, the IAEA became responsible for administering the safeguards system of the treaty.

The IAEA was composed of most of the member states of the United Nations. The purpose of the IAEA was to “promote the peaceful application of atomic energy and prevent

¹⁸ Pierre Lellouche, “Breaking the Rules Without Quite Stopping the Bomb: European Views,” *International Organization* 35, no. 1 (January 1, 1981): 44.

¹⁹ Jozef. Goldblat and International peace research institute., *Arms Control* (London; Thousand Oaks; Oslo: Sage publications ; PRIO, International peace research institute, 2002), 103.

diversion of fissionable material from peaceful purposes to nuclear weaponry.”²⁰ The IAEA monitored nuclear facilities through audits of plant records and by inspections. It was still fairly easy, however, for a nation to evade detection, stockpile the components of a nuclear weapon, and build a bomb in several weeks. This was one of the main reasons the United States objected so strongly against delivering plutonium or highly enriched uranium.²¹

The German-American quarrel over the Brazil deal was caused by Brasilia’s refusal to sign the NPT of 1969/1970. The NPT is an international treaty which, negotiated between the US and USSR and ratified by the UN in 1969, was designed to prevent the spread of nuclear weapons and technology. The United States, Great Britain and the Soviet Union signed the treaty first. Forty other nations followed by 1970. It strives to promote the peaceful use of nuclear energy. The signatories pledged to accept inspection by the IAEA.²²

The NPT affirmed the right of the signer to develop and use nuclear energy for peaceful purposes. It preserved the right of those nations to trade with nations of their choosing and to determine on their own if “certain requested supplies were consistent with the basic objectives of the Treaty.” Nations that had signed the Treaty were subject to the self-imposed regulations and rules of the NPT. At the same time, nations that had not signed the Treaty were not subject to those regulations and rules.²³

²⁰ Edwin Brown Firmage, “The Treaty on the Non-Proliferation of Nuclear Weapons,” *The American Journal of International Law* 63, no. 4 (October 1, 1969): 715.

²¹ Leonard S. Spector, Mark G. McDonough, and Evan S. Medeiros, *Tracking Nuclear Proliferation: a Guide in Maps and Charts, 1995* (Washington, D.C.: Carnegie Endowment for International Peace, 1995), 178. In addition to the IAEA, the European Atomic Community (Euroatom) was European led and tasked to fulfill the duties of the IAEA in Europe. It reflected western Europe's uneasiness with Washington's attempt to create a single worldwide safeguard system.

²² George H. Quester, “The Nuclear Nonproliferation Treaty and the International Atomic Energy Agency,” *International Organization* 24, no. 2 (April 1, 1970): 163.

²³ Goldblat and International peace research institute., *Arms Control*, 105.

The nonproliferation treaty was, in many ways, a curious international document. On the one hand, the NPT established a “norm of international behavior” for nuclear and non-nuclear nations. The NPT kept nuclear proliferation at bay, warded off nuclear anarchy and established the basis for future efforts by the superpowers, such as the SALT agreements, to reduce their respective nuclear arsenals.²⁴ On the other hand, the NPT split the world into two opposing camps, namely the nuclear and non-nuclear nations. The treaty defined a nuclear nation as one that “had exploded a nuclear explosive prior to 1 January 1967.” This limited the nuclear nations to five: the United States, the Soviet Union, the United Kingdom, France and China.²⁵

Under the NPT, those five nations could not only build nuclear weapons for their own use but also assist each other in developing nuclear weapons. They could also receive the materials necessary to build warheads from nuclear and non-nuclear states alike and deploy those weapons on the territories of other signees. The nuclear powers could decide to what extent they wanted to “accept international controls over their peaceful nuclear activities.” This right was not extended to non-nuclear nations, whose commercial nuclear industries had to be controlled and regulated, due to proliferation concerns. This left the overwhelming majority of nations, who had pledged not to develop nuclear weapons, to tolerate the possession of nuclear explosives by a handful of states, and to accept regulation and oversight by those nuclear nations.²⁶

²⁴ Goldblat and International peace research institute., *Arms Control*, 108.

²⁵ This number became difficult to maintain after India exploded a nuclear device in 1974. Since, according to the NPT, only a nation that had exploded a nuclear device before 1967 was considered to be a nuclear nation, India could not be designated as a nuclear nation, and is not officially considered to be one to this day.

²⁶ Goldblat and International peace research institute., *Arms Control*, 101–02.

Clearly, the NPT placed “the main burden of obligation” onto the shoulders of the non-nuclear nations who had signed the treaty. Why should countries renounce the bomb, “the possession of which provides the nuclear powers not only with an increase in political prestige but also with freedom of action on the military side?” Washington's proliferation policies stood on shaky moral grounds since the United States “optimized its own nuclear stockpiles yet advised other countries to abstain from doing so.” It is no wonder, that the FRG, Brazil and other non-nuclear states believed that there were ulterior motives behind the great powers' fears of nuclear proliferation: on the one hand, the nuclear states were saying nuclear peace should be safeguarded; on the other, they were also ensuring that their nuclear hegemony would continue.²⁷ It was therefore unsurprising that some nations - including Brazil, France and India - decided to not sign the treaty.²⁸

The only controls on those non-signees was that the nuclear materials exported from NPT members had to fulfill the regulations of the NPT. Therefore, the fuel-cycles of many non-members, such as France and India, were often not fully safeguarded internationally. This concerned many nuclear nations, above all the United States and the Soviet Union, which pushed for imposing “on non-parties [to the NPT] full scope-safeguards, as comprehensive as NPT-type safeguards, as a condition for nuclear trade.” A few Nuclear Suppliers, chiefly West Germany and France, resisted these full-scope safeguards.²⁹

The history of the NPT, especially from a German perspective, is complicated. The FRG, under Konrad Adenauer, on October 3, 1954, had announced and pledged that it would

²⁷ Matthias. Küntzel, *Bonn & the Bomb : German Politics and the Nuclear Option* (London; Boulder, Colo.: Pluto Press, 1995), 16.

²⁸ Goldblat and International peace research institute., *Arms Control*, 101–102.

²⁹ Riordan Roett and William Perry, “Recent Trends in Brazilian Foreign Policy,” *The World Today* 33, no. 8 (1977): 165.

not “produce atomic, biological, or chemical weapons within its borders,” as a way of becoming a member of NATO and the Western European Union.³⁰ Nevertheless, before the FRG signed the NPT in 1970, both Washington and Moscow feared that Bonn would acquire atomic weapons. German politicians across the spectrum, from Chancellor Konrad Adenauer, who called the NPT a “Morgenthau plan raised to the power of two”, to Franz Josef Strauss (CDU), who thought the treaty was a “Versailles Treaty of cosmic dimensions,” rejected the restrictions of the NPT. Even Helmut Schmidt believed the treaty was “questionable even if it was desirable.” Negative German attitudes toward the NPT stemmed from the assumption that the rest of the world, led by the United States, was trying to handcuff West Germany. Bonn was eager to preserve its independence, especially when it came to nuclear trade, and it wanted to keep its military options open.³¹

Therefore it is important to note that Bonn had agreed to sign the NPT only after Article IV was added to the treaty.³² This article guaranteed the FRG's right to export nuclear technology intended for peaceful uses. Throughout the 1970s, Bonn planned to replace oil, the predominant energy source for German industries, with nuclear power plants. The addition of Article IV to the NPT was thus of great importance to Bonn because it would make its growing nuclear industry economically viable.

The importance of nuclear energy for the FRG had developed gradually. Before 1950, coal had supplied approximately seventy-five percent of Western Europe's energy. The large coal deposits in the Ruhr area in Germany, estimated to be the largest coal reserves in

³⁰ Küntzel, *Bonn & the Bomb : German Politics and the Nuclear Option*, 1–2. Firmage, “The Treaty on the Non-Proliferation of Nuclear Weapons,” 714.

³¹ Küntzel, *Bonn & the Bomb : German Politics and the Nuclear Option*, xvi.

³² See Appendices B.

Europe, were part of the economic miracle that kept West Germany's economy booming. Yet, between 1950 and 1965, coal's importance declined, due to the abundance of cheap imported oil, and coal's energy share fell to thirty-eight percent. By 1973, oil accounted for fifty-nine percent of Western Europe's energy sources and fifty-six percent of West Germany's. The Middle East was the main supplier of oil, especially for the Federal Republic of Germany, which was the largest importer of oil in Europe. The rise in oil prices instituted by the OPEC cartel caused therefore an immediate energy crisis in the FRG. By contrast, the United States imported only around fifteen percent of its oil from foreign sources. To cope with the energy crisis, Bonn turned to nuclear energy to solve its long term energy needs. In an ambitious plan, announced in 1974, Bonn planned to increase the production of nuclear energy from one percent to fifteen percent of total energy production.³³

Throughout the 1970's studies predicted that nuclear power would become the dominant alternative to oil in the developed world.³⁴ Therefore, most experts expected that the world's supply of uranium would be depleted in a matter of decades. Reprocessing, which recycled spent fuel into plutonium, seemed to offer the solution to this dilemma, as plutonium could be used as a fuel in nuclear reactors. The problem was that it could also be used as a fuel in nuclear bombs.

Domestically, Schmidt's energy policy was under siege by late 1976, fueled by the disenchantment of the German public with nuclear energy. There had been several incidents at nuclear power plants that had turned a sizable portion of the population into anti-nuclear

³³ Earl H. Fry and Gregory A. Raymond, "The International Implications of West Germany's Energy Policy," *German Studies Review* 1, no. 2 (May 1, 1978): 174–175, 182–187.

³⁴ Fred Hoyle, *Energy or Extinction? : The Case for Nuclear Energy* (London: Heinemann, 1977). United States. Interagency Task Force on Nuclear Energy., U.S. Atomic Energy Commission., and United States. Federal Energy Administration., *Nuclear Energy*. (Washington: GPO, 1974).

activists. The nuclear facilities in the town of Gundremmingen (Bavaria) were shut down by state authorities in 1976 due to an incident which involved the escape of radioactive steam. Also in 1976, the nuclear facility in the town of Biblis (in southern Hesse) was shut down for several months, due to a malfunction in the main coolant circuit. In November 1976, anti-nuclear forces in the town Brokdorf (on the river Elbe) clashed with the police and hundreds were injured. On top of these incidents sat the problem of nuclear waste disposal. With a population of around sixty million in the 1970s but a land mass the size of Oregon, Germany was faced with the problem of finding a region to dump the waste.³⁵

Intertwined with the general public's disenchantment was the reality that to stay solvent, the German nuclear energy sector had to construct at least six power stations – somewhere in the world – within a year. This set Bonn on a collision course with Jimmy Carter's Washington.³⁶ By focusing on exports, the German nuclear sector came into direct competition with the United States' nuclear industry, which had enjoyed a virtual monopoly until the 1970's. This economic competition contributed to the confusion of both Washington and Bonn about the other's goals. West Germany needed large export deals, such as the Brazil deal, to survive. Satisfying the German market was not enough for the nuclear sector to make a profit, despite receiving millions in government subsidies. At the time, the FRG ranked among the world's leaders in nuclear technology, and the Kraftwerkunion (KWU) company, a subsidiary of Siemens, produced nuclear reactors that directly competed with the two American giants, Westinghouse and General Electric.³⁷

³⁵ Fry and Raymond, "The International Implications of West Germany's Energy Policy," 188–189.

³⁶ *Ibid.*, 190.

³⁷ Lellouche, "Breaking the Rules Without Quite Stopping the Bomb: European Views," 42.

The Europeans' increasing industrial and technological capabilities in the nuclear field had shifted the balance of power. As Thomas Neff and Henry Jacoby wrote, “the 1970s saw the end of the long held U.S. monopoly in the reactor manufacturing as well as in fuel cycle services.”³⁸ Pierre Lellouche writes that the Europeans had developed an impressive technological edge over the United States in reprocessing and fast breeder technology.³⁹ Because of the European's rising competency in and commitment to nuclear energy, the Europeans gravity towards nonproliferation had changed dramatically.

From 1975 to 1976, KWU suddenly had twenty-seven power plant orders on its books.⁴⁰ The deal with Brazil was the most controversial of those orders because it included the export of a full nuclear fuel-cycle.⁴¹ The Schmidt administration hoped that by offering Brazil a full nuclear fuel cycle it was leveling the playing field and would thereby gain a competitive edge against its American rivals.

The German-Brazilian nuclear deal, signed in 1975, was very lucrative for both countries. The deal was for eight nuclear power plants to be delivered by a consortium of private West German firms. Earning 12 billion marks, the deal was the largest export contract in the history of West Germany. Approximately 20,000 skilled jobs depended on it.⁴²

Since Brazil had large reserves of uranium, it was logical for it to look to nuclear power generation. The price of oil had quadrupled in the seventies and Brazil's rapidly growing economy, which imported three-fourths of its oil, was in danger of stagnating due to

³⁸ T.L. Neff and H.D. Jacoby, “Nonproliferation Strategy in a Changing Nuclear Fuel Market,” *Foreign Affairs* 57:5 (n.d.): 1123–1143.

³⁹ Lellouche, “Breaking the Rules Without Quite Stopping the Bomb: European Views,” 41.

⁴⁰ Fry and Raymond, “The International Implications of West Germany’s Energy Policy,” 189.

⁴¹ *Ibid.*, 190.

⁴² Craig R. Whitney, “Bonn to Send Brazil Nuclear Equipment, Though U.S. Objects,” *The New York Times* (April 9, 1977).

the cost of oil. In the 1970s, Brazil had more than half the known uranium deposits in the world.⁴³ Part of the nuclear deal with Brazil was that the South Americans would deliver uranium for West Germany's own nuclear sector thereby reducing its dependence on the United States, the largest producer of reactor fuel at the time.⁴⁴

For Schmidt and Foreign Minister Hans-Dietrich Genscher, the deal was a test case. It would mean that the German nuclear sector would henceforth be able to export sensitive technology to nations that had not signed the NPT. This would open up new markets. Bonn, therefore, was careful to include strict restrictions and safeguards worked out in compliance with the International Atomic Energy Agency (IAEA) and guidelines created at a London Suppliers Conference in 1974. The safeguards, however, were contested by the Ford and Carter administrations, who believed the deal on par with a nuclear Pandora's box. The German consortium planned to export a complete nuclear fuel-cycle, which meant sending Brazil reprocessing and enrichment facilities. The enriched uranium could be reprocessed into weapons grade material, thereby giving Brazil the potential to develop nuclear weapons.

The mechanics of reprocessing had been discovered in the 1950s, but it was three events in the mid 1970s that suddenly made the complex procedure seem economically viable – and dangerous.⁴⁵ First, the energy crisis caused a spike in the price of uranium, which, for the uranium poor Europeans, made reprocessing more attractive. Second, the United States fell behind in exporting the promised uranium to its Western allies.⁴⁶ However,

⁴³ Ernest Conine, "Waking Up From a Nuclear Nightmare," *Los Angeles Times* (April 10, 1978).

⁴⁴ "Getting Bonn to See the Light," *Los Angeles Times* (November 22, 1976).

⁴⁵ Spector, McDonough, and Medeiros, *Tracking Nuclear Proliferation: a Guide in Maps and Charts, 1995*, 172–173.

⁴⁶ "Chronologie deutsch-amerikanischer Fühlungsnahmen über Brasilien-Abkommen", February 28, 1977, B 102, 1274704, Bundesarchiv, Koblenz. Fry and Raymond, "The International Implications of West Germany's Energy Policy," 187. Germany had signed a long-term contract with the United States in 1960

the fact that India secretly developed and then tested a nuclear weapon in 1974 made reprocessing seem very dangerous.

Washington, in response to the nuclear explosion in India, started to label reprocessing as sensitive, meaning dangerous and worthy to be included on the trigger list. The trigger list was a list of 'sensitive' items, created by the IAEA, that could be used to produce nuclear weapons. If any of those 'sensitive' items was included in an export deal, the IAEA was informed. Bonn, on the other hand, saw commercial reprocessing as increasingly attractive because it promised: "Autarky in energy self-sufficiency, lowering uranium prices, easing of environmental problems and pressuring the uranium monopoly of the United States." The tension between these two perspectives would cause troubles between the FRG and the United States.⁴⁷

The United States' stance on reprocessing hardened gradually. Labeling reprocessing as sensitive jeopardized Westinghouse's deal with Iran. Westinghouse planned on exporting a full nuclear cycle (which included reprocessing) to Tehran. The Ford administration was therefore attempting to tighten the nuclear export guidelines without forbidding the export of full cycles outright. During the Supplier's Club meetings in the fall of 1974 and 1975, Washington aimed to tie the export of reprocessing technology to the condition that the full-cycle was either fully controlled by the IAEA or through a multilateral effort. The Nuclear Suppliers came to no agreement.⁴⁸

for the delivery of enriched uranium fuel.

⁴⁷ "Chronologie deutsch-amerikanischer Fühlungsnahmen über Brasilien-Abkommen", February 28, 1977, B 102, 1274704, Bundesarchiv, Koblenz.

⁴⁸ Ibid.

In March 1975, Washington asked Bonn not to complete the Brazilian deal. It wanted more information, especially about the reprocessing facilities. In turn, the Ford administration promised that the American nuclear industry would not negotiate a new deal with Brazil. In April 1975, an American team of nuclear experts arrived in Bonn for consultations. These experts demanded that West Germany participate not only in the stipulated IAEA-security measures but take part in the supervision of the reprocessing facilities. Furthermore, the FRG was expected to wait until after the next Suppliers meeting before signing the treaty. Bonn complied with all demands and when German President Walter Scheel visited Washington in June 1975, he was informed by the Secretary of State Henry Kissinger that the Ford administration, despite its objections, gave the deal its blessing. The deal was signed on June 27, 1975.⁴⁹

When Brasilia signed the deal with Germany, it submitted to the most stringent controls that a non-NPT signatory nation had ever done. Bonn in turn agreed to enforce those controls to an unprecedented extent. The London Suppliers Club gave the deal its blessing and the controls and conditions imposed by the IAEA (and Washington) were taken as the model for any subsequent nuclear exports from the industrialized world.⁵⁰

Despite all the guarantees, the fact remained that Brazil would acquire the know-how to construct nuclear weapons and would have the enriched plutonium to build them. The controls would only let the rest of the world know if the Brazilians were doing it. Furthermore, it would be difficult to stop Brasilia from building new facilities that would not

⁴⁹ Ibid.

⁵⁰ Wiegrefe, *Das Zerwürfnis : Helmut Schmidt, Jimmy Carter und die Krise der Deutsch-Amerikanischen Beziehungen*, 80–81.

be monitored by the IAEA or the FRG. Therefore, the deal with the FRG would give Brasilia a path toward nuclear weapons outside the international control of the Nuclear Suppliers, IAEA and the NPT.⁵¹

During the presidential campaign of 1976, Ford, under pressure from Jimmy Carter and Congress, decided to act. The President announced that the U.S. government would henceforth “regard reprocessing . . . as not necessary.”⁵² The Ford administration enacted a three year domestic moratorium on reprocessing during which it attempted to find not just an international consensus, but alternatives to reprocessing.

This domestic ban on commercial reprocessing had far reaching consequences. The temporary ban put an end to Westinghouse's Iran deal and called into question the supply of enriched uranium from American firms to its customer nations. This was important because the United States were the leading exporters of uranium. Furthermore, the Ford administration publically disapproved if other countries used spent fuel of American origin for reprocessing.⁵³

The Brazil deal had created a dangerous precedent, and both Ford and his presidential successor, Jimmy Carter, knew it. Carter decided from the beginning of his presidency to improve relations with Europe, Japan and the Third World. He attempted “to look at local needs, opportunities, and problems on their own merits – and in terms of American national

⁵¹ Ibid.

⁵² Matthias Schulz, “The Reluctant European: Helmut Schmidt, the European Community, and Transatlantic Relations,” in *The Strained Alliance*, edited Matthias Schulz and Thomas Alan Schwartz (Cambridge; Washington: Cambridge University Press ; German historical institute, 2010), 293.

⁵³ Philip Gummett, “From NPT to INFCE: Developments in Thinking About Nuclear Non-Proliferation,” *International Affairs (Royal Institute of International Affairs 1944-)* 57, no. 4 (October 1, 1981): 552.

interest – rather than primarily in terms of a Soviet-American contest.”⁵⁴ Despite Carter's intentions, the German-American relationship would greatly deteriorate during his presidency.

One of the reasons for this deterioration was that the Carter presidency marked the “first real transition in leadership since Nixon entered office in 1969.” Especially because of the central role of Kissinger, there had been a “substantial consistency to American foreign policy”, until the advent of the Carter presidency. The new President's lack of experience and his naivete in global politics led him to make a number of serious mistakes from the very outset and led to what historian Raymond Garthoff has called a “fragmented and inconsistent foreign policy.”⁵⁵ Carter, while willing to learn from experts, brought an attitude towards governance – “a combination of Wilsonian moralism, an engineer's rationalism”, and in British Prime Minister Callaghan's words, “a manifest dislike of horse-trading” to the White House.⁵⁶ This attitude would contribute to the troubles over the Brazil deal.

Nonproliferation was very high on the Georgian's agenda.⁵⁷ Carter wrote in his memoirs: “I took seriously the commitments I had made as a candidate. Peace, human rights, *nuclear arms control*, and the Middle East had been my major foreign policy concerns.”⁵⁸

Nonproliferation was of such high priority to him that he announced to his cabinet in October

⁵⁴ Zbigniew Brzezinski, *Power and Principle: Memoirs of the National Security Adviser, 1977-1981* (New York: Farrar, Straus, Giroux, 1983), 132.

⁵⁵ Raymond L. Garthoff, *Detente and Confrontation : American-Soviet Relations from Nixon to Reagan* (Washington, D.C.: Brookings Institution, 1994), 623.

⁵⁶ Joe Renouard and Nathan Vigil D., “The Quest for Leadership in a Time of Peace: Jimmy Carter and Western Europe, 1977-1981,” in *The Strained Alliance*, edited by Matthias Schulz and Thomas Alan Schwartz. (New York, N.Y.: Cambridge University Press, 2010), 309. James Callaghan, *Time and Chance* (London: Collins, 1987), 482–3.

⁵⁷ Garthoff, *Detente and Confrontation : American-Soviet Relations from Nixon to Reagan*, 625–26.

⁵⁸ Jimmy Carter, *Keeping Faith : Memoirs of a President* (Toronto; New York: Bantam Books, 1982), 66. Emphasis mine.

1977: “If making progress on nonproliferation was the only success of my presidency that would be worth it.”⁵⁹ Furthermore, Carter brought some knowledge in nuclear affairs, gained during World War II, with him to the White House. Carter, National Security Advisor Zbigniew Brzezinski believed, “stood out as the one [head of state] who had a genuine and highly personal familiarity with the scientific intricacies of the nuclear problem.”⁶⁰ Carter's view on nonproliferation was a shrewd mixture of “moral conviction and technical expertise” and was based on three essential principles: first, highly enriched uranium and plutonium needed to be more strictly controlled; second, international safeguards needed to be strengthened; third, commercial reprocessing was not economically necessary.⁶¹

According to Brzezinski, Carter's nonproliferation policy failed for two reasons. First, there were a number of cases, including the German-Brazilian deal, where “potential acquisition of dangerous technology offered an immediate proliferation risk”. Second, it would be difficult to arrest the move towards reprocessing.⁶² The long term commitments by the nuclear industries of France, Japan, Great Britain and Germany toward reprocessing made Ford's and Carter's attempted ban more difficult. Carter also assumed that “the national pride of nations . . . prevented their acceptance of intrusion into their right to reprocess and do as they please with the reprocessed fuel, which does contain plutonium suitable for bombs.” For the President the potential risks associated with reprocessing outweighed considerations of nationalist sentiment.⁶³

⁵⁹ Ibid., 71.

⁶⁰ Zbigniew Brzezinski, *Power and Principle : Memoirs of the National Security Adviser, 1977-1981* (New York: Farrar, Straus, Giroux, 1983), 49.

⁶¹ Ibid., 129.

⁶² Ibid., 129–30.

⁶³ Jimmy Carter, *White House Diary* (New York: Farrar, Straus and Giroux, 2010), 48.

For Helmut Schmidt, this was a hard pill to swallow. He had, three years earlier (May 1974), become the Chancellor of the Federal Republic. Schmidt was, at fifty-eight years of age, the youngest Chancellor in the history of the FRG and symbolized the growing confidence of West Germany.⁶⁴ The career politician Schmidt, who had been in politics since 1953, considered Carter inexperienced and did not hide his contempt for the new President.

In his memoir, Schmidt wrote that Carter came to the office bereft of any experience in international affairs and explained that he had been irked by the President's "idea of the superiority of his moral position and his overestimation of the ease with which international politics could be manipulated." The German was critical of the U.S. presidential system, which in his opinion created discontinuities in policies and personnel that could only "evoke insecurity, caution, even suspicion among the United States' allies as well as its opponents."⁶⁵ While many Americans, after the Nixon years, saw Carter's inexperience as a sign for a new beginning in Washington, Europeans "had no need for a new beginning in Washington; instead they had high hopes for a confirmation of America's overall strategy and its consistency in pursuing it."⁶⁶ From the moment Carter entered the White House these hopes were dashed for Schmidt. For the Chancellor, German-American relations under the new President had reached a low point.⁶⁷

⁶⁴ Reinhard Appel, "Helmut Schmidt," in *The German Chancellors*, ed. Hans Klein, trans. Edna McCown (Chicago: edition q, inc., 1993), 268–9. Harold James, "Cooperation, Competition, and Conflict: Economic Relations Between the United States and Germany, 1968-1990," in *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. vol. 2 (New York, N.Y.: Cambridge University Press, 2004), 188.

⁶⁵ Helmut Schmidt, *Men and Powers : a Political Retrospective* (New York: Random House, 1989), 229–30.

⁶⁶ *Ibid.*, 36–37.

⁶⁷ *Ibid.*, 187.

Already at their first meeting at the G7 summit, held in London in the spring of 1977, Schmidt faced off with Carter. The Chancellor blasted Carter's theory "that the West German economy could stimulate world trade by expanding more," commonly known as the locomotive theory, and Carter backed down. This pattern persisted, with Schmidt losing confidence in American leadership. When Carter, in 1978, shelved development of the neutron bomb, "after the Chancellor had coaxed his party into agreeing to allow the deployment of the weapon in West Germany," Schmidt asserted that the American President's failure of leadership had caused a power vacuum. As a result, the French and the Germans had to step up and fill in this power vacuum, at least in Europe.⁶⁸

Jimmy Carter opposed the German-Brazilian nuclear deal even before he was sworn in as President. The President's outspoken objections to the deal stemmed from the fact that it included the export of reprocessing facilities to Brazil and reprocessing created a form of plutonium that was easily transformed into weapon grade material. Carter was not convinced that the controls and regulations included in the deal were sufficient to stop Brazil from producing nuclear weapons. For the FRG and Brazil, on the other hand, reprocessing meant that uranium was recycled instead of being discarded. The operators of the nuclear power plant could squeeze more energy out of their uranium, thereby saving money by limiting the amount of costly uranium they had to import. Reprocessing also reduced the need for expensive waste management. When Carter became the President, these disagreements would become more pronounced.

⁶⁸ John Vinocur, "The Schmidt Factor," *The New York Times*, September 21, 1980, sec. 6.

CHAPTER 1

The Brazil Deal

Export Licenses - To Issue or not to Issue

The FRG felt isolated. Schmidt, as an Atlanticist, had hoped that the FRG's connection to the United States would continue to keep Bonn from becoming isolated in Europe. Even before Carter took office, the opposite seemed true. Washington's nonproliferation policies, begun under Ford and certain to continue under Carter, drove a wedge between Bonn and its European partners. At the end of 1976, Chancellor Schmidt felt pressured from four sides - the United States, France, Great Britain and the Netherlands - not to issue the export licenses for the transfer of enrichment and reprocessing facilities to Brazil.

The German-Brazilian deal and the trilateral commission (consisting of Brazil, the FRG and the IAEA) that oversaw it were perceived by Schmidt and his cabinet as the ideal solution to deal with the export of sensitive nuclear technology to the Third World. In the past, the American nuclear industry had preferred to remove the spent uranium of its clients back to its own plants for reprocessing. This irritated potential European competitors, such as West Germany.

The Germany Foreign Ministry believed the safeguards in the Brazil deal were on par with U.S. nonproliferation policies. The German nuclear industry and the Schmidt government viewed the treaty as an example of how to set up a stringent control system for the export of sensitive technology to nations that had not ratified the NPT. This was confirmed by the participants of the London Conference (January 1976), attended by the

main nuclear exporting nations, who declared that the security measures in the Brazil contract were more stringent than those imposed by the NPT.⁶⁹

Bonn was therefore not too worried when, on May 13, 1976 in New York, the presidential candidate Carter called for a voluntary moratorium from the principal suppliers of nuclear equipment on sales of sensitive nuclear technology, which included enrichment and reprocessing facilities. Bonn started to worry, though, when Carter voiced hope that this moratorium would be applied to recently completed nuclear agreements. Carter did not name any specific deals.⁷⁰

It was therefore not surprising that when U.S. ambassador to West-Germany Walter John Stössel, German Foreign Minister Hans-Dietrich Genscher and U.S. Senators Samuel Nunn (D-GA) and Dewey Bartlett (R-OK) met in Bonn on November 4th 1976, after Carter had been elected, the discussion dealt with the Schmidt administration's concern over Carter's campaign statements about nonproliferation. The American senators reassured the German Foreign Minister that U.S. foreign policy would not fundamentally change and that the friendship and trust between America and Germany would further develop. Senator Nunn declared that there had been fewer differences in attitudes towards foreign policies in this presidential election campaign than in the past. In fact, Nunn believed that Carter's critique of Ford's foreign policy was more about form than substance and that Carter had stated during his campaign that he wanted to consult more with the allies than had the former

⁶⁹ "Bonn verteidigt seine Nuklearpolitik - Das Auswärtige Amt weist Carters Kritik zurück", August 10, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

⁷⁰ "Kernenergie - Bedrohung für das Abkommen", November 17, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

administration. At this time, the Schmidt government, though wary, was hopeful that the good relations enjoyed under President Ford would continue under President Carter.⁷¹

These hopes were dashed when Carter, on November 15, in just his second press conference after winning the presidency, singled out for condemnation the reprocessing facilities included in the German-Brazilian deal: the President-elect declared that no sensitive technology should be delivered to nations that had not signed the nonproliferation treaty. American pressure directed against the Brazilian deal was not a new development. Indeed, the Ford and Carter administrations had the same goals: to stop the Brazil deal and limit the export of reprocessing technology.⁷²

Despite the similarities between Ford's and Carter's policies, Schmidt maintained a remarkably good relationship with Ford, but he loathed the President-elect. In part this was due to the fact that Ford and Carter had different ways of trying to stop the Brazil deal. Ford had applied discrete pressure, often working through diplomatic channels.⁷³ He had shied away from publicly criticizing Bonn. Carter's public chastisement intensified the strife and worried the German Foreign Ministry.⁷⁴

Meanwhile, in late 1976 Uhde (a subsidiary of ThyssenKrupp) and KEWA (Kernbrennstoff-Wiederaufarbeitungs-Gesellschaft), the two German firms contracted to deliver the reprocessing facility, were waiting for approval of the export licenses from the

⁷¹ “Gespräch des Herrn Bundesministers mit den Senatoren Nunn und Bartlett in Anwesenheit von Botschafter Stössel”, November 4, 1976, Karton 36429, Politisches Archiv des Auswärtigen Amts, Berlin.

⁷² “Sitzung der deutsch-brasilianischen gemischten Kommission für wirtschaftliche Zusammenarbeit am 23./24. November 1976 in Brasilien - Zur Frage der Lieferung einer Wiederaufbereitungsanlage”, October 18, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

⁷³ More about this pressure later.

⁷⁴ “Sitzung der deutsch-brasilianischen gemischten Kommission für wirtschaftliche Zusammenarbeit am 23./24. November 1976 in Brasilien - Zur Frage der Lieferung einer Wiederaufbereitungsanlage”, October 18, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

Schmidt government. The Foreign Ministry was ready to approve the licenses. Bonn, after Carter's November 15 press conference, paused. While Europe's statesmen, as a rule, never took the statements by American presidential candidates about foreign policy too seriously, Carter was no longer a candidate and this created a period of uncertainty.⁷⁵

On November 17, 1976, two days after Carter's press conference, German congressmen Christian Lenzer, Rudolf Seiters and Heinz Franke returned from an informational visit to Washington with a disconcerting message. They had heard from unidentified sources that Carter, after his inauguration, intended to oppose the nuclear deal with Brazil. Bonn worried that the new President would include statements about nonproliferation in his inaugural address that would close the door on any further consultations and damage the Atlantic relationship. In fact Carter did not plan to firm up his policy toward nonproliferation before March 21, but Bonn did not know this and was therefore eager to meet with Carter before his inauguration.⁷⁶

The Schmidt government was not sure how to interpret the Americans' objections to the deal. Since Germany and Brazil had signed a security treaty in February 1976, specifying that the Brazilian nuclear program would be strictly supervised by the IAEA, officials from both Brazil and Germany suspected that Washington's opposition to the deal was due more to economic resentment than to concerns about proliferation. On November 19, German Congressman Christian Lenzer stated that he had “long ago given up believing that there

⁷⁵ Helmut Schmidt, *Men and Powers: a Political Retrospective* (New York: Random House, 1989), 233.

⁷⁶ “Kernenergie - Bedrohung für das Abkommen”, November 17, 1976, B 102, 1274704, Bundesarchiv, Koblenz. Wiegreffe, *Das Zerwürfnis: Helmut Schmidt, Jimmy Carter und die Krise der deutsch-amerikanischen Beziehungen*, 86–87.

were any non-economic reasons behind American attitudes in this area.”⁷⁷ Foreign Minister Genscher quipped that “Westinghouse was a subcommittee of the American Congress” and Schmidt was on record as saying that “mighty monopolies stood behind American nonproliferation policies and it was imperative to stand firm and break the power of those monopolies.” As historian Klaus Wiegrefe wrote, one reason for the FRG's suspicions toward American motives can be found in the stereotype of the capitalist and materialistic American that was deeply ingrained in the German psyche. These suspicions persisted despite the fact that it was only because of Washington's self-imposed moratorium on the export of enrichment and reprocessing technology that Westinghouse had not clinched the deal with Brazil.⁷⁸

On November 24, President-elect Carter sent word via vice-President-elect Mondale to Schmidt asking Bonn not to issue the export licenses for the reprocessing facilities. Carter asked for a reply by January, when he would be inaugurated.⁷⁹ Schmidt and his cabinet took Carter's request seriously. Issuing the licenses could have serious political consequences not only for the relationship between the two governments but also domestically for Schmidt. If Schmidt did not issue the licenses, the opposition party (CDU) would paint his administration as weak and the German economy would take a serious hit. If he did issue the licenses the U.S.-German relationship, so important in Cold War politics, could become strained.⁸⁰

⁷⁷ “Kernenergie - Bedrohung für das Abkommen”, November 17, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

⁷⁸ Klaus Wiegrefe, *Das Zerwürfnis : Helmut Schmidt, Jimmy Carter und die Krise der deutsch-amerikanischen Beziehungen* (Berlin: Propyläen, 2005), 79.

⁷⁹ “Wiederaufbereitungsanlage Brasilien”, November 25, 1976, Karton 36430, Politisches Archiv des Auswärtigen Amts, Berlin.

⁸⁰ “Sitzung der deutsch-brasilianischen gemischten Kommission für wirtschaftliche Zusammenarbeit am 23./24. November 1976 in Brasilien - Zur Frage der Lieferung einer Wiederaufbereitungsanlage”, October 18, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

Finally, if the reprocessing and enrichment facilities were to be taken out of the package, Brazil might cancel the deal.

Only one day after Mondale delivered Carter's message, Carter made his second statement concerning the moratorium. On November 25, 1976, in San Diego, the President-elect referred to the German-Brazilian and French-Pakistan nuclear agreements, asking France and West Germany to retroactively and voluntarily abide by the proposed moratorium.⁸¹ The Chancellor was not amused.⁸² Schmidt angrily told the German Head of Foreign Relations and Security Bernd von Staden that West Germany in its deal with Brazil had upheld its obligations in regard to the IAEA-NPT regime. Joao Paulo dos Reis Velloso, the Brazilian Minister of Planning, pointed out that the IAEA had approved the agreement and that the Ford administration, as a member of the IAEA, had in fact approved the multi-billion dollar deal. Velloso stated: "It is a fait accompli. We signed the agreement. That is all we have to say about it."⁸³ The West German government responded reassuringly to Brazilian inquiries, pointing out that the contract would be fulfilled to the letter. Secretly though, Schmidt and his cabinet were unsure how to withstand American pressure.⁸⁴

To the distress of the Schmidt government, many Brazilian officials assumed (correctly) that if Carter decided to derail the Brazilian deal, he would focus on Germany as the weak link. Germany was dependent on U.S. firms for enrichment of uranium for its own nuclear facilities and its security depended on the 200,000 American soldiers stationed on the

⁸¹ "Fernschreiben: Nukleare Nichtverbreitungspolitik - deutsch-brasilianisches Abkommen", December 23, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

⁸² "Bonn verteidigt seine Nuklearpolitik - Das Auswärtige Amt weist Carters Kritik zurück", August 10, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

⁸³ "Brazil Bristles at Carter Remark on Nuclear Reactor," *Los Angeles Times* (November 17, 1976).

⁸⁴ "Bonn verteidigt seine Nuklearpolitik - Das Auswärtige Amt weist Carters Kritik zurück", August 10, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

FRG's territory. The Brazilian government, as a Brazilian diplomat stated, “felt that it could withstand American pressure. The whole question [about the nuclear deal] is to know at what point Germany will succumb to American pressure.”⁸⁵

On the same day as Carter's San Diego address (November 25), a British foreign office official, after a meeting with U.S. senators, reported to the Schmidt administration that U.S. Senator Ribicoff (D-CT) had said that the U.S. Senate was united behind the future President's nonproliferation policy. At the same time, a U.S. government official told the FRG's Foreign Ministry that questions concerning proliferation were high on Washington's agenda and would be pursued aggressively, especially vis-à-vis West Germany. Many senators, the official said, were “zealots of nonproliferation.”⁸⁶ This confirmed the fears of the Schmidt government.

Carter had become a wild card for Schmidt and his cabinet. At the end of November 1976, Deputy State Secretary Wolff advised Foreign Minister Genscher that he should not push too hard for Germany's agenda at the upcoming NATO foreign ministers conference in Brussels. Wolff believed that Carter already had a vision for America's leading position in the world. It could backfire if Carter got the impression that the allies were trying to steer and influence him. Despite Senators Nunn and Bartlett's reassurances, the Germans saw Carter as headstrong. German analysts doubted whether he subscribed to the same worldview as Kissinger and Ford.⁸⁷

⁸⁵ Ibid.

⁸⁶ Ibid.

⁸⁷ “Herbst-Ministerkonferenz der Nato in Brüssel”, November 15, 1976, Karton 36429, Politisches Archiv des Auswärtigen Amts, Berlin.

The German government had many questions about Carter's goals. Did the President-elect aim to preserve American domination over nuclear technology? Or was he trying to implement, as an article in the *Los Angeles Times* stated, a "coherent policy that clearly subordinated U.S. commercial interests to the goal of heading off nuclear proliferation"?⁸⁸ Carter claimed that he did not object to all of the deal: he insisted only that the uranium-enrichment and spent-fuel reprocessing equipment and technology, which could be used to make nuclear weapons, be omitted. As American representatives at the Nuclear Suppliers conference in London in November 1976 pointed out, the U.S. government had not permitted reprocessing at home for several years. They asked the Germans to examine if there were any alternatives. This seemed to indicate that Washington was sincerely concerned about proliferation.⁸⁹

For Schmidt, the situation was difficult. There were widespread misgivings in the German public toward nuclear energy. Nonetheless, the deal was worth billions of marks and if Schmidt's coalition government caved in to U.S. demands, it would provide fodder for the opposition party, the Christian Democrats.⁹⁰ Nonetheless, at the end of November 1976, Schmidt predicted that West Germany would have to give in to American demands in the next one to two years. He and his team admitted that the licenses for the delivery of the reprocessing and enrichment facilities would have to be further delayed.⁹¹

⁸⁸ "Brazil Bristles at Carter Remark on Nuclear Reactor," *Los Angeles Times* (November 17, 1976).

⁸⁹ "Sitzung der deutsch-brasilianischen gemischten Kommission für wirtschaftliche Zusammenarbeit am 23./24. November 1976 in Brasilien - Zur Frage der Lieferung einer Wiederaufbereitungsanlage", October 18, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

⁹⁰ "Getting Bonn to See the Light," *Los Angeles Times* (November 22, 1976).

⁹¹ "Wiederaufbereitungsanlage Brasilien", November 25, 1976, Karton 36430, Politisches Archiv des Auswärtigen Amts, Berlin.

Brazilian press coverage of Carter's public feud against the nuclear deal with the FRG distressed the German Foreign Ministry. The newspaper *O Estado De São Paulo* reported on December 4, 1976, that Washington was applying pressure to both Brazil and West Germany about the nuclear deal. The article reported some German officials were voicing the possibility of changing two “critical aspects” of the deal, namely giving Brazil enrichment and reprocessing facilities. Another Brazilian newspaper, *Correio braziliense*, reported on December 5 that Germany was ready to cave in to American demands. Both articles were adamant that Brazil wanted the reprocessing facilities only to secure energy independence. Therefore, the reprocessing plants had been the main driving force for Brazilian President Geisel to work with the Germans.⁹²

The German press also started to become interested. *Die Welt*, on December 9, 1976, analyzed the Brazilian deal on page one. According to the article, the Federal government, under pressure from the Washington, was hesitant to approve the export licenses, and this could lead to the cancelation of the entire deal.⁹³ One German official promptly denied the rumors about Germany caving in to U.S. demands, calling the allegations an affront.⁹⁴ Nonetheless, the Foreign Ministry had been ready to approve the licenses for months. The German firms Uhde and KEWA, which were responsible for the enrichment facilities, and

⁹² “Fernschreiben: Brasilianische Presseberichterstattung - deutsch-brasilianische Zusammenarbeit bei der friedlichen Nutzung der Kernenergie, Haltung amerikanischer Regierung hierzu”, July 12, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

⁹³ “Abwicklung des deutsch-brasilianischen Nuklearabkommens - Pressebericht über ausstehende Exportgenehmigungen”, September 12, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

⁹⁴ “Bonn verteidigt seine Nuklearpolitik - Das Auswärtige Amt weist Carters Kritik zurück”, August 10, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

Steag/Interatom, in charge of the reprocessing facility, were anxiously waiting the approval.⁹⁵

The Foreign Ministry felt the pressure from the national nuclear industry and the media.⁹⁶

The West German Foreign Ministry was carefully weighing the pros and cons of issuing the licenses. Foreign Minister Genscher stated that the agreement was legally binding. Breaking it would hurt Germany's reputation in Brazil and in the Third World, and also at home. The Foreign Office contemplated granting the license and presenting a *fait accompli* to the incoming Carter administration. Instead, however, Schmidt decided to approach the President soon after the inauguration and explain the FRG's side of the argument. The Foreign Ministry warned, correctly, that this carried the risk that Carter would dig in and tensions would escalate.⁹⁷

Bonn was worried over the potential fall out of Carter's public statements. The Ford administration, in the meantime, threatened to stop the deal through more discrete channels. Instead of challenging Bonn publicly, Ford attempted to isolate the FRG by derailing France's export deals, which also included reprocessing facilities. He also pressured the Netherlands and Great Britain to drop their involvement in the Brazil deal.

Nuclear Nonproliferation and Gaullism

On December 16, 1976, French President Valéry Giscard d'Estaing, presiding over the French board for external nuclear politics, decided that until further notice the French government would desist from issuing bilateral export licenses to Third World nations for

⁹⁵ "Aktuelle Probleme der deutschen nuklearen Exportpolitik - Resortbesprechung auf Arbeitsebene unter Vorsitz des AA am 30.12.76", December 30, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

⁹⁶ "Vorschlag für ein Gespräch des Herrn Bundesministers mit dem Herrn Bundeskanzler am 9.12.1976", December 1976, Karton 36431, Politisches Archiv des Auswärtigen Amts, Berlin.

⁹⁷ Ibid.

industrial reprocessing facilities. The FRG's Foreign Ministry assumed that France would favor Pakistan's withdrawal from their nuclear deal, involving the same highly sensitive nuclear technology as in the German-Brazilian deal. This was not only because France had started to mistrust Pakistan's government, but also because it would enable the French government to withdraw from the contract without a loss of face.⁹⁸ The decision of the French nuclear board made any future criticism from Washington irrelevant for Paris.

The German Foreign Ministry was alarmed. France, together with Britain and the United States, was one of the three western nuclear powers, and Bonn feared that the three were starting to work more closely together.⁹⁹ Evidence for this was the sudden flowering of U.S.-French cooperation in military and security issues. France spent approximately one third of its military budget on maintenance and development of its nuclear arsenal, and it needed U.S. technical assistance.¹⁰⁰ Bonn, at the beginning of December 1976, was informed that the Ford administration obliged merging France's computer industry with its own and thereby giving Paris access to technology that would help its nuclear industry develop the newest nuclear weapons. Giscard tried to present these closer ties with Washington as a bilateral cooperation between equals, but Paris needed American assistance much more than *vice versa*.¹⁰¹ For Washington, France's integration had many advantages.¹⁰² It bound France more closely into the Western alliance and gave Washington leverage over France's nuclear

⁹⁸ "Fernschreiben: Nukleare Exportpolitik Frankreichs - Entscheidung vom 16.12. des Rats für Auswärtige Nuklearpolitik", December 17, 1976, 12, B 102, 1274704, Bundesarchiv, Koblenz.

⁹⁹ Ibid. Most uranium reserves in the non-Communist world were in the United States and Canada.

¹⁰⁰ "Fernschreiben: Zusammenarbeit der westlichen Kernkraftmächte", December 1, 1976, Karton 36442, Politisches Archiv des Auswärtigen Amtes, Berlin.

¹⁰¹ "Fernschreiben: Engere Zusammenarbeit der westlichen Kernwaffenmächte", 01 1976, Karton 36442, Politisches Archiv des Auswärtigen Amtes, Berlin.

¹⁰² "Memo: Engere Zusammenarbeit der westlichen Kernwaffenmächte", 12 1976, Karton 36431, Politisches Archiv des Auswärtigen Amtes, Berlin.

industry, as witnessed by the abrogation of its nuclear deals with South Korea and Pakistan.¹⁰³

The West German government suspected that the increased coziness between Ford and Giscard was a way to pressure Germany into abandoning its deal with Brazil.¹⁰⁴ While the Franco-American entente triggered German fears of isolation, Bonn was reassured by its knowledge that keeping the FRG closely tied to the Western Alliance was one of the cornerstones of United States Cold War policy.

The Netherlands– Economic and Domestic Troubles

Washington's disapproval and France's expected withdrawal from its deal with Pakistan were not the only problems facing the German-Brazilian nuclear deal. Max van der Stoel, the Dutch Minister of Foreign Affairs (1973-1977), informed the Schmidt government on December 19, 1976 that the Dutch cabinet was threatening to veto the planned extension of the Almelo uranium enrichment plant in eastern Netherlands unless Brazil signed the NPT. Dutch opposition to the deal with Brazil had been fueled by the Ford administration and by widespread fears of nuclear power in the Dutch public.¹⁰⁵ This was problematic since the German-Brazilian deal was dependent on Urenco to deliver uranium for the Brazilian nuclear reactors until the enrichment and reprocessing facilities were up and running. Likewise, the deal ensured that Brazil would export uranium to the Urenco and Capenhurst (in Britain)

¹⁰³ “Memo: Engere Zusammenarbeit der westlichen Kernwaffenmächte”, 12 1976, Karton 36431, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁰⁴ “Fernschreiben: Zusammenarbeit der westlichen Kernkraftmächte”, July 1, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁰⁵ “Ausbau der Zentrifugenanlage Almelo; niederländische Beteiligung an der ‘Troika’”, December 19, 1976, Karton 36431, Politisches Archiv des Auswärtigen Amts, Berlin.

enrichment facilities, which would free Germany, England and the Netherlands from their dependence on U.S. companies for their enriched uranium. The Brazil shipment, worth two billion dollars, was to date the only big export commission of Urenco. However, in order for the Urenco facility to have the capacity to deliver uranium to Brazil, it needed to be expanded. By obstructing this planned expansion of Urenco, Ford was threatening to derail the entire nuclear deal.

The Ford administration found an easy target in the Dutch government. Nonproliferation had a very high priority in the Netherlands' foreign policy. The NPT was one of the cornerstones of their foreign policy. Historian Matthias Küntzel wrote that Amsterdam rejected the idea of individual European nations being armed with nuclear weapons and instead relied entirely on American nuclear deterrence because “its government's agreement to a worldwide uniform IAEA control system was the sacrosanct basis of the [Netherlands'] NPT diplomacy.”¹⁰⁶

Additionally, Amsterdam's share in Urenco was state owned. This meant that Washington could pressure the Dutch government to obstruct the enlargement of the facility. Urenco was owned in three equal parts by the governments of the Netherlands and Britain and two private German firms. In 1974, all three partners had approved enlarging the capacity of Urenco to 2000 tons a year (from this, 60% would be for consumption by the German energy industry) by 1982. The accrued cost of approximately two billion marks was to be shared equally by the three partners. Based on this commitment, the German-Dutch facility in Almelo as well as the facility in Capenhurst were to be expanded. While state-

¹⁰⁶ Matthias. Küntzel, *Bonn & the Bomb: German Politics and the Nuclear Option* (London; Boulder, Colo.: Pluto Press, 1995), 89.

owned British Nuclear Fuel Ltd. and the privately owned German part of Urenco had secured financial backing for the planned Urenco expansion, the Netherlands had not.¹⁰⁷ Ultra-Centrifuge Nederland, the Dutch part of Urenco, had initially been only 55% state owned. The Dutch government had planned to give full financing of the planned investment to the private firms. Those firms (for unknown reasons) had given up their share in Urenco and made Dutch financing uncertain.¹⁰⁸

The sudden prospect of a refusal from the Dutch government to grant the license for extending the facility complicated matters. Expansion of the Almelo facility, and consequently the commitment to deliver enrichment uranium to Brazil, were suddenly on shaky legs. Further complicating matters was the fact that Brazil had until January 4, 1977 to agree to the shipment by Urenco, which was contingent on export credits from the Netherlands and Great Britain to Brazil.¹⁰⁹ Van der Stoel told the Schmidt government that many in Amsterdam believed that Brazil, under pressure from Britain, the United States, the Netherlands, and possibly West Germany, would eventually cave in and sign the NPT.¹¹⁰

The Schmidt government was not convinced. Bonn took soundings at a meeting of the “Troika,” the joint committee consisting of Great Britain, West Germany and the Netherlands in charge of the Almelo facility, on December 20, 1976.¹¹¹ The FRG was informed that the Dutch cabinet had decided that it would continue the expansion of Almelo

¹⁰⁷ Ibid.

¹⁰⁸ “Ausbau der Zentrifugenanlage Almelo; niederländische Beteiligung an der ‘Troika’”, December 19, 1976, Karton 36431, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁰⁹ “Troika (Deutsch-britisch-niederländische Zusammenarbeit zur Urananreicherung nach dem Gasultrazentrifugenverfahren)”, January 18, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

¹¹⁰ “Ausbau der Zentrifugenanlage Almelo; niederländische Beteiligung an der ‘Troika’”, December 19, 1976, Karton 36431, Politisches Archiv des Auswärtigen Amts, Berlin.

¹¹¹ “Memo: Engere Zusammenarbeit der westlichen Kernwaffenmächte”, 12 1976, Karton 36431, Politisches Archiv des Auswärtigen Amts, Berlin.

under the condition that the reprocessed uranium for the Brazilian nuclear plants would only be delivered if Brazil signed the NPT. The Dutch cabinet also wanted to develop stricter guidelines for exporting enriched uranium.¹¹² Complicating matters was the troubled political atmosphere in the Netherlands, where the governing coalition was very fragile.¹¹³ The Dutch Premier, Joop den Uyl, was not sure how far he could help the Schmidt government, especially with an election looming. He was unsure he could quench resistance to the Brazil deal.¹¹⁴

British Reservations Toward the Deal

At the December meeting of the Troika, the British delegate sought out his German counterpart to voice his government's disapproval of transferring sensitive nuclear technology to Brazil. He pointed out that, given France's renunciation of the Pakistan deal, Dutch disapproval, and Carter's mindset, Germany was isolated. Bonn had already assumed that London might move closer to the American position.¹¹⁵ In addition, during the Troika meeting, the British delegates agreed with Amsterdam about tightening those parts of the deal that dealt with the transfer of sensitive technology to Brazil.¹¹⁶ The discreet manipulations of

¹¹² "Betr: Sitzung des Regierungsausschusses der Troika (Joint Committee) am 20 December 1976 in München", December 1976, Karton 36431, Politisches Archiv des Auswärtigen Amts, Berlin.

¹¹³ Hans Daalder, "Changing Procedures and Changing Strategies in Dutch Coalition Building," *Legislative Studies Quarterly* 11, no. 4 (November 1, 1986): 507–31.

¹¹⁴ "Troika (deutsch-britisch-niederländische Zusammenarbeit zur Urananreicherung nach dem Gasultrazentrifugenverfahren)", January 18, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

¹¹⁵ "Fernschreiben: Friedliche Nutzung der Kernenergie - Zwischenaufenthalt während einer Informationsreise der Studiengruppe des US-Senats in London vom 20. bis 23. November", November 26, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

¹¹⁶ "Betr: Sitzung des Regierungsausschusses der Troika (Joint Committee) am 20 December 1976 in München", December 1976, Karton 36431, Politisches Archiv des Auswärtigen Amts, Berlin.

the Ford administration and the ongoing criticism of the deal by the American President-elect were viewed by Bonn as the major reasons for London's growing doubts.¹¹⁷

The British and Dutch members of the Troika decided to send a *démarche* to the Brazilian government insisting that it sign the NPT and cede its rights for reprocessing and enrichment facilities. The German delegation refused to sign the *démarche*. Instead, in order to buy time, it insisted on another meeting, this time held by the foreign ministers, set for January 21, 1977 in London.¹¹⁸

With Britain and the Netherlands falling in line with Washington's proposed retroactive moratorium and France pulling out of its Pakistan deal, pressure was mounting on Schmidt's administration to follow suit. By the end of 1976, officials in the Foreign Ministry believed the new President's stance toward nonproliferation enjoyed the wide support among the American public, congress, press, and academia. The Foreign Ministry was apprehensive that relations with Washington would suffer if Bonn stuck to the Brazilian agreement, but at the same time it was worried about the impact of canceling the deal. At the end of 1976, before Carter moved into the White House, the momentum seemed to be on his side.¹¹⁹

January, 1977 – A Change in Momentum

The Minister of State at the British Foreign Office, David Owen, sent a confidential memorandum on January 12, 1977 to the German Foreign Ministry concerning his talks with

¹¹⁷ Ibid.

¹¹⁸ Ibid.

¹¹⁹ “Fernschreiben: Nukleare Nichtverbreitungspolitik - deutsch-brasilianisches Abkommen”, December 23, 1976, B 102, 1274704, Bundesarchiv, Koblenz.

the Dutch State Secretary Kooyman.¹²⁰ Kooyman had proposed three options of how to proceed with the German-Brazilian deal: First, revise the deal and eliminate the export of sensitive technology; second, appeal to Brazil to accept more stringent controls; third, approve the whole package with Brazil, but stipulate that from now on deliveries from Urenco would hinge on certain conditions, specifically that Brazil would have to have signed the NPT or accept full international control of the enrichment and reprocessing facilities. Owen reported that Great Britain could accept the third solution and urged the German Foreign Ministry to approve the export licenses as soon as possible so as not to lose the important contract with Brazil.¹²¹

Armed with Owen's confidential information, the German Foreign Ministry was not impressed when on January 16, 1977, Dutch Foreign Minister Van der Stoep, in talks with Foreign Minister Hans-Dietrich Genscher, proposed that West Germany should not export any sensitive technology and instead stipulate that Brazil had to send its used nuclear fuel to the United States for reprocessing. This did not comply with what Genscher had heard from the American side. The Carter administration planned to impose an unlimited national moratorium on nuclear reprocessing and instead guarantee to supply Brazil with nuclear fuel, if it agreed to not import sensitive technology from West Germany.¹²²

¹²⁰ "Troika (deutsch-britisch-niederländische Zusammenarbeit zur Urananreicherung nach dem Gasultrazentrifugenverfahren)", January 18, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

¹²¹ "Niederländische Auflage für weitere Zusammenarbeit in der Troika", January 18, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

¹²² "Troika (deutsch-britisch-niederländische Zusammenarbeit zur Urananreicherung nach dem Gasultrazentrifugenverfahren)", January 18, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

The German Foreign Minister understood that the Dutch were worried about the transfer of sensitive nuclear technology, but he considered this separate from the Dutch decision about whether to enlarge Almelo and approve Urenco deliveries to Brazil. If approval was not granted soon, the Schmidt government would have to build its own reprocessing facility on German ground and rethink the importance of the Troika.¹²³ Dutch efforts to force President Ernesto Geisel's administration to sign the NPT were seen by the Schmidt government as outside the framework of the Almelo contract. Genscher believed that all Nuclear Supplier nations would have to be involved in the discussions and it was unnecessary to create special guidelines for the Troika. The FRG assumed that the next suppliers' conference in March 1977 would set general guidelines, favorable to the German-Brazilian deal, with which all partners would have to comply.¹²⁴

On the British side, the British Minister of State, David Owen, had let the Schmidt government know that, though his government agreed with the Netherlands that the export of sensitive technology should be left out of the package, London was reluctant to let the whole deal burst. Due to the financial importance of the enriched uranium deliveries to Brazil for Urenco, Owen implied that the security measures of the trilateral control commission (FRG, Brazil, IAEA) in charge of the Brazilian reprocessing facilities would satisfy the nonproliferation concerns of the British government.¹²⁵

¹²³ “Vermerk: Deutsch-niederländische Gespräche über den weiteren Aufbau von Almelo und die zukünftige nukleare Zusammenarbeit am 13.01.1977”, January 13, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

¹²⁴ “Troika (deutsch-britisch-niederländische Zusammenarbeit zur Urananreicherung nach dem Gasultrazentrifugenverfahren)”, January 18, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

¹²⁵ Ibid.

After Owen sent his confidential January 12 memorandum to the German Foreign Ministry, the Schmidt government felt confident enough, despite American and Dutch objections, to grant the controversial export licenses for the enrichment and reprocessing facilities to Brazil, knowing full well that this would lead to controversy with the incoming Carter administration. Talking on the phone on January 13, 1977, Schmidt explained to President-elect Carter his wish to keep any disputes concerning nuclear policies secret.¹²⁶ In order to clear up any misunderstandings, Bernd von Staden, the German Ambassador to the United States would arrive in Washington the next day with a *démarche* that outlined the official position of the FRG towards the Brazilian deal.

On January 14, 1977, a day before von Staden met the future Secretary of State and future Vice-President, the Schmidt government contacted the Brazilian government promising to honor the contract it had signed on June 27, 1975 and grant the export licenses for the reprocessing and enrichment facilities at the end of February. The incoming U.S. administration would not be informed about Bonn's decision to grant the export licenses until after Carter's inauguration.¹²⁷

Bernd von Staden's Visit to Washington

On January 15, Ambassador von Staden informed the future Vice President about Schmidt's decision to send Brazil blueprints of the reprocessing facility. These blueprints would enable Brasilia's engineers to study the technical data of the facilities and get

¹²⁶ "Telefongespräch zwischen Bundeskanzler Schmidt und Präsident Carter", January 13, 1977, B 136 17555, Bundesarchiv, Koblenz.

¹²⁷ "Drahterlass: Zweiseitiges Abkommen über Zusammenarbeit auf dem Gebiet der friedlichen Nutzung der Kernenergie", January 14, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

acquainted with the technology before the actual components for the facility arrived. Mondale expressed concern. The future Vice President stressed Carter's opposition to the export of sensitive nuclear technology and referred to the message the President-elect had sent Schmidt in November 1976.¹²⁸ Von Staden had come prepared to respond to that message.

On January 7, 1977 the Schmidt administration had prepared a *démarche* outlining the German interpretation of the Brazilian deal. The *démarche* also stated that West Germany would refrain from exporting sensitive nuclear technology in the future, and it asked that the Americans avoid public statements about the planned moratorium before Carter's inauguration. The *démarche* did not mention that Schmidt had decided to issue the export licenses.¹²⁹

The German ambassador told Mondale that the Chancellor was worried about the public perception of strain in U.S.-German relations. He reminded Mondale that the Schmidt government had consulted intensively with the Ford administration which had agreed with the IAEA that the trilateral commission would be sufficient to guarantee security of the Brazilian reactors. Therefore, the German Federal government would send “software” and “blueprints” of the sensitive nuclear technology to the Brazilians in February 1977, von Staden informed Mondale.¹³⁰ Mondale stated that this would enable Brazil to build the

¹²⁸ “Fernschreiben: Mein Gespräch mit dem künftigen amerikanischen Vizepräsidenten Mondale am 15.01.1977 zur Nuklearexportpolitik”, January 15, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

¹²⁹ “Aktuelle Fragen der deutschen Exportpolitik - Brasilien”, November 1, 1977, B 102, 1274704, Bundesarchiv, Koblenz.

¹³⁰ “Fernschreiben: Mein Gespräch mit dem künftigen amerikanischen Vizepräsidenten Mondale am 15.01.1977 zur Nuklearexportpolitik”, January 15, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

contested facilities, even without West German help. Von Staden denied this. He reassured Mondale that Brazilian technicians and engineers had to acquaint themselves with the technology which in turn would not be delivered for another three years. Even if the Brazilians decided to renege on the deal and built the facilities with help from another supplier, Mondale protested they would still use the system devised by German engineers, which, the future Vice-President claimed, made it a German responsibility.¹³¹

The ambassador assured Mondale that Schmidt was eager to consult with Carter about the details of the Brazilian reprocessing facilities. He even mentioned the possibility of including other nations, presumably the United States, in the oversight of the contested facilities.¹³² Mondale agreed to read the *démarche* and pass it on to the President-elect, but he could not guarantee that Carter would not mention the issue in his inaugural address on January 20, 1977.¹³³

The same day, von Staden also met with Secretary of State-designate Cyrus Vance and Joseph Nye, who would become a key state department advisor on proliferation. Vance asked why the German government was proceeding in such haste with the technology transfer, adding that this would make the situation even more difficult. Von Staden explained that the West German government had contractual obligations but would not start building the facilities for years. He asked if the multilateral oversight of the contested facilities would not be adequate, to which Vance answered no.¹³⁴ Vance informed the ambassador that the

¹³¹ “Vermerk über Hausbesprechung zu Nuklearexport-Politik am 11. Januar 1977 um 15:30 h”, January 11, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

¹³² “Fernschreiben: Mein Gespräch mit dem künftigen amerikanischen Vizepräsidenten Mondale am 15.01.1977 zur Nuklearexportpolitik”, January 15, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

¹³³ Ibid.

¹³⁴ Ibid.

United States government had unofficially approached the Brazilian government offering to supply a “permanent fuel supply” for its nuclear reactors if it agreed to an “indefinite deferral” of the promised reprocessing enrichment facilities. In other words, the Americans declared that Bonn should not issue the licenses without modifying the contract. American firms would deliver the uranium that Brazil needed for the German-built nuclear plants. From the German point of view, this had many disadvantages. The United States had been an unreliable uranium deliverer in the past and the deal was aimed at lessening the FRG's and Brazil's dependence on American uranium. Disgusted, Schmidt, who had asked Carter to keep quiet on the issue, would later publicly compare Carter's international nuclear regime idea with “Disney World”.¹³⁵

Both Vance and Nye were concerned that sending the blueprints to the Brazilians would enable them to build the contested facilities.¹³⁶ Von Staden reassured them that Kraftwerkunion (KWU) would not start building the pilot facility for three years. Vance's apprehension, that sending the blueprints would enable Brazil to build the facilities on its own, was seen by Bonn as baseless. The engineering difficulties were so immense that Brazil, with only the blueprints, would be unable to build the facilities.¹³⁷ There would be adequate time to create a new set of guidelines for multinationally observing exported sensitive nuclear technology.¹³⁸

¹³⁵ Klaus Wiegrefe, *Das Zerwürfnis : Helmut Schmidt, Jimmy Carter und die Krise der deutsch-amerikanischen Beziehungen* (Berlin: Propyläen, 2005), 101.

¹³⁶ “Mein Gespräch mit dem künftigen amerikanischen Aussenminister Vance zur Nuklearexportpolitik”, January 15, 1977, Karton 36430, Politisches Archiv des Auswärtigen Amtes, Berlin.

¹³⁷ “Aktuelle Fragen der nuklearen Exportpolitik - Gesprächsmappe für Mondale-Besuch”, January 20, 1977, B 102, 1274704, Bundesarchiv, Koblenz.

¹³⁸ “Mein Gespräch mit dem künftigen amerikanischen Aussenminister Vance zur Nuklearexportpolitik”, January 15, 1977, Karton 36430, Politisches Archiv des Auswärtigen Amtes, Berlin.

Building up steam, Von Staden reminded Vance about “project independence,” an initiative that had been announced by President Richard Nixon on November 7, 1973, in reaction to the OPEC oil embargo. The goal was for the United States to achieve energy independence by 1980. Was it not understandable that Brazil also wanted energy independence? Vance assured the German that the Carter administration would present its new energy program to congress in March or April.¹³⁹

Von Staden was not satisfied. He pushed Vance further, exclaiming that the nuclear discussions reminded him of the discourse of eight years earlier, when in 1969 West Germany had signed the nonproliferation treaty. The treaty stated that the export of nuclear technology could not be banned if it was intended for research, development or peaceful uses. American fears that the transfer of sensitive technology could be used to develop nuclear weapons was not reason enough to cancel the transfer. Vance seemed to have no answer to the German arguments and the talks ended with the understanding that Washington disapproved of West Germany granting the export-licenses to Brazil, but with both sides willing to meet again in February to continue the discussion.¹⁴⁰

In the meantime, representatives of the German embassy in Brazil contacted that country's General Secretary of Foreign Relations, Ramiro Guerreiro and Foreign Minister da Silveira on January 18, 1977. Guerreiro stated that his government was waiting for Carter to become President before seriously engaging in the discussion. For him it seemed

¹³⁹ Ibid.

¹⁴⁰ Ibid.

“unbelievable” that Carter would “deliberately” jeopardize the good relations Brazil had with the United States.¹⁴¹ This view would change over the next months.

By the time of Carter's inauguration, two solutions for handling export of sensitive technology started to crystalize. The first solution was to initiate a worldwide moratorium on reprocessing, including multinationally run facilities. The second solution, favored by the FRG, was creating multinationally run reprocessing facilities. This left the door open to future exports and complied with the existing international guidelines concerning proliferation. The multinational approach had been pushed into the background by Carter's demands for an indefinite moratorium.¹⁴²

While President-elect Carter was pushing for an indefinite moratorium, Ford had favored a three year moratorium. Assuming that Ford's three year moratorium approach was still a viable option, it made sense to send the blue prints to Brazil. Three years was the the time span it would take before construction on the pilot facility would begin, leaving enough time for further negotiations. Sending the blueprints and approving the export licenses, taking their contractual obligations into account, was therefore not seen as a hasty and dangerous decision by Bonn. Rather, Bonn perceived Carter's indefinite moratorium idea and his public criticism of the FRG's export deal with Brazil as a crass and hasty deviation from the policies of the Ford administration. Carter's pre-presidential actions put strain on the Atlantic relationship and failed to convey a sense of stability and continuity that the Federal Republic craved from the United States.

¹⁴¹ “Fernschreiben: Zweiseitiges Abkommen über Zusammenarbeit auf dem Gebiet der friedlichen Nutzung der Kernenergie”, January 19, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁴² “Aktuelle Fragen der nuklearen Exportpolitik - Gesprächsmappe für Mondale-Besuch”, January 20, 1977, B 102, 1274704, Bundesarchiv, Koblenz.

Carter's First Months in Office

The new President's ambitious foreign policy program was clear from the start. As President-elect, Carter commissioned Presidential Review Memorandas (PRMS) for topics ranging from Panama, SALT, and the Middle East, which he planned to take up in the first days and weeks after becoming President. He also commissioned a PRM on nuclear proliferation. He was acutely aware of the German-Brazilian nuclear deal.¹⁴³

On January 21, 1977 the American ambassador to France, Arthur Hartman, talked in confidence to the German Secretary of State at the Foreign Office Peter Hermes. Hartman told Hermes that the Carter administration was upset. Washington believed that Bonn was about to do something irrevocable. The Carter administration assumed that the FRG was issuing the export licenses with such haste to make sure that the new administration was unable to preempt the deal.¹⁴⁴

The same day, the German Foreign Ministry assessed the implications of the Brazilian deal for West German-American relations. Carter's resistance toward the export deal had major political and economic implications for both the FRG and the United States. Politically, Washington represented, since the end of World War II, Bonn's strongest ally against the expansionist tendencies of the Soviet Union in Western Europe. The deal, if approved despite Carter's objections, would embarrass the new President, West Germany's *de facto* protector. Economically, a successful completion of the nuclear deal simultaneously threatened America's economic dominance in the Western Hemisphere and exposed the

¹⁴³ Zbigniew Brzezinski, *Power and Principle : Memoirs of the National Security Adviser, 1977-1981* (New York: Farrar, Straus, Giroux, 1983), 52.

¹⁴⁴ "Fernschreiben: Besuch Von Vizepräsident Mondale", January 21, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

disadvantages of this economic dominance for Western Europe. American firms held a near monopoly over the uranium export trade in the Western Hemisphere, and the German nuclear sector imported most of its uranium from American firms. Reprocessing reduced the need for uranium imports from the United States and thereby cut into the profits of the American nuclear sector. It was therefore not surprising that when Carter told Bonn that his policies were not inspired by economic motives, the Schmidt administration remained skeptical. Furthermore, the solvency of Germany's nuclear industry depended on the export of nuclear technology, including reprocessing technology. As a result, the German Foreign Ministry assumed that approval of the export licenses, with Carter's reservations and the heavy losses expected for the American nuclear industry in mind, could have economic repercussions for West Germany. The FRG expected that in retaliation for approving the export licenses, Washington might delay, or drive up, the prices of its uranium exports.¹⁴⁵

However, if the FRG did publicly break its contract as a result of pressures from Washington, it could change America's image in the German public, whose enchantment with the United States, even thirty years after the Second World War, was still strong. In a worst case scenario, if, as a result of Washington's intervention, West Germany became economically unstable, a disaffected Bonn could become susceptible to advances from the Soviet Union.¹⁴⁶

Both Washington and Bonn had to also consider their relationship with Brazil. There was no legal reason to cancel the German-Brazilian deal. Furthermore, Carter's predecessor

¹⁴⁵ "Fernschreiben: Besuch von Vizepräsident Mondale", January 21, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁴⁶ Ibid.

had stipulated extensive conditions and safeguards for the reprocessing facilities, which Brazil had accepted. If West Germany did cancel, it could be interpreted as obeisance to continued United States economic preeminence in the nuclear sector.

As a result, Bonn assumed that canceling the deal could hurt its international position as an independent nation. The Schmidt administration feared that Third World nations, already wary of American economic and political predominance, might perceive Bonn as a “lackey” of the United States.¹⁴⁷ For example, the spokesman for the German Brazilian Board of Trade and Industry in São Paulo, Wolfgang Sauer, informed Bonn that Brazil was in what he saw as a “struggle to lift Washington's chains, be it economically, politically or militarily. In its struggle, it needed new partners. Brazil viewed the FRG as such a new partner.”¹⁴⁸ Breaking the contract would threaten this seed of cooperation and trust.¹⁴⁹

Armed with the Foreign Ministry assessment from January 21, Schmidt met with his ministers to discuss the upcoming consultations with Mondale. Schmidt conceded that he would have to agree with Carter that the NPT was inadequate and needed to be amended. Despite the Chancellor's confession, Bonn was searching for a more subtle approach than Carter's heavy hand. Schmidt and his cabinet viewed the delay in uranium exports from American suppliers to the German nuclear industry as a deliberate means to pressure the FRG to break its deal with Brazil. Carter's hasty and insensitive approach had highlighted for Bonn the negative aspects of its relationship to the United States. Taking its precarious economic situation into account, Bonn was open to amending the NPT, but only under certain

¹⁴⁷ Ibid.

¹⁴⁸ Volkswagen, for example had invested heavily in the Brazilian market.

¹⁴⁹ “Brief von Wolfgang Sauer an Bundeskanzler”, April 14, 1977, B 136 12542, Bundesarchiv, Koblenz.

conditions. First, proliferation had to be regulated through internationally binding treaties, not through retractable/non-binding guidelines created by the Suppliers Club. These treaties, Bonn argued, would have to be independent and free from interference of the “ever changing personalities residing in Washington.” Schmidt was aware that the German-Brazilian deal had turned into a test case, which other Third World nations, who were hoping to score similar deals, were watching closely.¹⁵⁰

On the other side of the Atlantic, Vance mentioned in his evening memorandum for the President on January 24, 1977 that Mondale would meet with Schmidt the next day. Carter and his team planned to “talk with the FRG by early to mid-February on concrete alternatives to the transfer of sensitive technology.” Vance believed that the vice President's upcoming visit to Europe would have a major impact on relations with Bonn. He further predicted that the talks with Schmidt could be problematic.¹⁵¹

Mondale's Visit

Carter wrote in his diary on January 23, 1977, that Washington had instigated Mondale's visit to Western Europe and Japan to show friendship. Reflecting on the visit, Carter believed that “a sound basis of consultations and mutual trust among the developed democracies” had been established which he believed was the best way to deal with any problems the Western Alliance might face. Carter seemed satisfied with Mondale's visit.¹⁵²

This positive view of Mondale's visit is contradicted by German documents.

¹⁵⁰ “Vermerk über das Ministergespräch am 7. Februar 1977”, July 2, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁵¹ “Memorandum for the President from Cyrus Vance”, January 24, 1977, NLC-7-17-7-2

¹⁵² Brzezinski, *Power and Principle: Memoirs of the National Security Adviser, 1977-1981*, 131; Carter, *White House Diary*, 12–13.

The German Foreign Ministry had also high hopes for Mondale's visit. It evaluated Mondale as an intellectual liberal, who, although against the Brazilian deal, would be open to "clear [German] arguments."¹⁵³ Mondale himself was concerned about Schmidt's perceived hard line toward the United States. Schmidt had publicly favored Gerald Ford during the presidential campaign because, as he put it, "it would take a new team until Easter to get organized." Mondale had gained the impression, from press releases and conversations with various officials, that Schmidt was looking for confrontation with the new administration, be it about economic stimulus (Carter's locomotive theory), the Middle East, or nonproliferation. To make matters worse, Schmidt had criticized Carter's inaugural address as "lacking in clear direction." As for Mondale's visit, Schmidt managed to make it very awkward. Indeed, it was a disaster.¹⁵⁴

Before Mondale's arrival, the Chancellor stated to the press, in a veiled reference to the Carter administration's locomotive theory, that "American economists who argue that the solution to our [Western] economic problems is reflation should keep their traps shut [sollten ihre Klappe halten]."¹⁵⁵ Ominously, one of the main reasons for Mondale's visit was to prod Schmidt into reflating West-Germany's economy. Therefore, Schmidt viewed Mondale's visit as a waste of time and was appalled by the Keynesian policy of deficit spending that the new administration proposed.¹⁵⁶

¹⁵³ "Fernschreiben: Besuch des künftigen Vizepräsidenten Mondale in Bonn", October 1, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁵⁴ "Zum Besuch des US-Vizepräsidenten Mondale in Bonn", January 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin. The locomotive theory asserted that larger economies, such as the United States and the FRG, should initiate policies and initiatives that would transform them into haul engines that would pull the rest of the world economies out of the recession.

¹⁵⁵ Bernard Weinraub, "Mondale Asks Bonn to Spur Its Economy," *The New York Times* (January 26, 1977).

¹⁵⁶ Schmidt, *Men and Powers : a Political Retrospective*, 187.

High on Mondale's agenda for the planned visit to Bonn loomed the nonproliferation problem, especially the granting of the export licenses to Brazil. On January 24, 1977, Mondale informed the European Community Commission about the Carter administration's planned nuclear export policies. The Vice President emphasized the importance of strict export controls and demanded a moratorium on the export of sensitive nuclear technology. Since the United States labeled reprocessing as sensitive this meant that the nuclear states would need more uranium imports in order to run their power plants at the current level. To satisfy the demands for uranium that would be caused by the moratorium, the Carter administration planned to develop a new policy by April 1977. The FRG's Foreign Ministry speculated that a moratorium on the export of sensitive technology would only enhance the United States' dominance in the enriched uranium market.¹⁵⁷

On January 25, the Vice President arrived in the FRG, already irritated by Schmidt's public negative statements. The meeting, needless to say, was difficult. Although Schmidt had decided to grant the export licenses to Brazil, he had not decided when to do so. He suggested to the vice President that the Carter administration should apply pressure on the Geisel Administration to give up Brasilia's contractual rights for the reprocessing facilities, although he believed this was very unlikely. The German Foreign Ministry did believe, however, that Washington could persuade Brasilia to agree to further meetings before expecting Bonn to issue the export licenses. That, Schmidt reasoned, would catch multiple flies with one swipe. It would ease the pressure on Germany to issue the export licenses, and it would give Washington the impression that Bonn was trying to comply with its wishes.

¹⁵⁷ "Gespräch mit Vizepräsident Mondale - Mondales Ausführungen zur Nuklear-Exportpolitik von der EG-Kommission am 24. Januar 1977", January 25, 1977, B 136 17044, Bundesarchiv, Koblenz.

Yet, fundamentally, Schmidt was fooling the Carter administration. The Americans were not aware that the Germans had already decided to grant the licenses.

During the meeting, Schmidt openly expressed his irritation: "The one thing I want to make clear is that the Federal Republic of Germany has fulfilled all its obligations, whether under the nonproliferation treaty or other international agreements."¹⁵⁸ In response, Mondale told Schmidt that for the new administration the restriction of weapons grade materials, not just nuclear weapons, was important. Therefore, the export of sensitive nuclear technology had to be stopped and the export of reprocessed uranium had to undergo a more stringent vetting process.¹⁵⁹ Schmidt claimed that during the meeting Mondale not only recommended "an inflationary monetary and budget policy to us" but that "[Mondale] categorically demanded a reduction in our private sector exports of nuclear reactors, hinting that if the Federal Republic of Germany refused to go along, there would be no further deliveries of enriched uranium for West Germany's own nuclear power plants."¹⁶⁰ Further consultations were to be held in the middle of February.¹⁶¹

Brasilia in the meantime was outraged. Incredulously, the Brazilians they watched Vice President Mondale, during his first foreign mission, publicly discussing Brasilia's German nuclear deal with West German officials, while the Brazilian government had not even been officially contacted. This insensitive move by the Carter administration startled even the Brazilian opposition party, the Brazilian Democratic Movement (MDB), which was

¹⁵⁸ Ibid.

¹⁵⁹ "Message from the Vice President to Dr. Brzezinski - My First Day of Meetings in Europe", January 1977, Jimmy Carter Library, Atlanta, NLC-7-7-1-3-3.

¹⁶⁰ Schmidt, *Men and Powers: a Political Retrospective*, 189.

¹⁶¹ "Zum Besuch des US-Vizepräsidenten Mondale in Bonn", January 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

normally critical of the ruling autocratic military regime. Brazilian Senator Paulo Brossard, a member of MDB, stated that “it is not possible to accept it [Carter's call for a cancellation of the nuclear deal] without protesting the interference in matters that are the exclusively competence of my country and its own interests.”¹⁶²

Peter Hermes' Visit - February 10-12, 1977

The consultations between Mondale and Schmidt had changed nothing. American resistance to the Brazilian deal had hardened. Washington demanded high-level talks with both Brasilia and Bonn.¹⁶³ German analysts assumed that if the FRG followed through with its nuclear deal Washington would be able to make life difficult. They worried that the old question of how much Bonn should contribute to the costs of stationing American troops in West Germany, as a sort of revenge or lever, could resurface. The analysts also expected further delays in enriched uranium deliveries from American firms. They furthermore assumed that Washington could muddy the waters for Bonn in the Nuclear Suppliers Club and worried that the Club, under guidance from the United States, would restrict or ban all exports of sensitive technology to nations that had not signed the NPT. In that case, the Brazilian deal would become a bone of contention.¹⁶⁴

The German Chancellor, who sent State Secretary Peter Hermes to Washington for consultations, had three goals. First he instructed Hermes to avoid committing to anything

¹⁶² Allen L. Hammond, “Brazil’s Nuclear Program: Carter’s Nonproliferation Policy Backfires,” *Science* 195, no. 4279, New Series (February 18, 1977): 657–659.

¹⁶³ “Fernschreiben: Deutsch-amerikanische Konsultationen über Kernenergie und Nichtverbreitung am 10.-11. Februar 1977”, 11.02 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁶⁴ “Fernschreiben: Deutsch-brasilianisches Abkommen”, February 16, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

that could endanger the FRG's ability to export nuclear technology in the future. Second Hermes should stress that the FRG had abstained from possessing nuclear weapons, had signed the NPT, was ready to agree to international steps hindering proliferation and had no projects dealing with sensitive technology currently on the books. Third in order to counter further consternation in Brasilia, Schmidt instructed Hermes to insist that press releases should clearly state that the consultations were about the general nature of nonproliferation policies and not specifically about the contested Brazilian deal.¹⁶⁵

From February 10th to 12th, German and American officials met confidentially to discuss the Brazilian agreement. Warren Christopher, the Deputy Secretary of State-designate, and Peter Hermes led the discussions. Carter had instructed Christopher to "urge West Germany to defer transfer of the enrichment plant and reprocessing facility at least until arrangements might be negotiated." Hermes, as instructed by the Schmidt administration, balked at the suggestion but conceded that Bonn was "willing to forgo future exports of sensitive technology to other countries."¹⁶⁶ Christopher viewed West Germany's determination to go along with the deal as a setback to Carter's foreign policy, which had "placed avoidance of nuclear proliferation at its center."¹⁶⁷

Christopher asked if Bonn had issued the licenses yet. He explained that Carter viewed the issuing of export licenses to Brazil as the metaphorical snowball that could start a global avalanche of proliferation. Christopher confessed that Washington feared Brazil would abuse the export of sensitive technology to build nuclear weapons. He reassured a

¹⁶⁵ "Vermerk über das Ministergespräch am 7. Februar 1977", July 2, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁶⁶ "Fernschreiben: Deutsch-brasilianisches Abkommen", February 16, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁶⁷ David Bender, "Bonn Stands By Sale of Atomic Equipment," *The New York Times* (February 12, 1977).

skeptical Bonn that Carter did not expect the FRG to default on its contractual obligation and that Washington was working on policies that would create new forms of international guarantees for fuel supplies. Those policies would make the need for other nations to acquire a full fuel-cycle unnecessary and would not hurt the competitive environment between delivering and consumer nations. Lastly, he announced that the United States, as an alternative to the reprocessing facilities, would guarantee a permanent fuel supply for Brazil.¹⁶⁸

Christopher acknowledged that it was impossible for him to comment more specifically about the new American nuclear policies at this time. He assured Hermes that the President would present his policies to congress on March 7. Then, at the end of March, the FRG and the United States should start their bilateral consultations in order to prepare for the next meeting of the Nuclear Suppliers in London at the end of April.¹⁶⁹

The Americans explained that Carter's position was not directed against the peaceful use of nuclear energy, but reflected realistic fears of reprocessing. Even if perfect controls were in place, the chance that plutonium would be used to build nuclear weapons was very high. Therefore, a new approach, possibly international oversight of the storage and distribution of plutonium, had to be developed. Until such a regime was established, the export of sensitive technology should cease.¹⁷⁰

Bernd von Staden, the German ambassador to the United States, noted that due to contractual obligations, the FRG could not wait for the new American administration to

¹⁶⁸ "Fernschreiben: Deutsch-amerikanische Konsultationen über Kernenergie und Nichtverbreitungspolitik vom 10. und 11.2.," Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁶⁹ Ibid.

¹⁷⁰ Ibid.

implement its new policy course. Hermes added that nonproliferation had been high on the FRG's political agenda for years and that the failure to find common ground on this fundamental question could have far-reaching implications for the German-American relationship. Testily, von Staden added that it was therefore the responsibility of both governments not to jeopardize the good relations between the partners.¹⁷¹

Hermes went on to inform the Americans that the FRG had delayed issuing the export licenses for months. What he failed to mention was that Schmidt had informed Geisel that he would issue them, although he had not announced when. The German delegates hesitated to admit to Nye and Christopher that Schmidt had decided to grant the export licenses but told the Americans that if Washington were able to persuade Brazil to renege on its deal with West Germany, Bonn would not stand in its way. For Bonn, the FRG's international perception as a reliable business partner, which could withstand pressures from Washington, was more important to the German administration than the economic benefits of the deal itself. Domestically, the Schmidt administration assumed it could weather the criticisms of the opposition party if it appeared that Brazil had cancelled the deal. This stance comes as a surprise given the stress the Schmidt administration put on the economic importance of the deal and suggests strongly that Bonn assumed that Brasilia would not be swayed by American pressure.¹⁷²

The German delegates did admit that the Schmidt government had approved sending the blue prints for a reprocessing facility to Brazil. The constructions for two conventional (not reprocessing) reactors had already begun. The delivery of fuel for those two reactors,

¹⁷¹ Ibid.

¹⁷² Ibid.

until the reprocessing facility was up and running, was supposed to be secured through Urenco. Therefore, as von Staden made very clear, the offer from Washington for an unlimited fuel supply for the Brazilian reactors was seen as a direct economic attack. Christopher tried to assure him that it was only a “reserve back-up” and not an economic plan to gain an advantage over the German nuclear industry.¹⁷³

Again and again the German side returned to Carter's vision of an international worldwide uranium regime that would store, regulate and oversee the distribution and use of uranium. So, Hermes asked, as an alternative to reprocessing and as a result of an American-led uranium regime, would the American people accept becoming the “cemetery for nuclear waste” for a large part of the world? In response, Nye declared that the implications of long-time storage of irradiated nuclear fuel had to be explored. Most importantly, Nye went on, the economic feasibility of reprocessing still had to be proven.¹⁷⁴

The consultations did not reassure the Americans. The Carter administration still believed that if the FRG approved the export licenses, it would enable Brasilia to build its own nuclear cycle. What the consultations did accomplish was to bring to the forefront the fact that for the Carter administration the Brazil deal constituted only the tip of the iceberg. Carter wanted to change the NPT.

One of the main reasons that many nations had signed the NPT was the U.S. assurance, at a UN meeting on May 15, 1968 that the treaty would create a safe way to transfer nuclear technology for peaceful use and give nuclear industries a way to export and

¹⁷³ “Fernschreiben: Deutsch-amerikanische Konsultationen (10.02.1977) über Internationale Fragen friedlicher Kernenergienutzung”, December 2, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁷⁴ Ibid.

be profitable.¹⁷⁵ Now it seemed that the United States was determined to stop the export of reprocessing facilities to Third World nations. This constituted a major problem for not just the FRG but for most European Nuclear Supplier nations, since they all viewed reprocessing as an irreplaceable element in a responsible and profitable nuclear regime.

Christopher ended the consultations by making it clear that Carter expected that no export licenses would be issued while these consultations were on-going. Hermes assured Christopher that future consultations were important to develop new nonproliferation regimes, but he added that they would have no impact on the Brazilian deal. Therefore, he could make no promises that the export licenses would not be issued before the consultations ended.¹⁷⁶ In response, the American delegates conveyed to the Germans that while both nations had a common interest in nonproliferation, the United States had, due to its status as a world power, a “special responsibility” in that area. They informed Hermes and von Staden that the FRG's lack of appreciation for America's special responsibility was the cause of their current difference in opinion.¹⁷⁷

The documents indicate that Bonn was looking for a compromise. While Schmidt planned to fulfill the contract with Brazil, he and his cabinet were ready to agree on a future moratorium on the export of sensitive nuclear technology. Yet, the Germans failed to reach a compromise with the Americans. Historian Klaus Wiegrefe asserts that the personality of Peter Hermes was an important reason that these early negotiations went wrong. Instead of

¹⁷⁵ “Drahterlass: Deutsch-amerikanische Konsultationen über Kernenergie und Nichtverbreitung”, February 14, 1977, 10, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁷⁶ “Fernschreiben: Deutsch-amerikanische Konsultationen über Nuklearenergie und Nichtverbreitung - Abschlussgespräch Christopher-Hermes”, November 2, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁷⁷ “Fernschreiben: Deutsch-amerikanische Konsultationen über Kernenergie und Nichtverbreitungspolitik vom 10. und 11.2.,” Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

being flexible and slick, the lawyer was rough and stodgy. Hermes was unable to convey to Washington that Bonn was looking for a compromise. Instead, his belligerent demeanor conveyed to the new administration the impression that “Bonn was looking for a trial of strength.” Indeed, Wiegrefe writes, Hermes seemed to have not even mentioned the fact that Bonn was prepared to join and support any future moratorium on the export of sensitive nuclear technology.¹⁷⁸ Wiegrefe blames Hermes' ineptitude for the disastrous meeting and therefore for the fact that the conflict raged for several more months.

Yet the documents conflict with Wiegrefe's conclusion. Hermes did tell the Americans that Bonn was ready to forgo any future sales of sensitive nuclear technology. Additionally, he handed the Carter administration a *démarche* describing Bonn's position. Indeed, the documents indicate that it was Washington's failure to agree to the German compromise that caused the dispute to grind on. Ironically, the two administrations would agree on the same compromise that Hermes proposed at the February meetings four months later.

Reassessment after the February 10-12 Meetings

In a memo to Foreign Minister Genscher on February 13, 1977, Hermes conveyed three points Christopher had highlighted during the meetings: Carter was determined to keep nations from acquiring the know-how of reprocessing; he wanted to create alternatives to the German-Brazilian deal; lastly, he appealed to Bonn not to undermine his efforts by granting the export licenses. If Bonn granted the licenses it would constitute for Washington

¹⁷⁸ Wiegrefe, *Das Zerwürfnis: Helmut Schmidt, Jimmy Carter und die Krise der Deutsch-Amerikanischen Beziehungen*, 86–88.

“symbolically, psychologically and politically an irreversible step that would be interpreted as dangerous and provocative.” The Germans had been aware of American unease ever since they started negotiations with Brazil in the early 1970s. Ford and Kissinger, from the moment they knew of the agreement between Bonn and Brasilia, had voiced concern. Yet, only after pressure from Congress had Ford on November 28, 1976, passed a three year national moratorium. That Carter adopted the idea of the moratorium was not a surprise to Bonn; but the fact that he was intending to make it retroactive was.¹⁷⁹

On February 14, the Chancellor and his ministers met to discuss the recent consultations in Washington. The timetable for issuing the licenses was discussed. The Chancellor initially insisted that they should be issued by the end of February, but he had hinted to Mondale in earlier talks that he might wait until the U.S. consultations with Brazil at the beginning of March. German nuclear firms could be persuaded to wait until the end of March, but no longer. This gave Bonn some maneuverability. A general consensus was reached to issue the licenses only after the conclusion of the U.S.-Brazil consultations and the simultaneous American-German consultations.¹⁸⁰

During the meeting, Schmidt and his ministers displayed little sympathy for Carter's stance against reprocessing. They argued that the moratorium constituted an economic boon for the United States' nuclear industry. From a European perspective, Carter's position on reprocessing seemed absurd, given that the United States was already behind in its uranium deliveries for the European nuclear industry. How could the United States, if reprocessing

¹⁷⁹ “Fernschreiben: deutsch-amerikanische Konsultationen über Nuklearenergie und Nichtverbreitung - Abschlussgespräch Christopher-Hermes”, November 2, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin

¹⁸⁰ Ibid.

was banned, guarantee a steady supply of much more uranium if it could not even handle the current demand? The Germans also wondered how the independence of all nuclear nations could be guaranteed if all of them relied on the United States for their fuel. Finally, Bonn waspishly raised the question of whether Article IV of the NPT, namely the anti-discrimination law, applied to all signers or only the FRG.¹⁸¹

In a letter to Carter on February 23, Schmidt wrote that the FRG was still debating several of Carter's alternatives to the transfer of sensitive technology. The Chancellor indicated that the President's policies would have to be supported by an international consensus and create binding international laws. This was a sly move on Schmidt's part because it would be nearly impossible to reach an international consensus and pass a binding law that would be internationally accepted. In the meantime, the FRG would continue its nuclear exports.¹⁸²

Schmidt stated flatly in his letter to Carter that the FRG would continue with the Brazil deal. While acknowledging the concerns that Carter had with the NPT, the Chancellor argued that it remained the internationally accepted regime. Forcing Bonn to renege on its contractual obligations would strike a grave blow to the NPT. The NPT might be imperfect but it represented the only comprehensive document against proliferation. The solution was not to disrupt the Brazil deal but to convince the world that the new nonproliferation policies, developed in Washington, would be better and cheaper and make the world a safer place.¹⁸³

¹⁸¹ "Fernschreiben: Deutsch-amerikanische Konsultationen über Kernenergie und Nichtverbreitung am 10.-11. Februar 1977", 11.02 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin. See Appendices for Article 4 of the NPT.

¹⁸² "Schreiben des Bundeskanzlers an Präsident Carter", February 23, 1977, Karton 36447, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁸³ Ibid.

Carter's new direction in nonproliferation was stirring controversy in the United States. The President was under immense pressures that threatened to pull him in opposing directions.¹⁸⁴ On the one side there was the domestic nuclear industry which suffered under the moratorium on reprocessing. Carter's policies made the domestic nuclear industry nervous, since it would also cut into its profits.¹⁸⁵ On the other hand opposition to the Brazilian deal was mounting in the U.S. Senate. A Senate resolution on February 15, 1977 aimed to prevent reactor fuel, whatever its origin, to be delivered to non-NPT nations. The proposed law also “encouraged” other nations to bar the export of sensitive technology until all alternatives had been explored.¹⁸⁶

At the beginning of March, the FRG's Foreign Ministry, as a result of the upheaval of the previous months between Bonn and Washington, wrote an analysis of Carter, his presidency and the new administration's possible impact on Bonn's foreign policy. After the first weeks of Carter's presidency the German Foreign Ministry asserted that the changes to Washington's foreign policy would be greater than it had first assumed. It would be less consistent than under Kissinger resulting in a sort of precariousness for America's European partners. Carter was seen as a strong President who would surely clash with the newly revitalized Congress (in the wake of Watergate), resulting in some degree of paralysis. These elements of uncertainty, the Foreign Ministry believed, would have a negative impact on the relationship between the Atlantic partners. France and Britain were assumed to have the

¹⁸⁴ “Fernschreiben: Amerikanische Vorstellungen über die bevorstehende Gipfelkonferenz - Politische Themen”, February 17, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁸⁵ “Letter from Butler Derrick to President Carter”, June 1, 1977, Staff Offices - Office of Staff Secretary, NLC-28-22-8-1-6.

¹⁸⁶ “Fernschreiben: Deutsch-brasilianisches Abkommen”, February 16, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

same doubts and fears. The usual period of confusion associated with the first few months of a new American presidency was met with greater trepidation than usual.¹⁸⁷

Carter, the German Foreign Office wrote, had a “rigorous moral motivation that was combined in a very American way with acting pragmatically and therefore led to self-righteous opportunism when implementing what he saw as the only correct solution for a problem.” The Foreign Ministry believed that Carter's personality made it almost impossible for him to “comprehend” Kissinger's complex and pessimistic foreign policy. Rather, they saw an “inclination, bordering on obsession, to do everything completely differently.” The report expressed hope that the State Department would balance Carter's personality.¹⁸⁸

“Carterism” was seen as part of the American tradition representing a “complex of typical behavior patterns consisting of different spiritual, social, psychological and political traditions.” The desire to do everything differently than Kissinger would probably lessen over time. Yet, that desire “originated from a fundamental and powerful character trait associated with the self-image that Washington had of the role America's in the world,” of which Carter seemed to be especially representative. Americans had difficulty thinking in “political categories . . . [befitting to their] role as hegemonic power,” because they failed to acknowledge the “prerequisite of legitimacy of an international order”; that is, they did not see international order as a consensus that included nations whose vital interests and world views differed from their own. The traditional goals of American politics were not to create such a consensus because it would necessarily involve compromises that would pollute “the

¹⁸⁷ “Der Machtwechsel in Washington und seine Rückwirkungen auf die Aussenpolitik der Bundesregierung”, March 3, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁸⁸ Ibid.

moral concepts with which the United States operates as a community.” This was the reason that it became necessary for Washington to “broadcast its own societal norms onto the international community in the name of moral righteousness” – the international realization of the American Dream.¹⁸⁹

In a reference to the Brazil dispute, the report pointed out that Washington's reactions became especially problematic if smaller or less powerful and economically dependent nations clashed with its moralistic foreign policy agenda. They categorized the FRG as well as Brazil as economically and militarily dependent and less powerful than the United States. Since the Brazil deal violated no international laws the analysts implied that Carter's reactions were steered by a moralistic agenda that was more irrational than rational.

The Carter administration's reaction to, and interpretation of, Schmidt's February 23 letter highlights the complexities with which both sides had to deal. First, the Carter Administration's position on the Brazil deal was not as unified as it seemed. For example, Christopher, analyzing Schmidt's letter, saw “ambiguous phrasing” that revealed “flexibility in the German position” but acknowledged that its wording tested Washington's determination to hinder the export of sensitive technology.¹⁹⁰ Jessica Tuchman, who was the NSC director of the Office of Global Issues and was responsible for covering nuclear proliferation, interpreted the tone of Schmidt's letter differently. In a memo to Brzezinski on March 7, she wrote that, instead of *requesting* a meeting, the “Germans have in the meantime *demand*ed that the U.S. delegation come immediately to Bonn for talks.”¹⁹¹ Brzezinski also

¹⁸⁹ Ibid.

¹⁹⁰ “Memorandum for the President from Warren Christopher - Response to Chancellor Schmidt on Germany/Brazil Nuclear Agreement”, March 7, 1977, NLC-128-12-6-6-4.

¹⁹¹ “Memorandum for Zbigniew Brzezinski from Jessica Tuchman - Reply to Schmidt's Letter”, March 7, 1977, NLC-1-1-2-61-0. Emphasis mine.

saw “a very tough line on the Brazilian deal” from Bonn and indicated to Tuchman that he saw the letter as a step backwards in their consultations. This rift in the administration, between the 'doves', sympathetic to the German position, and the 'purists', unsympathetic to the German position, would widen as the conflict between Bonn and Washington continued.

Secondly, Carter's stance on nonproliferation was based not so much on morality as on the fact that Carter was critical of the NPT. This was due the fact that the NPT had failed to hinder India from exploding a nuclear device. Giving reprocessing technology to Brazil, which, like India, had not signed the NPT, therefore seemed especially dangerous to Carter.

In his response to Schmidt, Carter made it clear that the transfer of sensitive technology, no matter the safeguards, “would undercut the purpose of the [NPT] treaty.” He acknowledged that multilateral efforts were necessary to meet global energy needs. These efforts would be jeopardized, though, by the “increase in the number of fuel cycles under national control.” For the President the guidelines set forth by the NPT were not able to deter nations from developing nuclear arms after they received reprocessing technology.¹⁹² Carter admitted that his administration's review of the issue was not complete but that he was considering multilateral alternatives to the export of sensitive nuclear technology which included “internationally assured nuclear fuel supply, multilateral approaches to the vexing problems of spent fuel storage, and avenues for non-nuclear energy cooperation.” Carter asked Schmidt again to delay implementing the parts of the Brazilian deal concerning sensitive technology in order to give his administration time to examine these alternatives. He sought neither to commercially disadvantage the FRG nor to promote the total

¹⁹² Ibid.

abandonment of the agreement. Instead, he assured Schmidt that the United States would find means to ensure a steady nuclear fuel supply for Brazilian nuclear reactors. Carter believed that his efforts were “fully consistent with the need you [Schmidt] mention to take into account international obligations, on the one hand, while seeking and finding together solutions to new problems, on the other.”¹⁹³

Carter's plea fell on deaf ears in Bonn. The German nuclear industry continued to view Carter's offer of a steady fuel supply as an economic attack. While Bonn shared some of Carter's anxiety concerning the NPT, it viewed Carter's policies as discriminatory not only against itself but against all non-nuclear states.

Schmidt met with Genscher and other cabinet members on March 21 to discuss nonproliferation. The Schmidt government noticed with concern that the Carter administration as late as March 18 was still scrambling to develop a coherent nonproliferation strategy.¹⁹⁴ Exasperated, Schmidt and his administration decided, as it had before, that it had to issue the export licenses soon.¹⁹⁵ This decision was supported by the board for the Peaceful Usage of Nuclear Energy when it met a few days later, on March 23. The Board represented all political and industrial segments of West German society and although its decisions were nonbinding, it had influence. The board came to the conclusion

¹⁹³ Ibid.

¹⁹⁴ “Deutsch-amerikanische Konsultationen über Fragen der Abrüstung und Rüstungskontrolle in Washington”, March 22, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁹⁵ “Vermerk über das gestrige Ministergespräch unter Vorsitz des Bundeskanzlers zur Vorbereitung der Sitzung des Rates für die friedliche Nutzung der Kernenergie Am 23. März 1977”, March 23, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

that the NPT remained the only viable and effective regime for the German Republic to follow. The board decided that the Brazilian agreement was consistent with the NPT.¹⁹⁶

During the board meeting, a consensus was established that Washington's new policies created four problems for the FRG. First, the German nuclear industry was faltering domestically and needed the export deal on its balance sheets. Its failure would constitute an industrial fiasco for the national economy. Second, the foreign policy fall-out with the United States over the Brazilian deal complicated matters. Third, if the FRG broke its Brazilian contract, potential export partners might view Bonn as fickle and subordinate to the United States and therefore be cautious before dealing with West Germany. Lastly, Carter's new policies discriminated against threshold nations.

While all German political parties agreed on the importance of the deal, the public was divided over it. Despite their deep uneasiness with atomic energy and with the undemocratic Brazilian government, there was an overwhelming sense that the United States was acting in a heavy-handed, domineering fashion to preserve its economic hegemony.¹⁹⁷ At the same time, providing Brazil's rulers, an oppressive military regime, with the know-how to construct a nuclear weapon, seemed unwise to many Germans. Many discerned that the United States was not opposed to giving Brazil nuclear plants, but only to handing Brazil the ability to reprocess spent fuel, from which it could easily produce weapons-grade plutonium. These Germans agreed with Carter that a "multinational accord to furnish

¹⁹⁶ "Zusammenfassung für Tagesordnungspunkt 1: 'Fragen der interationalen Zusammenarbeit im Kernenergiebereich'", March 20, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁹⁷ Jonathan Kandell, "Brazil Bitter at U.S. Effort to Impose Nuclear Curb," *The New York Times* (March 28, 1977).

countries like Brazil with nuclear fuels and provide for the disposal or reprocessing of spent fuels" would be the best way to safeguard against rogue nuclear weapons.¹⁹⁸

Despite the unease over the deal in some parts of the German public, all political parties were united behind Schmidt. The opposition leader Helmut Kohl stated that the Schmidt government's policy, despite the difficulties with Washington, was correct and had the full support of his party.¹⁹⁹ This political unity was further supported when Bonn, in the third week of March, consulted with the French and British representatives of the Nuclear Suppliers Club. The British delegate stated that London shared Bonn's view, namely that it would take many years for Brazil to develop the practical know-how to implement the information contained in the technical blueprints. Those blueprints contained information on how to construct a scaled down reprocessing facility, which would function as training ground for the Brazilian engineers. This meant that there was plenty of time to negotiate and maybe even talk Brasilia into joining the NPT. In the meantime Brazil should get its nuclear materials from Urenco.²⁰⁰ The Europeans would deal later with the possibility that Brazil could build a bomb. In the meantime, they would reap the economic benefits of the deal and kick the nuclear can down the road.

¹⁹⁸ "Konstituierende Sitzung des Rates für die friedliche Nutzung der Kernenergie am 25.03.1977", March 25, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

¹⁹⁹ Ibid.

²⁰⁰ "Konsultationen über Fragen der friedlichen Nutzung der Kernenergie Mit F, GB Und Kanada", March 22, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

CHAPTER 2

The Fall Out: Reverberations of Carter's Nonproliferation Policies

The on-going troubles with Urenco, the Troika-run reprocessing facility in the Netherlands, had convinced Bonn that it needed to be more energy independent. The Dutch government had proven itself susceptible to American influence, which had almost led to the cancellation of the German-Brazilian deal. Therefore, Bonn planned to build a reprocessing facility on German soil in the spring of 1978 and contemplated running the facility jointly with the French. In late March 1977, Bonn received troubling information from sources in Washington that Carter planned to intervene in this decision.²⁰¹ Since winning the election, Carter, citing proliferation concerns, had tried to convince the Europeans not to export sensitive technology to the Third World. Now it appeared that those same considerations were leading Carter to tell the Europeans not to rely on sensitive technology themselves. If proven true, Carter would be treating the advanced nuclear nations as though they were developing countries. In response, France and the FRG would contemplate further consolidation of their nuclear industries, especially with regard to reprocessing, to counter Washington's nonproliferation policies.

The American ban on reprocessing, part of an energy policy that would be the centerpiece of Carter's administration, had been developed to deal domestically with the energy crisis in the United States. It aimed at making the United States energy sufficient from foreign oil and creating safer nuclear options for the domestic nuclear industry. Carter's

²⁰¹ "Fernschreiben: Amerikanische Nichtverbreitungspolitik", March 25, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

policy, due to the importance of American uranium exports, had international ramifications that created a heated debate in Washington centering on reprocessing, with Carter standing between two camps. On the one side were the “purists,” such as Secretary of Defense Harold Brown and the Secretary of Energy James Schlesinger. The purists argued for a hard line against proliferation and urged a moratorium on reprocessed uranium deliveries from France, Japan and the FRG to nations that had not signed the NPT. They believed that reprocessing technology, be it in the FRG, Britain or anywhere else, should be banned. In the beginning, Carter leaned toward the purists.²⁰²

The President informed his western partners on March 29 that the United States would implement a new domestic energy policy in the next few days.²⁰³ Bonn would have only two or three days to respond. If that was not sufficiently infuriating, Washington added a new demand: besides the moratorium on the export of reprocessed uranium, Carter also demanded – as the German source had predicted - that the construction of national reprocessing facilities should be prohibited. If any nation dared contravene this policy, the President threatened sanctions. This blatant interference in the domestic politics of its allies caused an uproar in Europe. Schmidt declared that the FRG could not be treated “as if it were South Korea.”²⁰⁴

Carter's hard line was not shared throughout his administration. In fact, many initial 'purists' had already started to soften their approach. Wiegrefe wrote that in March 1977, both Mondale and Brzezinski warned the President that a continued critique of West German

²⁰² Klaus Wiegrefe, *Das Zerwürfnis: Helmut Schmidt, Jimmy Carter und die Krise der deutsch-amerikanischen Beziehungen* (Berlin: Propyläen, 2005), 95–96.

²⁰³ “Fernschreiben: Amerikanische Nichtverbreitungspolitik”, March 29, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amtes, Berlin.

²⁰⁴ Ibid.

“proliferation [policies] could lead to a serious break in relations with Bonn.” The national security advisor and the vice-President were concerned that Carter was jeopardizing the success of the May G7 summit in London, which would be the first international outing of the new President.²⁰⁵

Brzezinski concurred that Washington's policy confronted some of America's allies in areas “where their vital economic interest or national dignity was involved.” How, Brzezinski mused in his memoir, could the administration reconcile the need for a new and stringent policy on proliferation with the “substantial commitment to nuclear reprocessing” of Washington's allies? He advised the President on March 18 to inform Washington's western allies about the change in proliferation policy immediately, instead of waiting until the end of the month. Giving all the Nuclear Supplier nations only a few days to react would be needlessly contentious.²⁰⁶

At the same time, Vance and Christopher were struggling to convince the President that he should not try to stop the FRG from building its own reprocessing facility. They believed that it would be foolhardy for the United States to try to order a country as stable and prosperous as Germany not to develop its own reprocessing facilities.²⁰⁷ Carter, disregarding the advice, decided to present his new proliferation policies to the allies only days before he planned on announcing them publicly.

²⁰⁵ Klaus Wiegrefe, *Das Zerwürfnis : Helmut Schmidt, Jimmy Carter und die Krise der deutsch-amerikanischen Beziehungen* (Berlin: Propyläen, 2005), 95.

²⁰⁶ Zbigniew Brzezinski, *Power and Principle : Memoirs of the National Security Adviser, 1977-1981* (New York: Farrar, Straus, Giroux, 1983), 129–130.

²⁰⁷ “Fernschreiben: Amerikanische Nichtverbreitungspolitik”, March 29, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amtes, Berlin.

On March 29, Carter sent a message to Schmidt outlining the future domestic energy strategy of the United States. The Administration had concluded that the dangers of nuclear proliferation for worldwide peace and security required a “major change in U.S. domestic energy policies and programs.” Accordingly, Carter had decided that the United States would: “indefinitely defer the commercial reprocessing and recycling of plutonium in the U.S.; [...] concentrate on development of alternative nuclear fuel-cycles; [...] and] increase U.S. production capacity for nuclear fuels.” Carter's policy was overwhelmingly concerned with domestic issues but he came to understand that, due to the importance of the United States as a major uranium exporter, those decisions would have implications for other nations. Accordingly, Washington wished to consult with some nations, including Germany, about the international implications and how “to proceed in concert with these other nations to promote the objective of developing effective international arrangements to meet global energy needs and minimize the risk of proliferation.” Comments and ideas would be welcome before Carter publicly announced this new policy. This left Bonn until April 1 to respond; less than three days!²⁰⁸

The next day, March 30, in an initial response to Carter's message, Bonn stated that the FRG planned to stick with reprocessing. German law forbade the construction of nuclear power plants unless radioactive waste management was included in the fuel cycle. This meant that the German nuclear industry required the reprocessing of nuclear materials. If the government opted for a policy that excluded the reprocessing process, the German judiciary would have no choice but to deny any further construction of nuclear power plants and to

²⁰⁸ “Botschaft Präsident Carters an Bundeskanzler”, March 29, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

withdraw all already issued licenses. Obviously, this would have had disastrous consequences for West Germany's domestic energy future. Also, as Bonn had pointed out repeatedly in the past, the FRG did not have unlimited access to uranium deposits around the world, as U.S. firms had, and it therefore had to manage its limited uranium supply differently. Reprocessing was considered essential to ensure the adequate energy supply of West Germany for the foreseeable future.²⁰⁹

The Clash over Reprocessing

During Vance's visit to Bonn on March 31, Schmidt and his cabinet discussed with him the issue of proliferation. Vance told Schmidt and Genscher that alternatives to reprocessing must be developed. In the future, if reprocessing was used, it should be supervised by international guidelines that went beyond those set by the NPT. Vance explained that the Brazil deal was setting an bad example that encouraged other nations to thwart Carter's efforts and seek reprocessing technology despite Washington's objections. He asked Schmidt if Carter's planned domestic policy changes would create any problems for the FRG. Schmidt bluntly answered yes, they would.²¹⁰

In order to give up reprocessing domestically, Carter planned to increase America's capacity for producing enriched uranium to provide nuclear fuels for domestic and foreign needs. He proposed to take the legislative steps necessary to permit the U.S. to “offer nuclear fuel supply contracts and guarantee delivery of such nuclear fuel to other countries.” Lastly,

²⁰⁹ “Für Staatssekretär Hermes - Erste Stellungnahme zur Botschaft von Präsident Carter”, March 30, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

²¹⁰ Ibid.

he planned on continuing to “embargo the export of equipment or technology that would permit uranium enrichment and chemical reprocessing.”²¹¹ This embargo spelled major trouble for those industrialized nations who had made major investments in reprocessing technology. Furthermore, if the United States, the largest uranium supplier in the western world, decided to penalize nations that used imported American uranium for reprocessing, that could create enormous problems. Many smaller nations, unlike the United States, needed reprocessing as an essential part of their nuclear cycle. Constantly importing uranium would prove difficult, as would disposing the nuclear waste that would be created. Also, if Germany did not sell the reactors to Brazil, Schmidt believed that his country's nuclear sector would be unable to sell any other reactors in the future, which would be a disaster for the German economy and its energy policy.²¹²

Schmidt told Vance frankly that his administration would therefore issue the licenses and blueprints directly after this meeting. He told Vance that after Mondale's visit in January, Bonn had desisted from issuing the licenses. The Vice President had asked them to postpone the decision for a few weeks. Schmidt remarked testily that Mondale had not asked for months. Schmidt went on: “I quite understand that the United States can do without reprocessing, since it is sitting on billions of tons of coal. Others are not so lucky.” Nonproliferation was important to Bonn and could only be upheld by not breaking contracts, which would send the the wrong signals to Third World nations. Schmidt insisted that the FRG should not be forced to break contracts which had been initially approved by

²¹¹ “Jimmy Carter: Nuclear Power Policy Statement on Decisions Reached Following a Review.”, n.d., <http://www.presidency.ucsb.edu/ws/?pid=7316#axzz1yIG7Nsfs>.

²¹² “Für Staatssekretär Hermes - Erste Stellungnahme zur Botschaft von Präsident Carter”, March 30, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

Washington and Moscow. What would Carter say if Bonn broke contracts it had with the United States?²¹³ The Secretary attempted to reassure the German Chancellor that the U.S. declaration concerned only America's domestic nuclear policies. The suspension of reprocessing went hand in hand with Carter's idea to find alternative energy sources.²¹⁴

Immediately prior to this meeting, Schmidt had learned that France had issued licenses to Pakistan that were essentially identical to those Germany planned to send Brazil. Carter had pressured both France and West Germany on the issue of proliferation. France had planned on sending a full-fuel cycle, which included a reprocessing facility, to Pakistan. Giscard, due to concerns about the reliability of Islamabad and pressure from Washington, had planned to cancel the deal. However the public pressure of the Carter administration led Giscard to grow concerned about the reaction of the French public if he cancelled the deal. If the public believed that Carter was dictating France's export policies it might result in a nationalist backlash that could end Giscard's already shaky government. The French President was therefore relieved that Pakistan, due to pressures from Washington, was going to back out of the deal. Armed with this knowledge, Paris issued the export licenses for the reprocessing facilities, since Giscard knew that Pakistan would cancel the deal. This turned the issuing of the licenses into a defiant, yet empty, gesture against what Paris perceived as Washington's interference. While Giscard's gesture was aimed at appeasing domestic nationalist sentiment, Schmidt and Genscher now considered it a question of prestige to issue the licenses.

²¹³ Ibid.

²¹⁴ “Vermerk über das Gespräch des Bundeskanzlers und des Bundesministers mit AM Vance vom 31. März 1977 - 3. Teil; Nichtverbreitung und nukleares Exportgeschäft mit Brasilien”, March 31, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

Genscher mentioned that one reason Mondale had asked Bonn to wait to issue the licenses to Brasilia was to avoid precipitating France's similar decision with its Pakistan deal. It had therefore become "ludicrous" for the FRG to wait any longer. In fact, Bonn believed that the longer it waited, the more prestige the FRG lost. Only when French and German firms sent the actual hardware would the deal have reached a critical stage.²¹⁵ Vance was caught unaware. He had not been alerted to the fact that France had issued the licenses and sent the blueprints to Pakistan.²¹⁶

Schmidt, testily, told Vance that he would give him a *démarche* for Carter with the German position. He added, "we will not expect your answer in just three days," referring to the fact that Bonn had only been made aware of this declaration concerning the far-reaching changes in the United States' domestic energy policies on March 29. Schmidt and his administration took grave offense to point six in Carter's declaration, which stated that the United States planned to further its nonproliferation goals through an embargo on reprocessing. Bonn, and other Nuclear Supplier nations, such as France, Great Britain, France and Japan, interpreted this to mean that the United States would impose sanctions on those who violated its international nuclear policies. Would those sanctions be imposed only on future deals or on existing ones? Was the fact that American firms were behind in their contractual obligations to deliver uranium to the European nuclear industry part of the embargo? Suspicions were already forming in the heads of many European statesmen. What

²¹⁵ Ibid.

²¹⁶ "Besuch des amerikanischen Aussenministers am 31. März 1977 - Gespräche mit Bundeskanzler und Bundesausserminister", March 31, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amtes, Berlin.

would stop Washington from declaring, more or less arbitrarily, that any future deals were flawed and worthy of sanctions?²¹⁷

Schmidt told Vance that he feared that Carter's coming declaration meant that the United States would instigate unilateral policies, which would run counter to all the international consensus building discussions he had had with Carter. In fact, while the discussions with the Carter administration had been going on for only a few months, it had taken years to construct the NPT. Not just international hurdles had to be cleared, but also domestic ones. Only the current German ruling coalition had been able to pass the ratification of the NPT, while the issue had actually split the opposition party. Therefore, it would take longer than “72 hours” to discuss Carter's declaration, which basically destroyed the existing basis for the NPT. Schmidt declared that breaking the Brazilian contract would amount to shattering the NPT. While he understood and even agreed that the NPT was inadequate, it was not wise to break it.²¹⁸

Therefore, Schmidt told Vance that he would issue the licenses before Carter made the new American domestic energy program public, to avoid further confrontation. Vance in response told Schmidt that Carter planned to talk with him personally about the issue. Carter, Vance went on, had strong feelings about nonproliferation. It would be a “source of sadness to the President” if Schmidt issued the licenses before talking to the President, and he pleaded with Schmidt to wait until he had talked to Carter. Schmidt ended the talks by

²¹⁷ Ibid.

²¹⁸ “Vermerk über das Gespräch des Bundeskanzlers und des Bundesministers mit AM Vance vom 31. März 1977 - 3. Teil; Nichtverbreitung und nukleares Exportgeschäft mit Brasilien”, March 31, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

stating that the FRG could not make fulfillment of their contractual obligations contingent on the approval of the United States.²¹⁹

Schmidt and Carter talked later that day (March 31) on the phone. Carter again made it clear that his energy policy was meant to be applied only as a domestic policy. Either the President failed to understand that his policies had a massive impact outside the United States or he did not care. Either way, Carter told the Chancellor that after a thorough assessment he had decided to put “commercial reprocessing” on hold. Schmidt ended the phone conversation by stating that as long as the United States did not plan to impose its “domestic policies on other nations, he would have no problem with that statement, but the FRG would not be able to follow the U.S. example.”²²⁰

After the Clash – The German reaction

The Bonn administration was surprised when the President, after the meetings of March 31, agreed to postpone his planned domestic energy declaration until April 7. During the meetings on March 31, Schmidt and Genscher had expressed their anger over Carter's new domestic energy policy. The FRG feared that the President's new policies would punish nations that exported nuclear technology Washington deemed dangerous, such as reprocessing technology. Analysts from the German Foreign Ministry had stated that this would make it difficult for the German nuclear industry to compete on the world market with the already powerful American nuclear sector, if Washington dictated what was safe to export

²¹⁹ Ibid.

²²⁰ “Vermerk über das Telefongespräch mit Präsident Carter Am 31. März 1977”, March 31, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

and what was not. Bonn perceived this to be a conflict of interest since the United States, due to its uranium deposits and technological advantage, was the leader in the nuclear field. Schmidt and his cabinet feared that the United States would assert its dominance and limit Europe's access to "management and know-how" of newly developed nuclear technologies. Moreover, Carter's embargo on reprocessing technology directly interfered not only with West Germany's domestic energy program but also with those of other Nuclear Suppliers, such as Japan, Great Britain and France, who viewed reprocessing as an essential element of their nuclear industry. Reprocessing meant fewer costly uranium imports from the United States and less angst over waste disposal.²²¹

Bonn assumed that its ire at Washington's new energy policies had caught the President unaware and constituted one of the reasons why he decided to postpone his announcement. The German Foreign Ministry believed that Carter needed more time to consult with his European partners to assess how widespread the discontentment with his new policies was. Bonn's reservations also stemmed from the fact that the Carter administration leaned toward nonproliferation solutions that discriminated against emerging threshold nations, such as Brazil. This mattered because it was precisely to these nations that the European nuclear industry hoped to export. For the Europeans, the existing NPT was of such importance because it constituted the only legal and international framework that allowed it to compete with the United States in the export of nuclear technology. Without

²²¹ "Fernschreiben: Amerikanische Nuklearpolitik", March 31, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

reprocessing technology, the nation with the largest uranium reserves would remain the undisputed leader of the nuclear pack.²²²

Bonn predicted, therefore, that Carter's new energy policy would fail. Nonetheless, the Schmidt administration, due to the pressures from Washington, had to decide whether to join Carter's initiatives. Doing so would ease tensions between Bonn and Washington and then, after the failure of the President's initiatives, the FRG could continue its exports.²²³

The weekly London magazine the *Economist* published on March 31 a lengthy editorial on “the need for President Carter to establish better relations with Chancellor Schmidt,” noting the U.S.-German relationship seemed in worse shape than at any time since World War II.²²⁴ The sense of concern was particularly deep about the squabble over the Brazil deal.²²⁵ Brzezinski was informed that not only nationalistic German hotheads but “very pro-American and non-nationalistic” German officials close to Schmidt were upset with the way Washington had dealt with Bonn in regard to proliferation.²²⁶

Schmidt was also acutely aware of the rift between the two administrations. The Chancellor planned on mending fences during a planned visit to Washington in July. In the meantime, the issuing of the export licenses to Brazil still constituted a concern for Bonn. Bonn was obsessed over timing; when would be a good time to officially pronounce Bonn's decision to defy the wishes of Washington and fulfill its contractual obligations with Brasilia? The German Foreign Ministry believed that if Schmidt issued the licenses before

²²² Ibid.

²²³ “Fernschreiben: Plan einer gemeinsamen deutsch-amerikanischen Erklärung zur Nichtverbreitungspolitik”, March 31, 1977, Karton 36445, Politisches Archiv des Auswärtigen Amts, Berlin.

²²⁴ Ibid.

²²⁵ “Memorandum for Zbigniew Brzezinski - Europe”, April 1, 1977, NLC-10-1-8-5-6.

²²⁶ “Memorandum for Dr. Brzezinski from the Situation Room - Noon Notes”, April 29, 1977, NLC-1-2-1-48-5.

Carter's energy policy speech, the world would perceive the FRG's move as confrontational. The same was true however, if the FRG delayed issuing the licenses until after Carter's speech. Schmidt was therefore contemplating a joint declaration with Carter, in which the President introduced his new policy after which the Chancellor announced his government's decision to grant the export licenses to Brazil. By acting together, the Chancellor hoped to project unity and thereby downplay the rift in relations between the Atlantic partners.²²⁷

This conciliatory sentiment was lost on the Carter administration. In Washington, Brzezinski and his aides were confused by Bonn's desire to issue a joint declaration. Adding to the confusion was that Paris was adamant that, if there was to be a joint statement, it be included or at least informed. Giscard felt not only left out but also worried that the FRG was making too many concessions to Carter. The nuclear industries of France and Western Germany both needed the international export market to thrive and stay solvent. If the economic giant of Western Europe unilaterally sided with the position of the United States it might close export options for other European Nuclear Supplier nations, such as Great Britain and France. For them, European multilateralism was emerging as the best option to counter the overwhelming economic and political dominance of the United States.²²⁸

France Seeks Closer Economic Ties with the FRG

The nuclear nations had had no idea in early February 1977 that Carter would attempt to convince them to abstain from developing reprocessing technology as well. The signals

²²⁷ "Fernschreiben: Plan einer gemeinsamen deutsch-amerikanischen Erklärung zur Nichtverbreitungspolitik", March 31, 1977, Karton 36445, Politisches Archiv des Auswärtigen Amts, Berlin.

²²⁸ "Memorandum for Dr. Brzezinski from the Situation Room - Noon Notes", April 29, 1977, NLC-1-2-1-48-5.

emanating from Carter's proliferation policies had confused his European partners and would convince France, Great Britain and Japan over the next few months that a joint opposition to Carter's proliferation policies would send a strong message to Washington. Opposition culminated during the G7 meeting in May, when Carter was faced with a unified front against his plan to ban reprocessing.

Paris informed Bonn early in February 1977 that the Carter administration had sought high-level talks with President Giscard about nonproliferation. These talks between France and the United States were scheduled for March.²²⁹ Before they took place, Schmidt and Giscard discussed the Brazil deal during private talks in Paris in February. Both statesmen acknowledged that sending reprocessing technology to Brazil did carry risks. If the FRG provided Brazil with reprocessing technology the South American nation would probably create nuclear weapons. Therefore, the American arguments had merit and needed to be taken seriously. Nonetheless, Carter's brash approach riled both Giscard and Schmidt. They rejected any right of the United States to interfere in their nations' business dealings. Giscard was not yet sure which direction Carter's new proliferation policies would take. He therefore wanted Schmidt to consider a closer economic collaboration of their nations' nuclear sectors. Closer cooperation would strengthen their nations' ability to withstand economic pressure from Washington.²³⁰

As a result, Giscard and Schmidt decided to give a joint press conference concerning proliferation. The two statesmen agreed not only that it would suit the national interests of

²²⁹ "Fernschreiben: Nukleare Proliferation - französisch-amerikanische Gespräche", May 2, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

²³⁰ "Vermerk über das Vier-Augen-Gespräch des Bundeskanzlers mit Präsident Giscard d'Estaing am 3. Februar 1977 in Paris", March 2, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

both nations to present a united front but also that a solution had to be found that would keep proliferation in check. They sought a solution that would limit the dangers of proliferation but not restrict their competitiveness on the world market. Carter's insistence that France and the FRG desist from exporting reprocessing technology was seen by Bonn and Paris as a potential threat to the future of Europe's international competitiveness in the nuclear market.²³¹

Compared with the the threat of proliferation, Carter signaled that economic considerations (at least non-American economic considerations!) were not a high priority. Carter projected a moral posture toward proliferation and a blasé attitude towards finance. This was contradicted, however, by the indirect results of the proposed reprocessing moratorium. U.S. firms had a near monopoly on the export of uranium and the moratorium on reprocessing gave American nuclear firms a direct advantage over their European rivals. Europe and especially France, Britain and the FRG feared therefore that they, as a consequence of an American economic stranglehold, could be eclipsed in the future by nuclear newcomers. The FRG and the French Republic worried that if the European nuclear industries were not allowed to develop their reprocessing technology, some threshold nations, not burdened by Washington's restrictions, would eclipse them.

The controversy strengthened an already strong Franco-German relationship. Historian Matthias Schulz argued that, starting in the 1960s, West Germany's partnership with the United States was important mainly for security reasons, while Bonn's relationship

²³¹ “Gespräch des Herrn Bundeskanzlers mit dem französischen Staatspräsidenten Giscard d’Estaing vom 04.02.1977 im Elysee-Palast in Anwesenheit von Premierminister Barre sowie der Herren Aussenminister Genscher und De Guiringaudi”, April 2, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

with France was the foundation for German integration into the European community and a vibrant West European economy. In order to avert German hegemony in Western Europe, France needed to “undertake a necessary long-term gamble” by cooperating closely with Bonn in order to create the conditions (stable currencies and energy prices) necessary to grow the French economy. Schmidt, on the other hand, believed that, due to the abysmal state of the international monetary system and the atrocious Carter administration, Europe could no longer rely solely on American economic hegemony.²³²

Yet taking a strong stance against Carter was not as easy for Bonn as it was for France. France was already a nuclear power while West Germany had no intentions of becoming one. Also, France had never signed the NPT, but Bonn had. The FRG therefore was bound by stricter controls than the French Republic. Furthermore, the French already had enrichment and reprocessing facilities. West Germany had only partial ownership over Urenco which was situated in the Netherlands. Any decisions at Urenco required the approval of the Dutch and the British. And, given Washington's ability to apply pressure on the Dutch and British, their approval of any policy that challenged Washington was very unlikely. Finally, West Germany was dependent on the United States to defend it against the Soviet Union. France was a nuclear power in its own right and was less dependent on the protection from the Western superpower.²³³

In early February 1977, Schmidt was unsure if a stand-off with the Carter administration - so early on - was a good idea. There was no way to foresee how the new

²³² Matthias Schulz, “The Reluctant European: Helmut Schmidt, the European Community, and Transatlantic Relations,” in *The Strained Alliance*, edited Matthias Schulz and Thomas Alan Schwartz (Cambridge; Washington: Cambridge University Press, 2010), 279.

²³³ “Vermerk über das Ministergespräch am 7. Februar 1977”, July 2, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

administration would react to a major confrontation. In fact, Schmidt, talking with Giscard on February 7, stated vaguely that Carter would, if tested, not react in a far-sighted manner. He told Giscard that it would be wise to give the new administration four to six months to acclimate before they confronted it, since at the moment the Carter administration was “still making rookie mistakes.”²³⁴

Giscard saw the situation differently. He perceived Schmidt's hesitation as “weakness” and pushed for an immediate and “strong reaction” to the Carter administration's emerging policy on nonproliferation. The French President believed that a joint “gesture of cooperation” from Bonn and Paris would relieve some of the pressure from Washington. A jointly issued and strongly worded statement criticizing Carter's new stance toward proliferation would send a potent signal.²³⁵

Three days later, Schmidt and Foreign Minister Genscher discussed France's interest in closer collaboration with the West German nuclear sector. The Chancellor asked for an analysis of potential French-German nuclear cooperation, detailing the possible advantages and strains that could arise: “Where was French scientific and industrial nuclear development in comparison to the German industry? What would the impact be on the labor market and foreign policy? What were possible reactions of the United States, Great Britain and other allied nations?” They also mulled over the possibility of constructing a reprocessing facilities in cooperation with France's nuclear industry.²³⁶

²³⁴ Ibid.

²³⁵ “Vermerk über das Ministergespräch am 7. Februar 1977”, July 2, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

²³⁶ “Vermerk über das Ministergespräch am 10. Februar 1977”, July 2, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

The Almelo incident, caused by the Netherlands' unstable domestic politics and interference by Washington, had made an impression in Bonn. As a direct result, Genscher and Schmidt discussed the possibility of constructing a German enrichment facility near the French border on West German soil, if the Dutch kept blocking the expansion of Almelo. The troubles the FRG was experiencing with the export of enriched uranium to Brazil from the Almelo facilities had convinced Schmidt that the FRG needed other options to deliver uranium to its export partners. Schmidt wanted to examine France's domestic politics closely in case Paris turned out to be as malleable as the Netherlands, before risking a repeat of the Almelo fiasco.²³⁷

In early February, when delegations from the United States and the FRG met for talks concerning the Brazil deal and proliferation, the ongoing French-German meetings were not mentioned. It appears that the Carter administration was not fully aware that Paris and Bonn were moving closer in response to its pressures on nonproliferation. In fact, Brzezinski implied that Paris had been more cooperative than the FRG.²³⁸

Beginning in March, Bonn started to perceive Carter's new proliferation policies as an attempt to turn the NPT into an instrument for American domination over the western nuclear industry. Paris and Bonn interpreted Washington's attempt to forbid reprocessing not just in the Third World but also in Europe as a foreboding sign of what Europe could expect from a new American led nuclear world order. Accordingly, Schmidt and his team started to take Giscard's advances very seriously.²³⁹

²³⁷ Ibid.

²³⁸ "Official Response - U.S. Policy Toward Brazil", March 11, 1977, NLC-128-12-5-23-6.

²³⁹ "Ergebnisvermerk beim Bundeskanzler am 14. Februar 1977", February 14, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

While waiting for the American-Brazilian consultations to start, the German Foreign Ministry in early March began planning for closer French-German consultations. The Schmidt administration, shrewdly, planned to take advantage of the difficulties of the Troika and Almelo. Bonn was convinced that, since the difficulties of the Troika were partially due to the political weakness of the government coalition in the Netherlands, the FRG could essentially blackmail the Dutch into approving the uranium exports to Brazil. The Foreign Ministry assumed that Dutch Premier Joop den Uyl would be alarmed by the potential economic loss caused by a break-up of the Troika and its facilities in Almelo, and would fear the domestic backlash it would generate. France's eagerness to cooperate on the nuclear market made the German threat credible. Paris' admission into the Troika, as either a replacement for the Dutch or as a new member, had many advantages. Bonn and Paris believed that an enlarged Troika could create a European nuclear "power-cluster" to contest any future nuclear regimes that Carter proposed. The function of such a "power cluster," as Giscard and Schmidt envisioned, was to balance American power. It can be compared to the function of the European Atomic Energy Community (Euratom). While the American-led IAEA was responsible for enforcing the NPT throughout the world, Euratom was responsible for enforcing it in Europe, giving Europeans some independence from the United States. Giscard and Schmidt's nuclear "cluster" could function either as a powerbroker, gaining the formal right to reprocess, or go "rogue" and claim the right to reprocess uranium despite Washington's opposition. Giscard and Schmidt decided that if Washington established a

worldwide nuclear regime, a united Europe would have enough clout to enforce at least their own domestic energy needs, reprocessing included.²⁴⁰

Brazil's reaction to Carter's Nonproliferation Policies

The Europeans were not the only ones worried about Washington's nonproliferation policies. Brazil was also targeted by Washington to give up the nuclear deal with West Germany. Brasilia, just as Bonn, was skeptical of Carter's new policies and resisted American interference. Historian Allan Hammond wrote that Carter's "uncompromising and blunt" diplomatic initiatives, had the "opposite of their intended effect." The German-Brazilian deal was burdened by many troubles that might have slowed or even ended it before it was scheduled to be completed in the 1990s. Yet, as the documents prove, Carter's pressures made it politically difficult for President Geisel to abandon the project without losing face and sacrificing Brazilian national pride.²⁴¹

Jimmy Carter's attempt to formulate U.S. proliferation policy found in Brazil a multifaceted challenge, defying easy explanation. The Nixon doctrine had classified Brazil as the regional powerhouse of Latin America. It was the strongest political and economic ally of the United States in the region. With its 110 million people, "a territory larger than the continental United States, and one of the most dynamic economies in the developing world," Brazil was poised to become a global power by the 21st century if its rising energy needs could be met. Brazil imported a whopping 80 percent of its oil. And, despite its many

²⁴⁰ "Deutsch-französische Zusammenarbeit auf dem Gebiet der zivilen Nutzung der Kernenergie", February 15, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁴¹ Allen L. Hammond, "Brazil's Nuclear Program: Carter's Nonproliferation Policy Backfires," *Science* 195, no. 4279, New Series (February 18, 1977): 657–659.

rivers, some experts believed that its impressive hydro-electric program was running out of convenient locations for new hydro-electric stations. Nuclear energy seemed to be the solution for the slumbering Latin Giant.²⁴² Energy independence, realized through nuclear energy, was not only part of the great power aspiration harbored by President Ernesto Geisel, but economic necessity.

On January 2, 1977 Bonn was informed that Brazil's Geisel administration was open to discussing nonproliferation with the incoming American administration. The Brazilians, however, to reassure their West German partners, had excluded the German-Brazilian deal from the discussion.²⁴³ In a letter from Vance to Brazilian Foreign Minister Silveira later in the month, the Secretary of State assumed that Brasilia wished to continue the bilateral and multi-lateral talks that had proved so useful under the Ford administration. Vance expressed his wish to meet as soon as possible. The letter signaled to the Geisel administration that Carter would keep up the consultation mechanisms established by Kissinger. At this time, despite Carter's rhetoric used during his campaign and as President-elect, Brasilia did not foresee any major disagreements between the two administrations but categorically planned to reject any modifications to the nuclear deal with West Germany.²⁴⁴

The Schmidt administration was skeptical that these consultations would yield any results. To Bonn, the new President's policies indicated that he wanted to overturn the global nuclear safeguard system of the NPT, the IAEA and the Nuclear Suppliers Club. Now,

²⁴² Jonathan Kandell, "Brazil Bitter at U.S. Effort to Impose Nuclear Curb," *The New York Times* (March 28, 1977).

²⁴³ "Fernschreiben: Deutsch-brasilianische Zusammenarbeit in der friedlichen Verwendung der Kernenergie - deutsch-amerikanische Konsultationen über Aktuelle Fragen der nuklearen Exportpolitik", August 2, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁴⁴ "Fernschreiben: Beziehungen Brasiliens zu den USA", January 28, 1977, Karton 36442, Politisches Archiv des Auswärtigen Amts, Berlin.

ironically, Washington seemed eager to undermine the NPT while Brazil, which had not even signed it, had developed a contract with the FRG that was not only based on the rules and guidelines set forth by the NPT but whose strictness surpassed it. By disregarding the judgement of the IAEA, which had approved the contract, the Carter administration was bypassing the established channels of the IAEA-NPT regime.²⁴⁵

German State Secretary Karsten Detlev Rohwedder was informed on February 8, 1977 that Vance had contacted the Brazilian Foreign Minister to ask Brazil to suspend the importation of the reprocessing facilities for an indefinite period in order to work out alternative options. The Geisel administration informed Schmidt that it was open to meet with the new American administration in order to continue dialogue about nonproliferation. Brasilia signaled to Bonn that it did not take Washington's promise of an unlimited fuel-supply seriously, since in the past the United States had failed to deliver promised uranium deliveries. In a clear rebuff to Washington, the Geisel administration indicated that it looked forward to bilateral talks, but not until the new American administration had been in office long enough to fully develop its new nuclear policies.²⁴⁶

Foreign Minister da Silveira reminded Vance that the deal with Germany included not only restrictions that transcended IAEA guidelines but that it had been approved by the IAEA itself. The Geisel administration viewed Carter's attempt to limit the nuclear deal as an act of sabotage that hindered the legitimate technology transfer between two sovereign states.²⁴⁷

²⁴⁵ Ibid.

²⁴⁶ "Ergebnisprotokoll über die 1. Sitzung des Bundessicherheitsrates am Mittwoch, dem 2. Februar 1977, 14:30 Uhr, Bundeskanzleramt, Kleiner Kaninetsaal", February 14, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁴⁷ Ibid.

Additionally, the new American administration made several faux-pas that angered the Geisel administration and set the tone for the subsequent consultations. Foreign Minister Silveira had informed Vance on February 3, 1977 that Brazil would not drop the reprocessing clause from the deal with West Germany, insisting that it was Brazil's prerogative to make a deal backed by international law. Silveira's statement did not sit well with Washington. A memorandum from Brazil was sent to the Schmidt administration describing the American reaction.²⁴⁸

The U.S. ambassador to Brazil, John Hugh Crimmins, approached the Brazilian ambassador in Washington, Paulo Sergio Pinheiro, the day after da Silveira informed Vance of his intentions not to drop the reprocessing clause from the deal. Crimmins wanted to make sure that Vance had “understood correctly,” that Brazil would not give up the sensitive parts of the deal. Crimmins pushed Pinheiro to at least wait until the further talks had occurred. When Pinheiro asked Crimmins if Washington “expected” Brazil to sever its legitimate business deal with the FRG, Crimmins responded in the affirmative. This demand did not sit well with Brasilia.²⁴⁹

Additionally, stoking the glowing embers of Brazilian resentment, the Geisel administration had asked the Carter administration repeatedly to keep their consultations private. Vance and Mondale, against Brasilia's wishes, went public. After Pinheiro informed Crimmins that Brazil had no intention of canceling any part of its deal with the FRG, but was open to more consultations, Mondale, during his Western Europe trip, stated that Washington

²⁴⁸ “Fernschreiben: Deutsch-brasilianische Zusammenarbeit in der friedlichen Verwendung der Kernenergie: Briefwechsel zwischen den Aussenministern der USA und Brasiliens”, February 3, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁴⁹ Ibid.

“*prohibited* the transfer of this [reprocessing] technology.” The U.S. administration “blundered” again when Vance held a press conference and demanded publicly that the deal be put on hold. The Geisel administration was furious and was worried that Mondale's remarks would stir a nationalist reaction among Brazilians angry at U.S. interference in a domestic issue. It is not clear if Vance and Mondale's 'blunders' were part of a coordinated strategy, sanctioned by Carter, to pressure Brazil into complying with Washington's wishes, or if they had simply gone rogue.²⁵⁰

The public dispute between the United States and Brazil worried Riordan Roett, one of the leading American experts on Brazilian affairs. On February 8, 1977, he wrote to the Vice-President expressing concern that Mondale's negative comments about the Brazilian-German nuclear deal had produced “strong and generally negative reactions in Brazil.” The nuclear agreement, Roett continued, was important to Brazil as a source for alternative energy and national pride.

Whether or not the United States believes the statements of the Brazilian government that the purpose of the agreement is energy and not bombs – and it appears clear that the United States does not – there is an important question of style and method involved in dealing with Brazil. Your remarks probably intensified an already delicate situation between the two countries, unfortunately.²⁵¹

Roett supported the goal of Carter's policies, but believed that if the United States hoped to make headway with nonproliferation and human rights, it needed to be more sensitive to local sensibilities. Carter's brash style was out of step with the new realities that had led to “heretofore impossible opportunities for countries such as Brazil to move rapidly in

²⁵⁰ Ibid. Emphasis mine.

²⁵¹ “Letter from Riordan Roett - U.S. Policy Toward Brazil”, March 11, 1977, NLC-1-1-2-61-0.

international prestige and influence.” The new administration would be well advised to acknowledge Brazil's nationalism and its international aspirations. Brazil, Roett added, was a moderate state in the Third World and was too important a partner to lose. Under no circumstances should the United States treat Brazil as a client state or awaken the suspicion that it was doing so.²⁵²

Roett's warnings were not heeded. Schmidt, three days after Vance's press conference, informed Brasilia that because of pressure from Washington, he had decided to wait until after the American-Brazilian consultations before issuing the export licenses for the reprocessing facilities. These consultations were scheduled for the beginning of March, and that meant a delay of another month. This decision caused an uproar from Geisel and da Silveira. While satisfied that the FRG was determined to uphold to its contractual obligations, Geisel's administration was “surprised and concerned” that Bonn planned on waiting to issue the licenses until Christopher visited Brasilia in March. The Brazilian President insisted on the fulfillment of the contract no matter what the outcome of the consultations with Washington would be. He was reassured by Bonn that the FRG had not mentioned its intention of waiting to Washington. Brazil would have viewed this as weakening its position during the upcoming talks.²⁵³

In the meantime, the Dutch Foreign Minister Van der Stoel had scheduled a visit to Brazil for February to meet with Geisel and da Silveira. He planned on discussing the political turmoil he faced at home, which was directed against the expansion of Urenco. He

²⁵² Ibid.

²⁵³ “Drahterlass: Deutsch-amerikanische Konsultationen über Kernenergie und Nichtverbreitung am 10.-11. Februar 1977”, February 16, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

was faced with a difficult choice. The Troika expected to expand the Urenco facility to cope with the increased demand for enriched uranium for Brazil's nuclear facilities, at least until the Brazilian's own enrichment and reprocessing facilities were up and running. On the one hand, this was essential to Urenco's solvency and survival, and the Dutch economy would take a big hit if the deal failed. On the other hand, Van der Stoel's shaky government faced stiff resistance from the opposition parties and even from members of his own ruling coalition who protested against exporting uranium to Brazil. While Da Silveira was willing to meet with the Dutch Foreign Minister he informed him beforehand that Brazil had signed a contract with the FRG and not the Netherlands. Van der Stoel's attempt to engender sympathy for his difficult situation would fail. The Brazilian government was not concerned about Dutch domestic politics.²⁵⁴

Van der Stoel visited Brazil on February 18 and met with da Silveira. The Dutch Foreign Minister tried to convince Brasilia to sign the NPT, or if that failed, to accept Washington's offer for an unlimited uranium supply in return for declining the German reprocessing facilities. Due to the Netherlands' involvement in Urenco, Van der Stoel favored the first option, that Brasilia sign the NPT. Not surprisingly, he made no headway, and da Silveira informed him that the export licenses for the uranium from Urenco had to be issued by April 1, 1977.²⁵⁵ Otherwise, Brasilia would cancel its uranium deliveries and look for other venues to purchase fuel for its newly acquired nuclear reactors, and the Dutch

²⁵⁴ “Drahterlass: Deutsch-amerikanische Konsultationen über Kernenergie und Nichtverbreitung am 10.-11. Februar 1977”, February 16, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁵⁵ “Fernschreiben: Besuch Aussenministers Van Der Stöls in Brasilien”, February 22, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

government (as well as the British and the German governments) would have to deal with the economic fall-out.²⁵⁶

Foreign Minister van der Stoel's visit to Brazil did yield some unexpected outcomes. Apparently, the Dutchman had not informed his Troika partners about his visit. David Owen, talking on February 21, the same day he became British Foreign Secretary, with German representatives, voiced his displeasure over Stoel's maverick stunt. It caused the British Foreign Secretary to view the Dutch as unreliable; as a consequence, he promised Genscher closer cooperation between the FRG and Britain on nuclear issues. If need be, Owen assured the Schmidt government, London would seek a way to secure the delivery of uranium from Urenco without the Netherlands.²⁵⁷ In return, the British government sought German support for an "offensive nonproliferation strategy" that would prohibit any future exports of technology deemed sensitive and thus counter any potential criticisms from Washington.²⁵⁸

There was another positive consequence from Van der Stoel's visit for Bonn. The Geisel administration began to appreciate the strains that their nuclear agreement put on Germany's relationship with not just the United States but its European partners as well. The Geisel administration developed some compassion for Bonn's difficult situation and started to comprehend the conundrum that Schmidt was in. Nonetheless, Brasilia, echoing Giscard's argument, stressed that delaying issuing the licenses for the reprocessing facilities would simultaneously weaken Brazil's position and confuse Washington about Bonn's intentions. Bonn countered that that while it expected to issue the export licenses, to do so before the

²⁵⁶ "Drahterlass: Besuch AM Van Der Stöls in Brasilien", February 21, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁵⁷ Nuclebas was Brazil's state-run energy monolith. It was in charge of implementing the nuclear project.

²⁵⁸ "Drahterlass: Besuch AM van der Stöls in Brasilien", February 21, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

trilateral consultations were completed might be interpreted by Washington as disrespectful, thereby damaging transatlantic relations. Better to show good will and wait until after the consultations, which were scheduled for the beginning of March.²⁵⁹ Although the Geisel administration was irritated by the delay, its advantages were becoming clearer. It would allow Brazil to show its goodwill to Carter, while not losing anything substantial. Just listening would cost the Brazilians nothing.²⁶⁰

On March 2, 1977 Brazil and the United States met for high-level bilateral talks to discuss the controversial nuclear deal with West Germany. Warren Christopher, the U.S. Deputy Secretary of State, and Foreign Minister Antonio Azeredo da Silveira made no progress during the meeting. Christopher was instructed by the President "to cancel [the] two clauses in the nuclear agreement" that dealt with the uranium enrichment plant and reprocessing unit. Brazil refused to change the clauses but agreed to further talks.²⁶¹ While Silveira agreed to participate in further discussions about nonproliferation, he refused to agree with Christopher that the nuclear deal was a form of proliferation. The Brazilian Foreign Minister saw no alternative to the existing deal.²⁶²

Bonn, in the meantime, viewed the on-going bilateral consultations in Brasilia with trepidation. Although Silveiro assured the Schmidt administration that Brazil planned to implement all articles of the deal, including the contested enrichment and reprocessing

²⁵⁹ "Fernschreiben: Deutsch-amerikanische Konsultationen über Kernenergie und Nichtverbreitung am 10.-11. Februar 1977 - Unterrichtung des Brasilianischen Aussenministers", February 18, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁶⁰ "Fernschreiben: Gespräch Van Der Stöl - Azeredo", February 27, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁶¹ "Brazil, U.S. at an Impasse on German Nuclear Deal," *The New York Times* (March 3, 1977).

²⁶² "Internationale Aspekte der nuklearen Exportpolitik im Rahmen der Nichtverbreitungspolitik", March 4, 1977, Karton 36450, Politisches Archiv des Auswärtigen Amts, Berlin.

facilities, Christopher claimed that the last word had not yet been spoken. The Schmidt government anticipated that Christopher, during the planned meetings on March 10-11 between the FRG and the United States, would push for more meetings as a tactic to further stall the implementation of the deal.²⁶³ With this as a background, German diplomat Hermes and Brazilian Foreign Minister Silveira met on March 9 and both affirmed their governments' steadfastness and determination to implement all parts of the nuclear deal.²⁶⁴

At the same time, relations between Washington and Brasilia were worsening. A clear signal was that Geisel rejected any security and military assistance from the United States. On March 12 "Brazil canceled its 25-year-old military assistance treaty with the United States in a dispute over human rights." The *New York Times* interpreted Brazil's decision to end the Military Aid Pact as a symbolic move. Brazil, over the last few decades, had started to build up its own weapons industry and as a result had become less dependent on U.S. aid. The State Department, required by Congress to prepare human rights reports on all nations receiving military aid from the United States, released an unfavorable report for Brazil. The report described how the Brazilian military government tortured political prisoners. Brazil's Foreign Ministry believed this report to be "an intolerable interference in its internal affairs," and as a consequence turned down fifty millions dollars in proposed military aid.²⁶⁵ Carter, writing on the margin of the document that informed him of Brazil's refusal, coolly stated: "Acceptance of our aid is voluntary."²⁶⁶ Despite the Brazilians' rejection

²⁶³ "Fernschreiben: Deutsch-amerikanische Konsultationen über Nuklearenergie und Nichtverbreitung", March 4, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁶⁴ "Brasilianisch-amerikanische Gespräche - Fernmündliche Unterrichtung Staatssekretär D. Hermes durch Botschafter", September 3, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁶⁵ "Brazil Cancels U.S. Military Pact over Human Rights Dispute," *Los Angeles Times* (March 12, 1977).

²⁶⁶ "Memorandum for the President from Warren Christopher", March 5, 1977, NLC-128-12-6-6-4.

of U.S. military aid, Guy Brandao, a spokesman for the Brazilian Foreign Ministry, was eager to assure the United States that Brazil was still an ally: "It doesn't change anything. It simply ends an assistance agreement. Nothing more than that."²⁶⁷ At the end of March, despite Brandao's public assurances, relations between the United States and Brazil would deteriorate to such a low that Brazil asked Bonn to stop its nonproliferation consultations with Washington.²⁶⁸

There is no doubt that Carter's resistance to the nuclear deal, together with the human rights report, contributed to the worsening in relations between Washington and Brasilia. Brazil saw Washington's actions as "intolerable interferences in their country's internal affairs." As an emerging world power, Brazil's outrage was understandable.²⁶⁹ Brazil's preeminent role in Latin America, geographically, militarily and economically had given rise to a heightened sense of nationalism and the diplomatic rows with Washington were like kindling, stoking the fires of nationalism to greater heights.²⁷⁰

Carter's policies had unexpected consequences. According to journalist Gary Neeleman, they were emboldening the opposition to Geisel. Neeleman believed that Washington's heavy-handedness could provoke another crackdown in Brazil.²⁷¹ The Brazilian ambassador in Washington, Joao Baptista Pinheiro, confirmed that Carter's policies were encouraging opposition to the Geisel administration. At the same time they stirred Brazilian nationalism. Even the leaders of the center left opposition party, traditional enemies of the

²⁶⁷ "Brazil Cancels Military Aid Treaty Over U.S. Report on Human Rights," *The New York Times* (March 12, 1977).

²⁶⁸ "Transfer nuklearer Technologie - Brasilienabkommen", March 25, 1977, Karton 36444, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁶⁹ "Ruffling Some Foreign Feathers," *Los Angeles Times* (March 15, 1977).

²⁷⁰ Ibid.

²⁷¹ "Letter from Gary Neeleman to President Carter", April 6, 1977, NLC-10-1-8-5-6.

military regime, were spurred to back the government's insistence "on the inviolability of the nuclear accord."²⁷²

In part to provide perspective on the tensions with Brazil, the National Security Council, analyzed U.S. policy toward Latin America in March 1977. It noted that Brazil and its neighbors wanted the United States to respect their sovereignty. The NSC astutely observed

United States goals in the region were less focused – and often intrinsically negative. We want them not to aggravate East-West tensions; not to deny access to their energy resources and other raw materials; not to develop nuclear capabilities. In sum, we want sufficiently stable and healthy economic and political growth not to weaken our security, create new global problems, or offend our values.²⁷³

Latin American nations viewed Washington as “out of step with the processes of change” in the Southern Hemisphere. As a result Washington was left with diminished political clout and leverage. The NSC analysts believed that recent pressures on Brazil's government, such as the human rights report and the on-going row over proliferation had been counterproductive and “ [had] raised new fears [in Latin America] about United States intervention and paternalism.”²⁷⁴

The NSC asserted that Latin American governments believed that “we [Washington] alternately take them for granted, then expect too much of them. They suspect that U.S. leaders have time for everything and everyone except for Latin America. They feel unheard, unappreciated, and discriminated against.” The perceived loss of U.S. power and clout after

²⁷² “Central Intelligence Agency Directorate of Intelligence - Memorandum - Impact of the US stand on human rights”, June 6, 1977, NLC-1-2-1-48-5.

²⁷³ “How Brazil Views the World - An Intelligence Assessment”, March 1978, NLC-128-12-5-23-6.

²⁷⁴ Ibid.

Watergate and Vietnam “raised doubts about our will and our ability to lead” in Latin America.²⁷⁵

The report correctly stated that Washington's public criticism of Brazil's nuclear deal with West Germany played right into the Brazilians' belief that the United States only interacted with Brasilia in order to criticize. Carter's clumsy diplomatic handling of the situation made sure of this and assured that Geisel, despite American objections, went ahead with the deal. On April 4, Bonn informed Christopher officially of Schmidt's decision to issue the export licenses.²⁷⁶ Two weeks later, directly after Carter pitched his new energy policy to Congress, the German Foreign Ministry approved the export licenses.²⁷⁷

Economic Summit in London - Europeans united against Carter

While Washington's attempt to stop the Brazil deal was foiled, the President was nonetheless successful in his push for a moratorium on the export of reprocessing technology. At the same time, Carter's embargo on reprocessing technology impeded his Atlantic partners (and Japan) from pursuing or using reprocessing technology themselves. As a consequence, a rift between the United States and Europe opened, which was visible during the economic summit in May in London.²⁷⁸

In his energy policy speech of April 7, 1977, Carter called for a new global study to identify nuclear fuel-cycles that were more “proliferation resistant”, than reprocessing. The

²⁷⁵ Ibid.

²⁷⁶ “Fernschreiben: NV-Politik - Vollzug des deutsch-brasilianischen Vertrages”, April 5, 1977, Karton 36445, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁷⁷ “Verfahren im Zusammenhang mit der Erteilung der Ausfuhrgenehmigung zum Brasilien-Abkommen”, May 4, 1977, Karton 36445, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁷⁸ Ibid.

President had already proposed to set up a study for an International Nuclear Fuel Cycle Evaluation (INFCE) in May at the London G7 meeting. Although Carter's initiatives attempted "to discourage the development and spread of dangerous nuclear technologies and to minimize worldwide accumulation of potential nuclear explosives in peaceful power programs," the involvement of Japan, France, Britain and West Germany in reprocessing technology would make it difficult for them to warm to the new initiatives.²⁷⁹ The Schmidt government took the President's April 7 declaration, that a nuclear program could be sustained without a full-cycle, as validation that Washington was attempting to push other nations to abandon not only future reprocessing plans but also already existing programs.²⁸⁰ The German public also reacted negatively to Carter's energy initiative. *Der Spiegel* described it as the bullying of an economic giant. Even before Carter took office, "he tried to force the Federal Republic to renege on its contract with Brazil." When this failed, "he made Congress pass a law which chained each country automatically under American control, if it used uranium from the States." The Carter administration, the article stated, made it clear that any country that wanted to buy U.S. uranium, would have to agree to the conditions the Americans imposed.²⁸¹

At the same time, Carter, on April 3, 1977, complained to Brzezinski about Schmidt's obnoxious behavior towards him. The National Security Advisor responded by explaining that Schmidt was under pressure at home, partly because of Washington's new initiatives, and that the G7 meeting in May "would not be a success if we were not more responsive to

²⁷⁹ Brzezinski, *Power and Principle: Memoirs of the National Security Adviser, 1977-1981*, 132.

²⁸⁰ "Nichtverbreitungspolitik - Erklärung des Präsidenten zum 07.04.1977", April 4, 1977, Karton 36445, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁸¹ "Was ist das nur für eine Führung?" - Die Politik des unberechenbaren Jimmy Carter," *Der Spiegel*, April 1978.

European sensitivities.”²⁸² Brzezinski admitted in his memoir that “the importance of the initial export licenses [from the FRG to Brazil] was overemphasized [by the Carter administration],” and that the issue was not only dividing Washington from Germany and France unnecessarily, but that the G7 meeting in May occurred in a hostile environment because of it.²⁸³

Opinions on the success of the G7 differed. British Prime Minister James Callaghan wrote that Carter had received a “verbal browbeating from Schmidt in London” which had led the President to “put the word out that he might not attend any more such conferences.”²⁸⁴ Brzezinski believed that the G7 meeting had been successful. Carter was thoroughly prepared and “held his own” in his first outing with the leaders of the Western world. The National Security Advisor went so far as to describe the new President as an emerging star.²⁸⁵ Carter himself believed that he had “established a personal rapport with the allies” during the meeting, but that “differences on the nuclear issue were only papered over.”²⁸⁶

The G7 meeting in May of 1977 was tense. The assembled leaders were worried about the state of the world economy as well as recent U.S. policies. The economies of West Germany and Japan were outperforming the rest of the industrialized world. From the onset, Carter humbly stated that he wanted to learn from the more experienced leaders. Writing in his diary on May 6, on the eve of the G7 in London, Carter remarked that he was at a disadvantage when discussing financial matters, since “ Callaghan, [Yasuo] Fukuda [of Japan], Giscard, and Schmidt have all been finance ministers and have economics as a

²⁸² Brzezinski, *Power and Principle: Memoirs of the National Security Adviser, 1977-1981*, 292.

²⁸³ *Ibid.*, 131.

²⁸⁴ James Callaghan, *Time and Chance* (London: Collins, 1987), 485–6.

²⁸⁵ Brzezinski, *Power and Principle : Memoirs of the National Security Adviser, 1977-1981*, 293.

²⁸⁶ Jimmy Carter, *White House Diary* (New York: Farrar, Straus and Giroux, 2010), 69.

background.”²⁸⁷ The President's humility did not sit well with the other statesmen who were hoping that Washington would take the lead and “assume its responsibility as the world's leading economic power.”²⁸⁸

When Carter did attempt to lead, by reintroducing his locomotive theory, he was shot down. Schmidt not only rejected Carter's theory again, but told the President that, since West Germany's economy was outperforming America's, he needed no economic lectures from Washington. Furthermore, Schmidt was angry that Carter raised the nuclear issue during the talks and as a consequence “squarely attributed the world's economic problems” to American economic policies.²⁸⁹

Carter had specifically asked that the issue of proliferation be added to the agenda of the summit. During the meeting, it became clear that all members agreed with Carter that stricter guidelines and regulation were needed. Carter wrote in his diary that he told the other statesmen that the United States and Canada were both extremely strict in their sale of natural and enriched uranium to nations that had not signed the NPT and wished other nations would follow their lead. This provoked a three hour debate about nonproliferation. In his diary Carter wrote how he believed that the NPT was inadequate:

Some of the nations have signed a nonproliferation treaty and agreed not to produce weapons, like Japan and Germany. Others have signed the NPT and are producing weapons like us. Others are producing weapons and haven't signed the NPT, like France. Some are heavily dependent on imports of nuclear fuel. And some, like the United States and Canada, are heavy exporters of nuclear fuels.²⁹⁰

²⁸⁷ Carter, *White House Diary*, 46–47.

²⁸⁸ Helmut Schmidt, *Men and Powers : a Political Retrospective* (New York: Random House, 1989), 67.

²⁸⁹ Matthias Schulz, “The Reluctant European: Helmut Schmidt, the European Community, and Transatlantic Relations,” 297.

²⁹⁰ Carter, *White House Diary*, 48.

The attending statesmen agreed to strengthen the NPT. They disagreed, however, on how to do it. Disagreements about reprocessing would split the G7 into two opposing camps: the United States and Canada (the two biggest western uranium exporters) against the other five nations who were dependent on uranium exports from North America.

Carter's solution was three-pronged. First, he planned to outlaw reprocessing domestically. Second, the President attempted to reassure the other statesmen that Washington would collaborate with them to find a multilateral solution to the problems that a moratorium on reprocessing would cause. Third, Carter informed them that the United States, as outlined in his controversial April 7 energy policy speech, would enlarge its uranium enrichment capabilities. This, he asserted, would make reprocessing unnecessary.²⁹¹ In response, Schmidt asked Carter and Canadian President Trudeau if they would then agree to store all the additional uranium that would accrue if reprocessing was halted. Carter told the West German Chancellor that America would not permit other nations to deposit their nuclear waste on American soil. Carter pointed out to Schmidt that “you could store all the nuclear waste there was on one square mile if you were willing to accept its presence.”²⁹²

The President, instead of forbidding reprocessing flat-out, had assumed that the other industrialized nations would follow Washington's lead in the matter.²⁹³ This proved to be wrong. The other statesmen viewed the American President's solution not just as unilateral

²⁹¹ “Vermerk über die Beratungen des Downing-Street-Gipfels am 7. Mai 1977 Nachmittags”, July 5, 1977, Karton 36446, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁹² Carter, *White House Diary*, 48.

²⁹³ “Vermerk über die Beratungen des Downing-Street-Gipfels am 7. Mai 1977 Nachmittags”, July 5, 1977, Karton 36446, Politisches Archiv des Auswärtigen Amts, Berlin.

but as rigged in Washington's favor. Carter promised that his administration would finish its study of the matter in two months, and he encouraged the six other leaders to do the same.²⁹⁴

Canadian Prime Minister Trudeau agreed with Carter about the dangers of proliferation. In an obvious stab at the FRG he added that at times it seemed that some nations believed proliferation to be part of the natural order of things. Indeed, the Schmidt administration had in the past stated that it believed that all nations would eventually acquire nuclear technology; that the spread of nuclear technology was as inevitable as the ascent of the automobile or cooking with fire.²⁹⁵

If a nation wanted nuclear potential, Schmidt asserted, it would eventually acquire it. The best solution would be to make the NPT less discriminatory. The NPT should simultaneously be more stringent and also more welcoming to nations that had not yet signed it. Bonn aspired to create a framework that would embrace as many states as possible. For the FRG, this was the only solution that would keep American domination at bay. Newly emerging nations, such as Brazil, had to be included in the new regime so that the industrialized nations could guide their ascent as a responsible nuclear nation. During the months preceding the G7 summit, German diplomats had approached the Brazilians and alluded to the possibility of Brazil joining the Nuclear Suppliers Club.²⁹⁶ The Geisel administration had shown cautious interest, while asserting that Brazil would not give up its aspirations to own a full-cycle and become energy independent.²⁹⁷

²⁹⁴ Ibid.

²⁹⁵ Ibid.

²⁹⁶ "Fernschreiben: Nukleare Exportpolitik - Fortsetzung des deutsch-brasilianischen Informationsaustauschs", May 4, 1977, Karton 36445, Politisches Archiv des Auswärtigen Amts, Berlin.

²⁹⁷ "Fernschreiben: Deutsch-brasilianische Zusammenarbeit bei der friedlichen Verwendung der Kernenergie", May 5, 1977, Karton 36446, Politisches Archiv des Auswärtigen Amts, Berlin.

Trudeau was still skeptical. For him there was an immense difference between finding viable energy solutions for a non-nuclear nation and giving them a full-cycle that included reprocessing. From the Canadian Premier's point of view prohibiting emerging nations from developing full-cycles was not discrimination but common sense. "But how can we make that clear without sounding condescending?" asked Schmidt. Brazilians, like most other nations, were fiercely patriotic and therefore resented outside interference in their domestic energy policy.²⁹⁸

President Giscard weighed in, stating that in his opinion every nation had the right to use nuclear power peacefully. The commercial use of nuclear energy could only develop, however, if an adequate supply of enriched uranium was available. At the moment the United States, and to a certain extent Canada, held a monopoly on the export of enriched uranium and the North Americans were behind in their deliveries. The French President announced, therefore, that starting the following year, France would produce enriched uranium for export. In addition, disregarding Carter's recommendations, the French nuclear industry would continue to use its reprocessing technology. France's and the FRG's arguments were similar. Both governments believed that only large countries, such as the United States and Canada, could handle nuclear waste deposits for an indefinite period, while, as Giscard put it, "medium sized countries such as France" had to rely on reprocessing.²⁹⁹

Takeo Fukuda, the Japanese Prime Minister, joined the discussion. Tokyo was also affected by Carter's moratorium on reprocessing. Carter knew already that Japan's Prime

²⁹⁸ Ibid.

²⁹⁹ Ibid.

Minister had strong objections to a reprocessing moratorium. As the NSC informed the American President on April 8, the Japanese reaction to his public comments about reprocessing had been mixed. While applauding the general sentiment, Fukuda hoped it would be possible to persuade Carter “not to impose his will on nations like Japan, which have (or will have soon) reprocessing facilities in operation.”³⁰⁰ Japan's irritation with Carter's policies stemmed from the fact that Tokyo had assumed that “previous American practices [initiated by the Nixon and Ford administrations] would continue” and had therefore already built a reprocessing facility at Tokai-Mura.³⁰¹

The Japanese Prime Minister reminded the other statesmen that Japan had been the only nation to suffer a nuclear attack. As a result, Japan had no intention of constructing nuclear weapons. Also, nonproliferation, because of Japan's history, was a priority for Tokyo. His nation's desire to use nuclear energy commercially should not be equated with proliferation. Fukuda explained that planning a nation's energy policy should be the prerogative of every government. Studies at the time, he lectured, projected an energy crisis in ten to fifteen years. Nuclear energy seemed to be the only solution for nations such as Japan. For them, just as for the FRG, reprocessing seemed essential. Therefore, Fukuda proclaimed, Japan would start building another reprocessing facility in the fall, despite Carter's objections. Also, Fukuda agreed with Schmidt that Carter's attempt to undermine the Brazil deal would severely damage the people's trust in not just international contracts but

³⁰⁰ “Memorandum - Japanese Reaction to Nuclear Reprocessing Statement”, April 8, 1977, NLC-1-1-4-44-7.

³⁰¹ Brzezinski, *Power and Principle: Memoirs of the National Security Adviser, 1977-1981*, 132.

also the NPT. Carter, listening to his fellow leaders, must have had a strong sense of déjà vu. Their arguments were echoing the language the Brazilians had been using for months.³⁰²

David Owen, the British Foreign Secretary, met with Schmidt and Giscard during the G7 for private talks. All three were concerned about the impact that Carter's nonproliferation policies would have on their respective nuclear industries. Owen agreed with Schmidt, Fukuda and Giscard and stated that Great Britain's nuclear industry, for the same reasons as theirs, needed reprocessing. The British, mirroring the perceptions of the FRG and France, believed that if the Brazil deal failed, the consequences could be greater than just the economic loss. It would signal to the rest of the world that Europe was not a reliable partner. This could cause future partners to choose U.S. firms over the European competition. Owen advised that "Europeans should not yield to any nonproliferation demands of the new administration in Washington. We have to have a plan and stick with it. Americans are not necessarily smarter than us."³⁰³ The French President weighed in and advised the German Chancellor that he believed that both France and the FRG would be strongly pressured by Carter to stop developing reprocessing technology. Schmidt was more optimistic.³⁰⁴ After months of quarrels with Washington, he believed that Carter "would have understood by now that we [the Europeans] could not give up that option [of reprocessing]."³⁰⁵

³⁰² Ibid.

³⁰³ "Fernschreiben: Besuch von Staatsminister von Dohnanyi am 21.02.1977 in London - Zusammenarbeit BRD-GB-Niederlande im Nuklearbereich", February 23, 1977, Karton 36443, Politisches Archiv des Auswärtigen Amts, Berlin.

³⁰⁴ "Fernschreiben: Reise des Bundeskanzlers nach Nordamerika - britisch-amerikanisches Verhältnis", May 7, 1977, Karton 36448, Politisches Archiv des Auswärtigen Amts, Berlin.

³⁰⁵ "Vermerk über das Gespräch des Bundeskanzlers während des Londoner Gipfeltreffens", March 6, 1977, Karton 36447, Politisches Archiv des Auswärtigen Amts, Berlin.

Aftermath of the Brazil Deal

The conflict over the export deal with West Germany had damaged relations between Washington and Brasilia. Carter, in order to mend fences, sent Terence A. Todman, Assistant Secretary of State for inter-American affairs and Frank A. Weil, Assistant Secretary of Commerce visited Brazil in May 1977. While Mr. Todman and Mr. Weil made no headway in changing Brazil's mind about the nuclear deal with West Germany, their visits nonetheless emphasized that "economic relationships between the two countries" were still strong and thriving. Todman diplomatically defused the humiliation felt in Brazil and West Germany about America's perceived interference in the affairs of their sovereign states. He stated that Brazil and West Germany were "sovereign and independent governments, free to make whatever agreements they wish." A month later, on June 5th, 1977, Rosalynn Carter, the wife of President Carter, visited Brazil. She was the third high-ranking American to visit Brazil since relations between the two countries started to deteriorate. Although Mrs. Carter had no official title in her husband's government, many observers knew that she was a close confidante of Carter on matters of policy.³⁰⁶ Her two day stay was a success and Brazil took notice of the attention that Washington showed. *O Estado*, Brazil's largest newspaper wrote that "a moment of tension between Brazil and the United States has been overcome." The newspaper went so far as to state that the "misunderstandings involving the problem of human rights in Brazil, the Brazilian-German nuclear energy pact and Brazil's status within the hemisphere" had all been solved. While the article clearly exaggerated, it revealed that

³⁰⁶ David F. Belnap, "U.S., Brazil Relations Mending: First Lady's Visit Likely to Improve Them More," *Los Angeles Times* (June 5, 1977).

the relationship between Washington and Brasilia, after Bonn had approved the export licenses, was improving.³⁰⁷

On the other side of the Atlantic, Schmidt likewise attempted to mend relations. The Chancellor wrote in a letter to Carter in June 1977 that the FRG stood behind Washington's nonproliferation initiatives. As a result, the Foreign Ministry planned to cancel any exports that involved sensitive materials, such as reprocessing technology. Schmidt added that this moratorium would be in place at least until new safeguards were established. Since Bonn assumed that Carter's policies would ultimately fail, the Chancellor was thereby leaving a window for future exports open. Chancellor Schmidt announced publicly on June 17, 1977 that "West Germany would no longer export sensitive nuclear technology that can be used to produce atomic bombs." Schmidt's concession did not include the dissolution of the controversial Brazilian nuclear deal. The reprocessing facilities included in the Brazilian deal would not fall under this new self-imposed moratorium: ". . . existing contracts and their application will not be affected by this decision."³⁰⁸

The German-Brazilian deal itself turned out to be flawed and proved to be an economic nightmare for Brazil. As early as April 1978, German and Brazilian observers started to doubt the viability of the deal and predicted that it would collapse "of its own weight if the United States will only back off." The large uranium deposits thought to be sitting in Brazil's earth had not yet been found. This threw a wrench into the plans of Brazil's developing nuclear industry. Three years later, in May 1981, the German-Brazilian nuclear agreement was seen by many as a failure. The original plan to finish the plants by 1990 had

³⁰⁷ Ibid.

³⁰⁸ "Letter from Schmidt to President Carter", June 11, 1977, NLC-5-4-8-17-6.

been pushed back ten years. Instead of costing eight billion dollars, the costs were estimated to be some thirty billion dollars. Another factor souring the deal was Brazil's hydroelectric potential. In 1975, projections had "put the country's potential at 100,000 megawatts." Six years later, the estimate had more than doubled to "213,000 megawatts, and the survey did not include the potential of the Amazon and its tributaries."³⁰⁹ Lastly, the fuel-cycle portions of the deal, the reprocessing facilities so contested by Carter, turned out to be an economic nightmare for the FRG and Brazil. A popular saying among Brazilian critics of the deal was that the program amounted to "a trade of uranium that Brazil does not have for technology that Germany does not have."³¹⁰

Shielded through Euratom, the FRG, Britain and especially France and Japan continued to use and develop reprocessing technology despite Carter's moratorium. Germany's reprocessing facility, which was scheduled to begin production in the 1990's, was one of the last to be built. The British, French and Japanese facilities were also not directly affected by Carter's new policies.³¹¹ Yet Carter's moratorium ended the export of reprocessing technology to nations that had not already made substantial investments towards reprocessing, mostly Third World nations. Nations, at least outside the sphere of Euratom, that planned to build reprocessing facilities would need the approval of the United States and would have to submit to American supervision of those facilities. The Brazilian facilities

³⁰⁹ Warren Hoge, "Brazil Getting A-Power But The Luster Has Dimmed," *The New York Times* (May 18, 1981), sec. A.

³¹⁰ Ernest Conine, "Waking Up From a Nuclear Nightmare," *Los Angeles Times* (April 10, 1978).

³¹¹ Philip Gummett, "From NPT to INFCE: Developments in Thinking About Nuclear Non-Proliferation," *International Affairs (Royal Institute of International Affairs 1944-)* 57, no. 4 (October 1, 1981): 565-67.

were one of the only ones, besides the facilities in Japan, that, although outside the sphere of Euratom, were not subject to American supervision.³¹²

³¹² Karl Kaiser, "The Great Nuclear Debate: German-American Disagreements," *Foreign Policy*, no. 30 (April 1, 1978): 103–04.

CONCLUSION

Carter's Nonproliferation Policies after the Brazil Conflict

Carter's policies radically changed the trajectory of the global role of nuclear energy. After the G7 meeting in 1977, the Nuclear Suppliers Club, under the leadership of Jimmy Carter, developed the “Guidelines for Nuclear Transfers” that established rules all members of the NPT had to follow. The Brazil deal led Carter, who even as a presidential candidate had been a strong advocate for nonproliferation, to see firsthand the limitations of the existing IAEA-NPT regime. Although Washington was unable to stop the nuclear transfer from West Germany to Brazil, Carter was able to persuade Bonn not to export any more sensitive technology.³¹³ As a direct reaction to the Brazilian deal, his administration pushed for the creation of the International Nuclear Fuel Cycle Evaluation (INFCE). This two year long evaluation led to the passing of the Nuclear Nonproliferation Act (NNPT) of 1978. The INFCE and the NNPT were direct responses to the reprocessing technology conundrum, so prominently on display in the export deal between the FRG and Brazil.

The INFCE, which was launched at the end of 1977, “provided the backdrop for our [Washington's] nonproliferation policy over the next two years,” and it constituted an international scientific initiative that developed alternatives to reprocessing.³¹⁴ Furthermore, in response to European concerns, it studied “methods to deal with spent fuel storage.”³¹⁵ The U.S. Congress passed the NNPT in 1978. The NNPT made the spread and development of reprocessing technology to the developing world nearly impossible. The NNPT specified

³¹³ Zbigniew Brzezinski, *Power and Principle : Memoirs of the National Security Adviser, 1977-1981* (New York: Farrar, Straus, Giroux, 1983), 131.

³¹⁴ Gummett, “From NPT to INFCE: Developments in Thinking About Nuclear Non-Proliferation,” 553.

³¹⁵ *Ibid.*, 131.

regulations for nuclear exports, reprocessing facilities and other sensitive items. The act placed the United States in the lead of nonproliferation matters.³¹⁶

Parts of the act created controversy, especially the adoption of “full-scope safeguards as an export requirement.” Recipients of American nuclear fuel had to comply with strict rules governing nonproliferation. A recipient nation had to place its complete nuclear industry, and not just its reprocessing facilities, under IAEA safeguards. This had major consequences, since the United States was the main exporter of nuclear fuel in the western world. The NNPT's full-scope safeguards created not only a nationalist backlash against American overreach but pitted the European Atomic Energy Community (Euratom), which was responsible for overseeing the nuclear safeguards of the European Communities, against the American led IAEA. Bonn had feared this outcome. Carter's nonproliferation policies challenged European independence and Germany's European leadership role.³¹⁷

Implications of the Conflict over the Brazil Deal

Germans had danced around the open secret of Germany's leadership role in Western Europe for years. For the Chancellor and many Germans, the time was past “when West Germany considered as right everything that the United States wanted to accomplish.” During the years of the Schmidt government and especially during the Carter years, West German self-esteem was on the rise. For example, when Chancellor Schmidt participated in the summit meeting in Guadeloupe in January 1979, together with President Carter, French

³¹⁶ Carlton Stoiber *et al.*, “Nuclear Nonproliferation—Law and Policy,” *Proceedings of the Annual Meeting (American Society of International Law)* 76 (April 22, 1982): 79.

³¹⁷ Philip Gummett, “From NPT to INFCE: Developments in Thinking About Nuclear Non-Proliferation,” *International Affairs* 57, no. 4 (October 1, 1981): 553.

President Valery Giscard d'Estaing, and British Minister James Callaghan, this was the first time Germany had been included in the “nuclear club.” The significance of this event was not lost on government circles in Bonn, for whom it signified “a German return to the highest levels of international politics.” At the summit, Schmidt referred openly to the leadership role of West Germany. A year later, in 1980, Schmidt went even further. He proclaimed Germany the commercially and economically strongest nation behind the United States. Furthermore, Schmidt believed that without German support, the North Atlantic Treaty Organization's recently approved nuclear modernization program would have gone down the drain. Never one to let modesty intrude, Schmidt went so far as to state that he was “the prime force behind the creation of the European Monetary System,” established in 1979, an American journalist observed.³¹⁸

At the same time, the allies kept Germany's military under close scrutiny. Most Germans had embraced pacifism after the Second World War and were wary of an active and large German military force. This made Germany militarily dependent to the United States. Its vulnerable position in the geopolitical chess game between the USSR and the United States dampened its newfound sense of power. The reality of the Cold War thus required Schmidt to proclaim the vulnerabilities of Germany openly. For him, the delicate position of Berlin made Bonn “susceptible to blackmail” and “its [Germany's] long eastern border with the Communist world” held many dangers not understood by Americans. Due to the lingering effects of World War II, then, Germany was averse to building nuclear weapons or

³¹⁸ John Vinocur, “The Schmidt Factor,” *The New York Times*, September 21, 1980, sec. 6.

sending its troops to hot-spots outside NATO. The cumulative effect of these factors was that there was "a resistance to take responsibility," after decades of relying on U.S. protection.³¹⁹

Schmidt's behavior might have appeared erratic. Yet Schmidt's remarks, spiked with superlatives as they were, described two sides of the same coin. On the one hand, he recognized the weaknesses and insecurities of the relatively new republic, while on the other hand, he displayed the new German confidence that was based on the strength of the Federal Republic's political economy, an economy developed "amid the conflicting political norms and economic requirements of global interdependence, regional integration, and national self-assertion."³²⁰ Schmidt's contradictory remarks accurately described the fragile situation in which West Germany found itself during the 1970s. Germans, because of World War II, were not only closely watched by its own allies, but many, because of the shame they felt for the holocaust, were unable to express national pride.

After World War II, the FRG's emphasis on economic success became a "path to political and moral rehabilitation" and an instrument that "calibrated for the Germans their deliverance from ostracism and the restoration of their self-esteem." Bonn was able to take its economic success and "translate [it] into political demands" without provoking the fears of its allies that "Old Germany" was rising again.³²¹ For Bonn, economic power became an uneasy way to express nationalist pride. German politicians often used diplomatic vocabulary that was peppered with economic terms as they did throughout the Brazil negotiations. This strategy led to continual conflict with the U.S., which was not only the

³¹⁹ Ibid.

³²⁰ Wolfram F. Hanrieder, "The German-American Connection in the 1970s and 1980s: The Maturing of a Relationship," in *Shepherd of Democracy? : America and Germany in the Twentieth Century*, ed. Carl Cavanagh. Hodge and Cathal J. Nolan (Westport, Conn.: Greenwood Press, 1992), 116.

³²¹ Ibid.

FRG's strongest supporter but also its biggest economic rival. Economic success became a device that, in the words of historian Wolfram Hanrieder, “calibrated for the Germans their deliverance from ostracism and the restoration of their self-esteem.” In sum, West Germany's economic success after the Second World War turned into a means for the new republic to reclaim some form of political and moral high-ground. This worked fairly well until, during the 1970s, the economy of West Germany began to outperform the economies of the United States and France, Bonn, instead of being hidden in the multilateral pack that constituted the Western Alliance, was suddenly the leader of the pack.³²²

To discretely use their new power, German politicians, such as Schmidt, used this “diplomatic vocabulary” that intertwined politics with economics.³²³ Schmidt gave a speech in October 1977, that explains the importance of “diplomatic vocabulary” in the Chancellor's world view, and in so doing, it sheds light on his handling of the Brazilian deal. A sound economy, Schmidt asserted, was the foundation for all security enjoyed by the West. Economic security enabled the western world to maintain a “military equilibrium” with the East and ensured the “stability of our free and democratic institutions.” For Schmidt, the three most important events in the 1970s were: the worldwide recession early in the decade; the collapse of the international monetary system; and the oil crisis. All could be remedied only by creating economic stability.³²⁴ Given his understanding of economic issues, Schmidt saw the rise of Third World nations, such as Brazil, as a challenge. Brazil and other

³²² Larres, “West Germany and European Unity in U.S. Foreign Policy,” 64. See also: Bernhard May, *Kosten und Nutzen der deutschen EG-Mitgliedschaft* (Bonn: Europa Union Verlag, 1982).

³²³ Hanrieder, “The German-American Connection in the 1970s and 1980s: The Maturing of a Relationship,” 114–115.

³²⁴ Helmut Schmidt, “Helmut Schmidt, Perspectives on Politics,” ed. Wolfram F. Hanrieder (Westview Press, 1982), 29.

developing nations were asking for “full control over their raw materials and higher prices, they demand more development aid, they demand the biggest possible share of the benefits of Western investment in the Third World, and they demand unrestricted access for their industrial products into our markets.”³²⁵ Washington's attempt to restrict Brazil's access to reprocessing technology appeared counterproductive to Schmidt. The developed world needed to keep its markets for industrial exports - to and from the Third World – open, to establish mutual trust.

It was therefore in the “uppermost interest” of the developed world to “integrate the developing countries [such as Brazil] fully into the system of world trade.”³²⁶ For the Chancellor, the Brazil deal solved a cardinal problem that threatened the security of the Western World: energy security. Schmidt was particularly worried about inflation brought on by the continual rise of the price of oil and other raw materials from the Third World.³²⁷ The Chancellor, quoting studies by the OECD, Massachusetts Institute of Technology and EXXON, believed that starting in the 1980s, oil reserves would not be able to satisfy demand. In order to ensure economic stability, the West therefore needed to consider alternatives, especially nuclear energy. The developed nations were required by necessity to establish through “indispensable cooperation” with undeveloped nations a reliable supply chain. Europe needed the uranium deposits which experts assumed to be in the ground in Brazil. Washington's opposition to the Brazil deal seemed illogical to the Chancellor. The United States used half the energy consumed in the West and would need those reliable

³²⁵ Ibid., 30.

³²⁶ Ibid., 32.

³²⁷ Ibid., 30.

supply chains just as much as Europe.³²⁸ For the sake of security in the western world, Schmidt and his fellow leaders needed therefore to “construct a liberal, flexible, and hence working world economic system” that did not exclude Third World nations. For Bonn, the cooperation between Brazil and West Germany represented a model of close economic and political cooperation that have and have-not nations needed.³²⁹

Multilateralism lay at the heart of the emergence of West Germany after the Second World War. It insured that Bonn was safely integrated into the Western community where it was watched by its nervous European neighbors with Argus-eyes, lest it reemerge to threaten global peace and stability.³³⁰ This multilateral embeddedness of West German policies made it possible for Schmidt, Matthias Schulz argues, to take a tougher stance against Carter and Washington. Starting in the 1970s, due to the collapse of the fixed exchange rate system (Bretton Woods), the FRG was suddenly able to operate with considerably more autonomy and was therefore less “vulnerable to direct pressure from the United States than it had been before.”³³¹ Bonn, although still firmly fixed in the American dominated economic orbit, was suddenly able to be not just politically but economically more independent.

Although the FRG succeeded repeatedly in turning multilateral cooperation into a national advantage, this strategy became difficult to maintain as the economic and monetary power of the FRG increased. As economic and monetary matters became more important

³²⁸ Ibid., 32–34.

³²⁹ Ibid., 31.

³³⁰ H. W. Brands, “The United States, Germany, and the Multilateralization of International Relations,” in *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. vol. 2 (New York, N.Y.: Cambridge University Press, 2004), 47.

³³¹ Harold James, “Cooperation, Competition, and Conflict: Economic Relations Between the United States and Germany, 1968-1990,” in *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. vol. 2 (New York, N.Y.: Cambridge University Press, 2004), 187.

throughout the 1970s, economic issues became more politically charged. Economic language in diplomatic circles became an expression of power politics. Up until the end of the 1960s the close relations between the United States and West Europe had made it possible for West Germany to appear simultaneously as a good Europeanist and Atlanticist. When the FRG gradually emerged as an European leader and the Atlantic relations bit by bit eroded, Germany had to choose between the two.³³² The German-Brazilian deal functions therefore as an important case study. The deal was the first one of many conflicts that would pit Jimmy Carter and Helmut Schmidt against each other. It set the tone not only for the remainder of Carter's time in office but in many ways it also represents the unease in German-American relations that exists to this day.

Bonn's foreign policy had always been a complicated balancing act. After 1945, the defeated and divided FRG was assimilated into the Western Alliance and the Cold War set the background for all the FRG's foreign policy activity. Bonn had to sustain a constructive relationship with Washington while integrating into a European community. American power kept the Soviet Union at bay and created the “stable and predictable framework” for Europe and the FRG to forge structures of unity. Under this stable framework Bonn and the rest of Europe were able to foster their own nation's goals while at the same time complementing and sustaining American Cold War strategy.³³³

³³² Hanrieder, “The German-American Connection in the 1970s and 1980s: The Maturing of a Relationship,” 114–115.

³³³ Eckart Conze, “Expectations of Dominance and Partnership Rhetoric: The Federal Republic of Germany in the Crossfire of American and French Policy, 1945-1990,” in *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. vol. 2 (New York, N.Y.: Cambridge University Press, 2004), 54–55.

Klaus Wiegrefe, in his excellent book *Das Zerwürfnis*, wrote that directly after the Second World War, the German-American relationship was based on four pillars. The first pillar was that the United States guaranteed that the FRG would be safe from Soviet encroachment. Second, the United States guaranteed the political legitimacy of the West German Republic. Third, the Americans bound the German economy tightly into their evolving world economic system, which made the famous German economic miracle in the 1950s possible. Germany was stripped of natural resources and needed the free trade of the western world to import and export its goods. Fourth, the United States became a model for the new republic. German elites admired and imitated their American counterparts. A large majority of West Germans was very pro-American. John F. Kennedy, after his triumphant Berlin visit in June of 1963, told the joke that in the future, should an American President be depressed, send him to Germany.³³⁴ In return for American protection, the FRG supported Washington's Pax Americana throughout the Western World. Clinging to America ensured that the FRG would be an accepted member of the Western community. All those pillars started to crumble during the late 1960s and 1970s.³³⁵

One reason was the Europeanization of Europe, which in itself was a contradictory process. Europeanization happened under the umbrella of American hegemony and was possible only because Washington kept Soviet influence at bay. At the same time, it was a reaction to American dominance and a pursuit by Europe to find its own voice and establish a third power-center. This European sentiment was the root of many frictions with

³³⁴ Wiegrefe, *Das Zerwürfnis: Helmut Schmidt, Jimmy Carter und die Krise der deutsch-amerikanischen Beziehungen*, 7–10.

³³⁵ Klaus Wiegrefe, *Das Zerwürfnis: Helmut Schmidt, Jimmy Carter und die Krise der deutsch-amerikanischen Beziehungen* (Berlin: Propyläen, 2005), 25–29.

Washington, the Brazilian deal being one. While Europeanization was an ongoing process, it took off under the leadership of Helmut Schmidt and Valéry Giscard d'Estaing.³³⁶

The international economic difficulties of the 1970s were another reason for the deterioration of relations between Washington and Bonn. Trade competition increased. Richard Nixon, in August 1971, imposed a ten percent tariff on imported goods.³³⁷ Hanrieder asserts that the “tacit transatlantic agreement between the United States and western Europe” forged in the postwar years had undergone a significant change. The agreement had been based on America's postwar “hegemonic economic and monetary position” and the tacit understanding that Washington would be prepared to make economic sacrifices for European wellbeing. In return for those economic sacrifices, the United States would receive political privileges and support from their European partners. Starting in the 1960s, an awakening West Germany started to resent these American privileges.³³⁸

That the American-German alliance during the Carter years was strained is undeniable. The tensions over Germany's deal with Brazil encapsulate these tensions. Preventing the spread of nuclear weapons caused intense controversy between the United States and Europe throughout the 1970s. Beginning with the Ford administration and continuing with Carter, American and European Nuclear Suppliers were pitted against each other. The first area of controversy was the question of technological transfers to the Third

³³⁶ Conze, “Expectations of Dominance and Partnership Rhetoric: The Federal Republic of Germany in the Crossfire of American and French Policy, 1945-1990,” 59–60.

³³⁷ Klaus Larres, “West Germany and European Unity in U.S. Foreign Policy,” in *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. vol. 2 (New York, N.Y.: Cambridge University Press, 2004), 63.

³³⁸ Wolfram F. Hanrieder, “The German-American Connection in the 1970s and 1980s: The Maturing of a Relationship,” in *Shepherd of Democracy?: America and Germany in the Twentieth Century*, ed. Carl Cavanagh. Hodge and Cathal J. Nolan (Westport, Conn.: Greenwood Press, 1992), 112.

World and the conditions for such transfers. The controversy also pitted the United States' aversion to breeder and reprocessing technology against those Nuclear Supplier nations who had made long-term commitments in favor of reprocessing. A significant outcome of the Brazil deal was that nations, especially in Europe, who had developed - or were in the process of developing - reprocessing technology, openly defied Washington's moratorium on reprocessing.

There is no question that Bonn's rebellion over the Brazil deal was driven by economic incentives. The Brazil deal did constitute an economic boon for the FRG. At the same time, it created not just economic but political tensions with the United States. Policy makers on both sides of the Atlantic regarded "economic relations as a stabilizing element in East-West relations," with the expectation that this economic cooperation would translate into enhanced political cooperation. The Brazil deal defied these expectations.³³⁹

At the same time, Bonn's past and fragile international position made trade central to the FRG's foreign policy. Schmidt signaled to Washington that he and his administration would acquiesce to Carter's demands if the Americans convinced the Brazilians to cancel the deal. There were two reasons for this. First, Bonn's dependence on Washington was too great to seriously endanger the relationship. This offer was intended to alleviate the bitterness between the two allies. Second, due to the importance of trade for the FRG's foreign policy, Bonn could not cancel the deal itself. As its economy grew, trade for West Germany, as an instrument of political statecraft, was paramount.

³³⁹ Angela. Stent, *Economic Relations with the Soviet Union : American and West German Perspectives* (Boulder, Colo.: Westview Press, 1985), 46.

In the end, the conflict over the Brazil deal depicted not only a collision over nonproliferation policies but the changing power equilibrium in the relationship between the Federal Republic of Germany and the United States. The Brazil deal showcased the “increased mutual dependency” between the FRG and the United States while highlighting the problems associated with their “complex interdependency.”³⁴⁰ West Germany was dependent on the protection of the United States. At the same time, the FRG attempted to attain some degree of independence from the United States. Both nations profited from strong nonproliferation policies. At the same time they were economic competitors on the nuclear market. The conflict over the Brazil deal illustrates the changing nature in the relationship between the Atlantic partners and demonstrates the fine line the FRG was walking between proclaiming loyalty to the United States while simultaneously trying to establish some independence in its foreign policy.

³⁴⁰ Monika Medick-Krakau, “Trojan Horse or Loyal Partner? West Germany as a Trading Power, Between the United States and the EC,” in *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. vol. 2 (New York, N.Y.: Cambridge University Press, 2004), 204-203. Also see: Robert O. Keohane and Joseph S. Nye, *Power and Interdependence : World Politics in Transition* (Boston: Little, Brown, 1977).

BIBLIOGRAPHY

PRIMARY DOCUMENTS

- ARCHIVAL

Bundesarchiv, Koblenz

Jimmy Carter Library, Atlanta

Politisches Archiv des Auswärtigen Amts, Berlin

– NEWSPAPERS

Der Spiegel

Los Angeles Times

The New York Times

Time Magazine

- MEMOIRS

Brzezinski, Zbigniew. *Power and Principle : Memoirs of the National Security Adviser, 1977-1981*. New York: Farrar, Straus, Giroux, 1983.

Callaghan, James. *Time and Chance*. London: Collins, 1987.

Carter, Jimmy. *Keeping Faith : Memoirs of a President*. Toronto; New York: Bantam Books, 1982.

———. *White House Diary*. New York: Farrar, Straus, and Giroux, 2010.

Gates, Robert Michael. *From the Shadows : The Ultimate Insider's Story of Five Presidents and How They Won the Cold War*. New York, NY: Simon & Schuster, 1996.

Schmidt, Helmut. Helmut Schmidt, Perspectives on Politics. Edited by Wolfram F. Hanrieder. Westview Press, 1982.

———. *Men and Powers : a Political Retrospective*. New York: Random House, 1989.

SECONDARY SOURCES

- Anthony G. McGrew. "Nuclear Revisionism: The United States and the Nuclear Non-Proliferation Act of 1978." *Millenium - Journal of International Studies* 7, no.3 (1978): 237–250.
- Appel, Reinhard. "Helmut Schmidt." In *The German Chancellors*, edited by Hans Klein, translated by Edna McCown, 263–318. Chicago, 1993.
- Barkenbus, Jack N. "Nuclear Power Safety and the Role of International Organization." *International Organization*. (1987): 475–490.
- Barton Z. Cowan. "A Look at U.S. Nuclear Nonproliferation Policy." *Proceedings of the Annual Meeting (American Society of International Law)* 73 (April 26, 1979): 159–166.
- Bender, Thomas, and Geyer, Michael. "Empires: Might and Myopia." In *The United States and Germany During the Twentieth Century: Competition and Convergence*, edited by Christof Mauch and Kiran Klaus Patel. Washington, D.C.; New York: German Historical Institute; Cambridge University Press, 2010: 96-119.
- Bourantonis, Dimitris. "The Negotiation of the Non-Proliferation Treaty, 1965-1968: A Note." *The International History Review* 19, no. 2 (May 1, 1997): 347–357.
- Brands, H. W. "Presidential Doctrines: An Introduction." *Presidential Studies Quarterly* 36, no. 1 (March 1, 2006): 1–4.
- . "The United States, Germany, and the Multilateralization of International Relations." In *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. 2:47–53. New York, N.Y.: Cambridge University Press, 2004.
- Bunn, Matthew, and Anthony Wier. "Terrorist Nuclear Weapon Construction: How Difficult?" *Annals of the American Academy of Political and Social Science* 607 (2006): 133–149.
- Carlton Stoiber, John Glenn, Richard T. Kennedy, Mohamed A. Shaker, and Lawry W. Herron. "Nuclear Nonproliferation—Law and Policy." *Proceedings of the Annual Meeting (American Society of International Law)* 76 (April 22, 1982): 77–99.
- Conze, Eckart. "Expectations of Dominance and Partnership Rhetoric: The Federal Republic of Germany in the Crossfire of American and French Policy, 1945-1990." In *The*

- United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. 2:54–61. New York, N.Y.: Cambridge University Press, 2004.
- Crawford, Beverly. “How Regimes Matter: Western Control of East-West Trade Finance.” *Millennium - Journal of International Studies* 16, no. 3 (1987): 431–452.
- Daalder, Hans. “Changing Procedures and Changing Strategies in Dutch Coalition Building.” *Legislative Studies Quarterly* 11, no. 4 (November 1, 1986): 507–531.
- Epstein, William. “Why States Go -- And Don’t Go -- Nuclear.” *Annals of the American Academy of Political and Social Science* 430 (March 1, 1977): 16–28.
- Falk, Richard. “Nuclear Weapons Proliferation As a World Order Problem.” *International Security* 1, no. 3 (January 1, 1977): 79–93.
- Falke, Andreas. “American and German Trade Policy: Between Liberal Multilateralism, Neoprotectionism, and Regional Integration.” In *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. 2:220–227. New York, N.Y.: Cambridge University Press, 2004.
- Firmage, Edwin Brown. “The Treaty on the Non-Proliferation of Nuclear Weapons.” *The American Journal of International Law* 63, no. 4 (October 1, 1969): 711–746.
- Frost, Ellen L., and Angela E. Stent. “NATO’s Troubles with East-West Trade.” *International Security*. 81 (1983): 179–200.
- Fry, Earl H., and Gregory A. Raymond. “The International Implications of West Germany’s Energy Policy.” *German Studies Review* 1, no. 2 (May 1, 1978): 173–199.
- Garthoff, Raymond L. *Detente and Confrontation : American-Soviet Relations from Nixon to Reagan*. Washington, D.C.: Brookings Institution, 1994.
- George H. Quester. “Reducing the Incentives to Proliferation.” *The ANNALS of the American Academy of Political and Social Science* 70 (March 1977): 70–81.
- Goldblat, Jozef. *Arms Control*. London; Thousand Oaks; Oslo: Sage publications ; PRIO, International Peace Research Institute, 2002.
- Gummett, Philip. “From NPT to INFCE: Developments in Thinking About Nuclear Non-Proliferation.” *International Affairs (Royal Institute of International Affairs 1944-)* 57, no. 4 (October 1, 1981): 549–567.

- H. Jon Rosenbaum, and Glenn M. Cooper. "Brazil and the Nuclear Non-Proliferation Treaty." *International Affairs* 46, no. 1 (January 1, 1970): 74–90.
- Hacke, Christian. "The United States and the German Question." In *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. 2:18–25. New York, N.Y.: Cambridge University Press, 2004.
- Hammond, Allen L. "Brazil's Nuclear Program: Carter's Nonproliferation Policy Backfires." *Science* 195, no. 4279. New Series (February 18, 1977): 657–659.
- Hanrieder, Wolfram F. "The German-American Connection in the 1970s and 1980s: The Maturing of a Relationship." In *Shepherd of Democracy? : America and Germany in the Twentieth Century*, edited by Carl Cavanagh Hodge and Cathal J. Nolan. Westport, Conn.: Greenwood Press, 1992.
- Hartmut Krugman. "The German-Brazilian Nuclear Deal." *The Bulletin of the Atomic Scientists* (February 1981): 32–36.
- Heep, Barbara D. *Helmut Schmidt Und Amerika : Eine Schwierige Partnerschaft*. Bonn: Bouvier, 1990.
- Herbert Dittgen. "Die ära Der Ost-West-Verhandlungen Und Der Wirtschafts- Und Währungskrisen (1969-1981)." In *Deutschland Und Die USA Im 20. Jahrhundert : Geschichte Der Politischen Beziehungen*, edited by Klaus Larres and Torsten Oppelland. Darmstadt: Wissenschaftliche Buchgesellschaft, 1997.
- Hofhansel, Claus. "Explaining Foreign Economic Policy: A Comparison of U.S and West German Export Controls." *Journal of Public Policy* 10, no. 3 (July 1, 1990): 299–330.
- Hubel, Helmut. "Cooperation and Conflict in German and American Policies Toward Regions Outside Europe." In *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. 2:69–75. New York, N.Y.: Cambridge University Press, 2004.
- "India to Join A-Club?" *Asian Affairs* 5, no. 2 (November 1, 1977): 131.
- "International Arrangements for Nuclear Fuel Reprocessing." *Bulletin of the American Academy of Arts and Sciences* 30, no. 3 (December 1, 1976): 5–12.
- Jaishankar, S., and C. Raja Mohan. "Nuclear Cartelisation: Theory and Practice." *Economic and Political Weekly* 12, no. 20 (May 14, 1977): 798–802.
- James, Harold. "Cooperation, Competition, and Conflict: Economic Relations Between the United States and Germany, 1968-1990." In *The United States and Germany in the*

- Era of the Cold War, 1968-1990*, edited by Detlef Junker. 2:187–202. New York, N.Y.: Cambridge University Press, 2004.
- Joskow, Paul L. “The International Nuclear Industry Today: The End of the American Monopoly.” *Foreign Affairs* 54, no. 4 (1976): 788–803.
- Junker, Detlef. *The United States and Germany in the Era of the Cold War : a Handbook. Volume 2, 1968-1990*. Cambridge: Cambridge University Press, 2010.
- Kaiser, Karl, Franz-Josef Klein, Deutsche Gesellschaft für Auswärtige Politik., and International Conference on Reconciling Energy Needs and Non-Proliferation. *Reconciling Energy Needs and Non-proliferation : Perspectives on Nuclear Technology and International Politics*. Bonn: Europa Union Verlag, 1980.
- Kaiser, Karl. “The Great Nuclear Debate: German-American Disagreements.” *Foreign Policy*, no. 30 (April 1, 1978): 83–110.
- Keohane, Robert O., and Joseph S. Nye. *Power and Interdependence: World Politics in Transition*. Boston: Little, Brown, 1977.
- Küntzel, Matthias. *Bonn & the Bomb: German Politics and the Nuclear Option*. London: Boulder Press, 1995.
- Landry, David M. “Brazil's new Regional and Global Roles.” *World Affairs* 137, no. 1 (July 1, 1974): 23–37.
- Larres, Klaus. “West Germany and European Unity in U.S. Foreign Policy.” In *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. 2:62–68. New York, N.Y.: Cambridge University Press, 2004.
- Lellouche, P. “International Nuclear Politics.” *Foreign Affairs* 58 (1979): 336–350.
- Lellouche, Pierre. “Breaking the Rules Without Quite Stopping the Bomb: European Views.” *International Organization* 35, no. 1 (January 1, 1981): 39–58.
- Link, Werner. “Ostpolitik: Detente German-Style and Adapting to America.” In *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. 2:33–39. New York, N.Y.: Cambridge University Press, 2004.
- Long, Clarence D. “Nuclear Proliferation: Can Congress Act in Time?” *International Security* 1, no. 4 (April 1, 1977): 52–76.
- Lowrance, William W. “Nuclear Futures for Sale: To Brazil from West Germany, 1975.” *International Security* 1, no. 2 (October 1, 1976): 147–166.

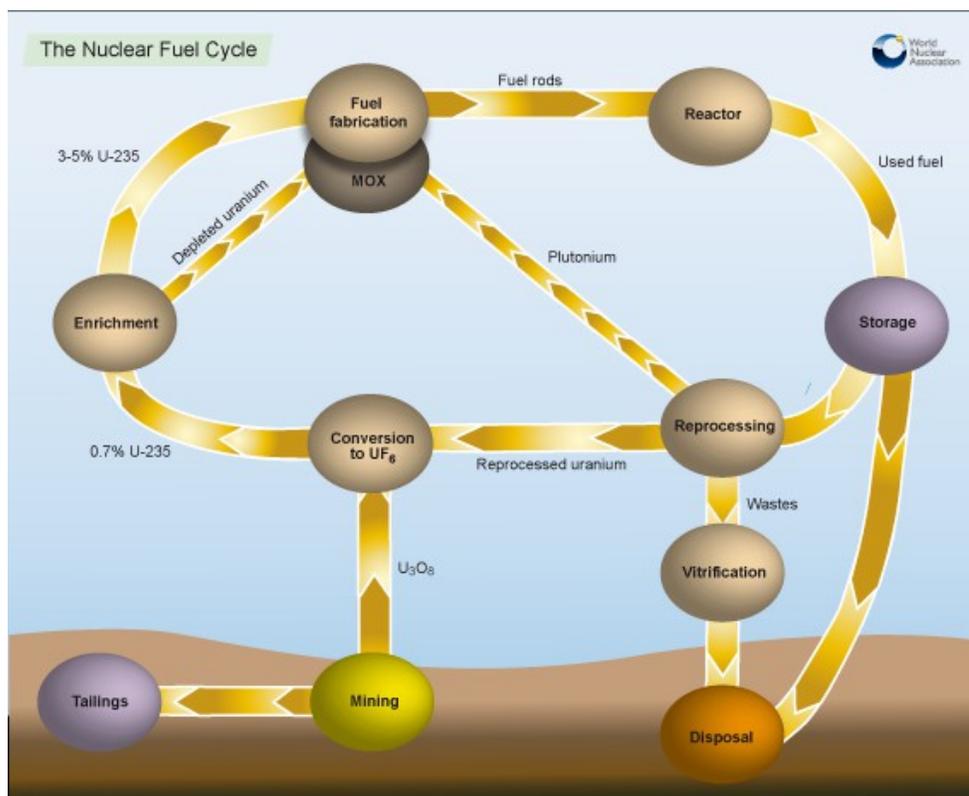
- Lundestad, Geir. *The American "Empire" and Other Studies of US Foreign Policy in a Comparative Perspective*. Oxford; New York; Oslo: Oxford University Press ; Norwegian University Press, 1990.
- Matthias Schulz. "The Reluctant European: Helmut Schmidt, the European Community, and Transatlantic Relations." In *The Strained Alliance*, edited by Matthias Schulz and Thomas Alan Schwartz. Cambridge; Washington: Cambridge University Press, 2010.
- May, Bernhard. "The World Economic Summits: A Difficult Learning Process." In *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. 2:249–256. New York, N.Y.: Cambridge University Press, 2004.
- Medick-Krakau, Monika. "Trojan Horse or Loyal Partner? West Germany as a Trading Power, Between the United States and the EC." In *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. 2:203–210. New York, N.Y.: Cambridge University Press, 2004.
- Metz, William D. "Reprocessing: How Necessary Is It for the Near Term?" *Science* 196, no. 4285. New Series (April 1, 1977): 43–45.
- Neff, T.L., and H.D. Jacoby. "Nonproliferation Strategy in a Changing Nuclear Fuel Market." *Foreign Affairs* 57:5 (n.d.): 1123–1143.
- Niedhart, Gottfried. "U.S. Detente and West German Ostpolitik: Parallels and Frictions." In *The Strained Alliance*, edited by Matthias Schulz and Thomas Alan Schwartz. 23–44. New York, N.Y.: Cambridge University Press, 2010.
- Nye, Joseph S. "We Tried Harder (And Did More)." *Foreign Policy*, no. 36 (October 1, 1979): 101–104.
- Pierre Lellouche. "International Nuclear Politics." *Foreign Affairs* 58, no. 2 (1979): 336–350.
- Potter, William C. *International Nuclear Trade and Nonproliferation : the Challenge of the Emerging Suppliers*. Lexington, Mass.: Lexington Books, 1990.
- Quester, George H. "The Nuclear Nonproliferation Treaty and the International Atomic Energy Agency." *International Organization* 24, no. 2 (April 1, 1970): 163–182.
- Renuoard, Joe, and Nathan Vigil D. "The Quest for Leadership in a Time of Peace: Jimmy Carter and Western Europe, 1977-1981." In *The Strained Alliance*, edited by Matthias Schulz and Thomas Alan Schwartz. 309–332. New York, N.Y.: Cambridge University Press, 2010.

- Roett, Riordan, and William Perry. "Recent Trends in Brazilian Foreign Policy." *The World Today* 33, no. 8 (1977): 295–304.
- Schulz, Matthias, and Thomas Schwartz A. "The Superpower and Union in the Making: U.S.-European Relations, 1969-1980." In *The Strained Alliance*, edited by Matthias Schulz and Thomas Alan Schwartz. 355–374. New York, N.Y.: Cambridge University Press, 2010.
- Schulz, Matthias and Thomas Alan Schwartz. *The Strained Alliance: U.S.-European Relations from Nixon to Carter*, edited by Matthias Schulz and Thomas Alan Schwartz. New York: Cambridge University Press, 2010.
- Schwabe, Klaus. "Detente and Multipolarity: The Cold War and German-American Relations, 1968-1990." In *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. 2:1–17. New York, N.Y.: Cambridge University Press, 2004.
- Schwammell, Inge. *Deutschlands Aufstieg Zur Großmacht : Die Instrumentalisierung Der Europäischen Integration: 1974 - 1994*. Frankfurt am Main: Lang, 1997.
- Schweigler, Gebhard. *West German Foreign Policy: the Domestic Setting*. New York, N.Y.: Praeger, 1984.
- Spector, Leonard S., Mark G. McDonough, and Evan S. Medeiros. *Tracking Nuclear Proliferation: a Guide in Maps and Charts, 1995*. Washington, D.C.: Carnegie Endowment for International Peace, 1995.
- Stent, Angela. *Economic Relations with the Soviet Union: American and West German Perspectives*. Boulder, Colo.: Westview Press, 1985.
- Thompson, Kenneth W. *The President, the Bureaucracy, and World Regions in Arms Control*. Lanham, Md.: University Press of America, 1998.
- United States. Arms Control and Disarmament Agency. *International Negotiations on the Treaty on the Nonproliferation of Nuclear Weapons*. Washington, D.C.: United States Arms Control and Disarmament Agency, 1969.
- Wiegrefe, Klaus. *Das Zerwürfnis : Helmut Schmidt, Jimmy Carter Und Die Krise Der Deutsch-amerikanische Beziehungen*. Berlin: Propyläen, 2005.
- Wilker, Lothar. *Nuklearpolitik Im Zielkonflikt : Verbreitung D. Kernenergie Zwischen Nationalem Interesse U. Internationaler Kontrolle*. Köln: Verlag Wissenschaft u. Politik, von Nottbeck, 1980.

Zimmer, Matthias. "The German Political Parties and the USA." In *The United States and Germany in the Era of the Cold War, 1968-1990*, edited by Detlef Junker. 2:89–95. New York, N.Y.: Cambridge University Press, 2004.

APPENDICES

Appendix A

The Nuclear Fuel Cycle³⁴¹

³⁴¹ <http://www.world-nuclear.org/info/inf03.html>