

33



Directorate of Intelligence

~~Secret~~



South Africa: Have Prospects for Accession to the Nuclear Non-Proliferation Treaty Improved?



(b)(3)

An Intelligence Assessment

0047393
 GI#10041#88 0302-0305
 OGI#1281#88

OGI PRODUCTION GROUP
 OFC OF GLOBAL ISSUES
 ROOM 3G04
 HQS

13 March (A-4/1)

~~Secret~~

GI 88-10041
April 1988

Copy 302

Warning Notice

Intelligence Sources
or Methods Involved
(WNINTEL)

**National Security
Information**

Unauthorized Disclosure
Subject to Criminal Sanctions

Dissemination Control Abbreviations	NOFORN (NF)	Not releasable to foreign nationals
	NOCONTRACT (NC)	Not releasable to contractors or contractor/consultants
	PROPIN (PR)	Caution—proprietary information involved
	ORCON (OC)	Dissemination and extraction of information controlled by originator
	REL...	This information has been authorized for release to...
	WN	WNINTEL—Intelligence sources or methods involved

(b)(3)

All material on this page
is Unclassified.



Directorate of
Intelligence

~~Secret~~



(b)(3)

South Africa: Have Prospects for Accession to the Nuclear Non-Proliferation Treaty Improved?



(b)(3)

An Intelligence Assessment

This paper was prepared by [redacted] Office
of Global Issues. Comments and queries are welcome
and may be directed to the Chief, Geographic
Issues Division, OGI, [redacted]
[redacted]

(b)(3)

(b)(6)

(b)(3)

(b)(3)

Reverse Blank

~~Secret~~

GI 88-10041
April 1988

~~Secret~~

**South Africa: Have Prospects
for Accession to the Nuclear
Non-Proliferation Treaty
Improved?** [redacted]

(b)(3)

Key Judgments

*Information available
as of 19 February 1988
was used in this report.*

We believe South Africa has decided to take steps toward formally accepting the Nuclear Non-Proliferation Treaty (NPT) but is unlikely to become a party to the treaty before the General Conference of the International Atomic Energy Agency (IAEA) in September 1988. In our view, State President Botha has concluded that the political, technical, and economic incentives to join the treaty warrant eventual accession, but that doing so before the nationwide municipal elections on 26 October would generate damaging political backlash against his government. [redacted] (b)(3)

Pretoria will probably begin negotiations on the NPT and then prolong the consultations while it seeks concessions from current nuclear suppliers and commitments from the IAEA, calculating that "good faith" discussions will forestall its expulsion from the IAEA for another year. Once the elections are over and South Africa judges it has exhausted the possibilities for delay, we think Pretoria will become a party to the treaty even if it is not completely satisfied with the concessions and commitments it has engineered in the meantime. After NPT accession, Pretoria is likely to protract negotiations on an IAEA safeguards agreement. [redacted] (b)(3)

Even with the NPT, we doubt that South Africa will sacrifice any capability to construct a nuclear weapon. National defense and security will prevail over other equities, and the Afrikaners' siege mentality—now solidly entrenched—will probably dictate maintenance of the capability. Thus, we suspect that President Botha, who is the ultimate decisionmaker, will reason that the NPT is an unavoidable prerequisite for the long-term well-being of South Africa's civil nuclear program and that, by sequestering a portion of its highly enriched uranium stockpile, South Africa can retain its nuclear weapons option. [redacted] (b)(3)

South Africa's current exclusion from the nuclear community stems largely from sanctions imposed because of apartheid. [redacted] [redacted] As a result, treaty accession will not assure for Pretoria the benefits normally available to an NPT party, such as technical cooperation. We believe it is likely, however, that Pretoria's desire to preserve its membership in the IAEA, to improve its prospects as a nuclear importer (b)(1) and exporter, and to regain international recognition as an advanced (b)(3) nuclear state will outweigh its concern about achieving only a limited payoff from joining the NPT. [redacted] (b)(3)

~~Secret~~

GI 88-10041
April 1988

~~Secret~~

(b)(3)

From a nonproliferation perspective, South African participation in the NPT has pluses and minuses. On the positive side, accession would make South Africa considerably less attractive to other proliferant states as a collaborator on a clandestine weapons program. It would also attenuate a source of polarization within the IAEA that has diverted the Agency from its vital safeguards and safety functions. On the negative side, because South Africa probably has the capability to manufacture nuclear weapons, assuring its commitment to the treaty presents a difficult political and technical challenge to NPT supporters and to the IAEA. Unless that challenge can be met, Pretoria's membership could damage the credibility of the treaty by seeming to tolerate de facto nuclear weapons states, contrary to the goals of the NPT.

(b)(3)

~~Secret~~

Contents

	<i>Page</i>
Key Judgments	iii
Background	1
Incentives to NPT Accession	1
Access to Nuclear Technology and Fuel for Peaceful Purposes	2
Preservation of Uranium Export Markets	5
Continued Membership in the IAEA	7
Looking at the Costs	7
Bureaucratic Dynamics in Pretoria	7
Outlook for NPT Accession, Safeguards, and the Highly Enriched Uranium Stockpile	9
NPT Accession	9
The Safeguards Question	10
The HEU Stockpile	10
Implications	11
... For the IAEA	11
... For South Africa's Nuclear Weapons Program	11
... For the Nonproliferation Regime	12
... For the US-USSR Bilateral Relationship	13
Appendix	
South Africa: Chronology of Nuclear Developments	15

~~Secret~~
[Redacted]

South Africa: Have Prospects for Accession to the Nuclear Non-Proliferation Treaty Improved? [Redacted]

(b)(3)

Background

South African State President P. W. Botha publicly announced in September 1987 Pretoria's readiness to negotiate with the nuclear weapons states on the possibility of joining the Nuclear Non-Proliferation Treaty (NPT). By timing his announcement to coincide with the opening of the General Conference of the International Atomic Energy Agency (IAEA) and making the negotiations contingent upon the conference's outcome, Botha kindled suspicion that the announcement was a ploy to prevent Pretoria's ouster from the Agency. A resolution calling for suspension, sponsored by Nigeria and backed broadly by the nonaligned states, was subsequently withdrawn in favor of a resolution deferring debate until the next General Conference in September 1988. [Redacted]

(b)(3)

Several factors suggest, however, that South Africa's calculus on the NPT may have changed: delays in starting up the Semi-Commercial Uranium Enrichment Plant at Valindaba, the continuing need for access to nuclear technology and fuel, the real prospect of Pretoria's expulsion from the IAEA, and its desire to preserve export markets for its uranium. Furthermore, Botha's willingness last year to make a statement that was certain to result in intensified pressure for accession from all quarters indicated a readiness to take positive steps toward joining the NPT. [Redacted]

(b)(3)

This paper examines and evaluates these conflicting signals to assess whether Pretoria's announcement was a sincere statement of intent or solely a stalling tactic to preserve its membership in the IAEA for yet another year. [Redacted]

(b)(3)

Incentives to NPT Accession

We believe South Africa has weighed a number of technical, economic, and political incentives and concluded that, on balance, they warrant taking steps toward accession at this time:

- Access to nuclear technology and fuel for peaceful purposes.

Press Release by State President P. W. Botha at IAEA General Conference, 21 September 1987

The Republic of South Africa is prepared to commence negotiations with each of the nuclear weapon states on the possibility of signing the Non-Proliferation Treaty. At the same time the Republic of South Africa will consider including in these negotiations safeguards on its installations subject to the NPT conditions. The nature of these negotiations will depend on the outcome of the 31st General Conference of the IAEA which is being held in Vienna as from 21 September.

South Africa hopes that it will soon be able to sign the NPT and has decided to open discussions with others to this end. Any safeguards agreement which subsequently might be negotiated with the IAEA would naturally be along the same lines as, and in conformity with, agreements with other NPT signatories.

[Redacted]

(b)(3)

- Preservation of export markets for its uranium.
 - Continued membership in the IAEA.
- Treaty accession will not guarantee for Pretoria all of the benefits that would normally accrue to an NPT party, particularly technology exchange. Sanctions against nuclear cooperation with South Africa stem largely from its maintenance of apartheid, according to a broad range of diplomatic [Redacted] sources. As a result, we expect Pretoria to seek firm commitments to nondiscriminatory treatment when, according to US diplomatic reporting, it sends a team to Washington, London, Bonn, and Paris to discuss the NPT issue. In the end, though, we suspect Pretoria will risk a modest payoff in exchange for improved prospects as both a user and a supplier of nuclear services, materials, and technology. [Redacted]

(b)(1)

(b)(3)

(b)(3)

**The Treaty on the Non-Proliferation
of Nuclear Weapons (NPT)**

Opened for Signature: 1 July 1968
Entered Into Force: 5 March 1970
Depositary States: United States, United Kingdom, USSR
Number of Parties: 137 (including Taiwan)

Key Provisions:

- Non-Nuclear-Weapon States
 - Will not receive, acquire or manufacture a nuclear explosive device.
 - Will accept safeguards on all peaceful nuclear activities (waiver for material used for nonexplosive military purposes such as naval propulsion).
 - Will conclude a safeguards agreement with the International Atomic Energy Agency within 18 months of depositing instrument of accession.
 - Have inalienable right to develop and use nuclear energy for peaceful purposes.
- Nuclear-Weapon States
 - Will not transfer nuclear weapons or explosive devices to another state or encourage or assist another state to manufacture such weapons or devices.
 - Will facilitate exchange of nuclear equipment, material and technology with other parties.
 - Will pursue negotiations in good faith toward ending the nuclear arms race and achieving nuclear disarmament.
- Each Party Shall . . . Have the Right to Withdraw From the Treaty
 - If it decides that extraordinary events, related to the subject matter of this treaty, have jeopardized the supreme interest of its country.
 - It shall give notice of such withdrawal three months in advance.

Any state that did not sign the NPT before its entry into force in 1970 may accede to the treaty. Such states deposit instruments of accession rather than instruments of ratification and are not referred to as signatories. The treaty defines nuclear-weapon states as states that had manufactured and exploded a nuclear weapon or other nuclear explosive device before 1 January 1967. Thus, even if South Africa were so inclined, it could not accede as a nuclear-weapon state.



(b)(3)

Access to Nuclear Technology and Fuel for Peaceful Purposes

In our view, the most important technical incentive for joining the NPT at this time is the long-term prospect of obtaining foreign assistance for the next phase in South Africa's nuclear power program. [redacted] a site selection study for South Africa's second nuclear power station is under way along the south coast, and the Electric Supply Commission wants to start construction by the

mid-1990s. Although its capabilities have improved dramatically during the 1980s, industry experts point out that South Africa still lacks the technical infrastructure to embark independently upon nuclear power plant construction projects and will need foreign assistance to complete the project on schedule.

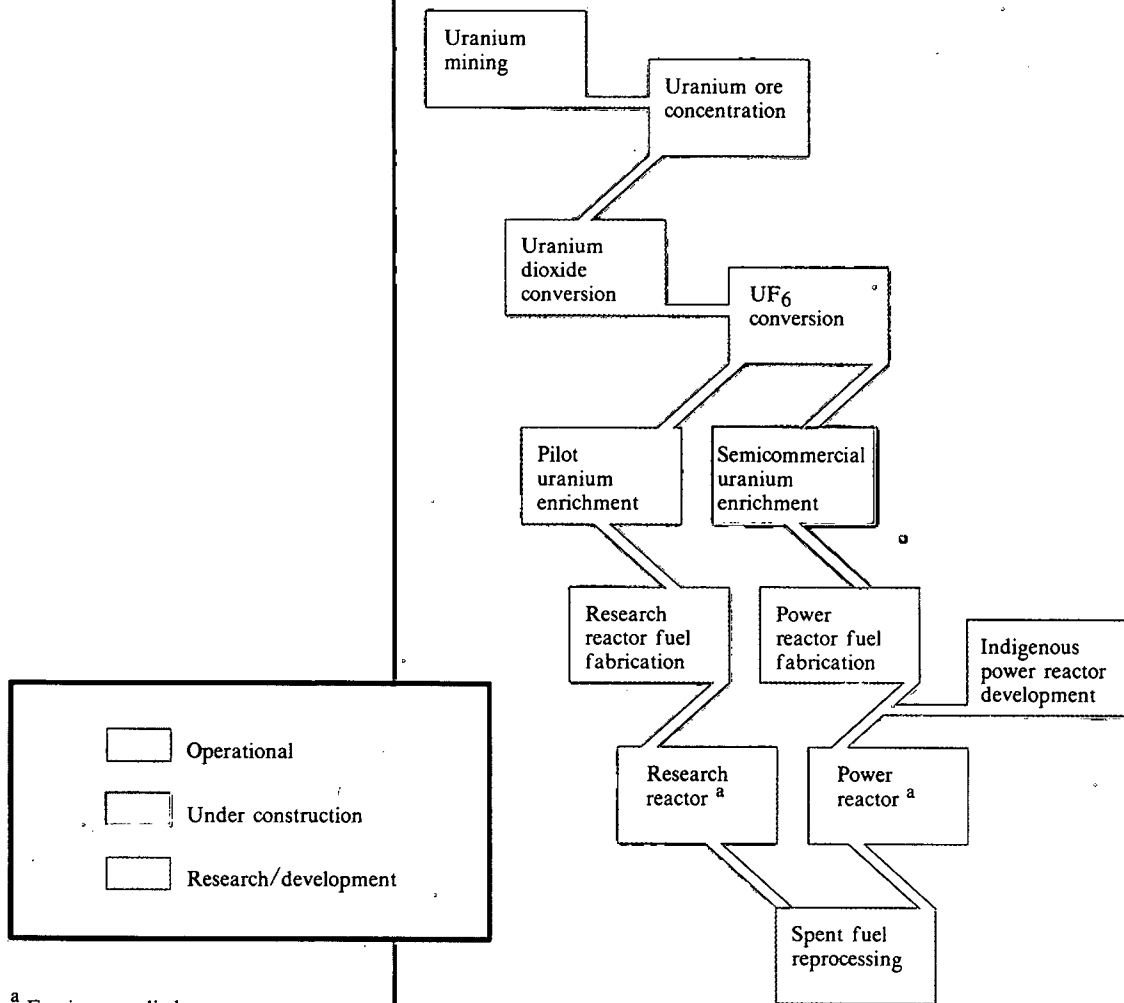
(b)(1)

(b)(3)

(b)(3)

~~Secret~~

Figure 1
South Africa: Civilian Nuclear
Fuel Cycle Development



	Operational
	Under construction
	Research/development

^a Foreign-supplied

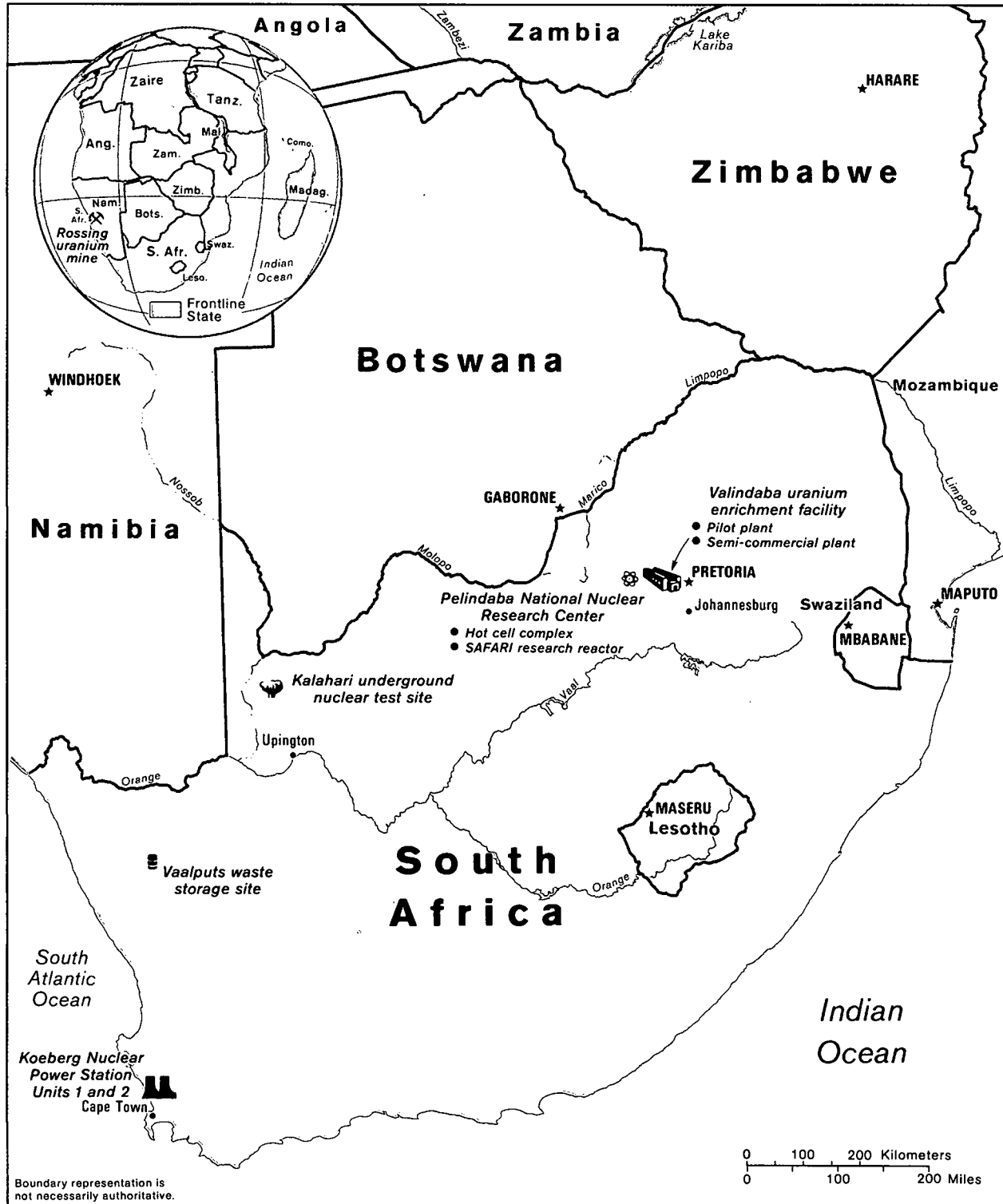
316639 3-88

(b)(3)

~~Secret~~

~~Secret~~

Figure 2
South African Nuclear-Related Facilities



712723 (A04921) 3-88

(b)(3)

~~Secret~~

(b)(1)
(b)(3)

A more immediate technical incentive arises from the need to import low-enriched uranium (LEU) fuel for the two nuclear power reactors at Koeberg. [redacted]

[redacted] Koeberg will face a fuel shortage between 1988 and 1990. Now that startup of the Semi-Commercial Plant at Valindaba, which will serve Koeberg's needs, has been delayed again until later this year, Pretoria's dilemma may be growing more acute. Unless new fuel arrangements can be concluded soon, Pretoria may be forced to resort to a combination of expedients to meet its domestic need for LEU:

- Further reducing the output of its two power reactors at Koeberg.
- Invoking the extension clause in its fuel contract with France (the fabrication contract is due to expire in 1989 but permits five more reloads beyond that date).
- Producing LEU at its Pilot Enrichment Plant at Valindaba to supplement available supplies [redacted]

(b)(1)
(b)(3)

- Purchasing LEU on the spot market. [redacted]

(b)(3)

Although NPT accession will not guarantee South Africa full access to nuclear fuel and technology, it would remove an obvious political hurdle for any potential supplier. France probably would be most willing to undertake new contracts in that it already has a vested interest in Pretoria's nuclear program and [redacted] its large nuclear industry has concluded only one reactor export deal in the last five years. NPT accession would not eliminate all political and legal obstacles to cooperation with the United States, though it would permit a waiver of the ban against nuclear exports in the Comprehensive Anti-Apartheid Act (CAAA). [redacted]

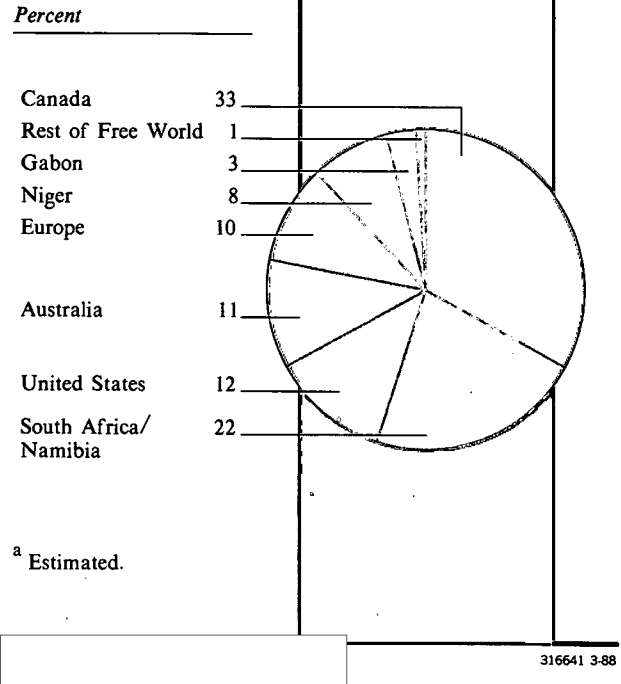
(b)(1)
(b)(3)

(b)(3)

Preservation of Uranium Export Markets

In addition to access to technology and fuel, resolution of South Africa's NPT status will affect its ability to export uranium worldwide. South African and

**Figure 3
Free World Uranium
Production, 1987^a**



(b)(3)

Namibian exports to utilities in Europe, Taiwan, Japan, the Middle East, and, until enactment of the CAAA in 1986, the United States have totaled about \$500 million annually. South Africa—which ranks second in non-Communist uranium production after Canada and just ahead of the United States—would be forced to compensate its British and Namibian consortium partners should the Rossing Uranium Mine in Namibia be closed as a result of market losses. [redacted]

(b)(3)

South Africa may be reasoning that acceding to the NPT will relieve the pressure on its West European and Asian clients to follow Washington's lead and prohibit imports of South African ore and oxide. (Accession would not affect the CAAA ban on imports of South African ore and oxide into the United States for domestic use or for enrichment and re-export to third countries.) According to US Embassy reporting, the precedent set by the CAAA has clearly worried South Africa's leaders, and they are seeking

(b)(1)
(b)(3)

(b)(1)
(b)(3)

to mitigate the legislation's contagious effect. In June 1987, for example, South Africa shipped a large inventory of uranium to Western Europe for storage, [redacted] to avoid potential future sanctions on its sales there. [redacted]

(b)(1)
(b)(3)

[redacted] in 1986 South Africa sped up shipments of nearly 6,500 metric tons of uranium oxide for clients in Japan, Taiwan, and the United States to complete deliveries before CAAA sanctions against US enrichment and reexport of South African uranium went into effect. [redacted]

(b)(3)

Continued Membership in the IAEA

Aside from the critical issues of technology and trade access, we suspect that Pretoria values highly its IAEA membership and views the NPT as critical in preserving its links to the Agency. South Africa is one of the founding members of the IAEA and, in our judgment, wishes to regain its full rights of membership and recognition as the most advanced nuclear nation in Africa (see appendix). [redacted]

(b)(1)
(b)(3)

[redacted] Pretoria wishes to continue to have access through the Agency to a body of expertise and information on nuclear safety, science, and technology that is denied it elsewhere. We doubt, however, that joining the NPT would enable Pretoria to regain its seat on the Board of Governors. [redacted]

(b)(3)

(b)(1)
(b)(3)

[redacted] some in South Africa believe that accession to the NPT is not likely to ensure lasting benefits in the IAEA. According to reporting from the US Mission in Vienna, South Africa's problems in the organization over the last decade can be traced to three issues: apartheid, mining of Namibian uranium, and unwillingness to accept safeguards on its entire nuclear program. Acceptance of the NPT will resolve only the third issue. [redacted]

(b)(3)

Looking at the Costs

South Africa would pay both a technical and a political price for joining the NPT. In our view, however, Pretoria could, and probably would, mitigate the technical consequences by retaining a clandestine stockpile of weapons-grade uranium and offset the domestic political costs by timing an NPT decision to generate the least possible backlash in the 26 October 1988 nationwide municipal elections. [redacted]

(b)(3)

From a technical perspective, application of full-scope safeguards under an NPT agreement would constrain only marginally Pretoria's nuclear weapons capability unless measures exceeding the norm for NPT parties are applied. Safeguards at its Pilot Enrichment Plant would limit future availability of enriched uranium for weapons production. They would not, however, eliminate the potential to produce explosive devices should Pretoria withhold for contingency purposes even a portion of the material it has produced since 1978. Furthermore, South Africa was conducting basic research on a nuclear explosive design some years ago [redacted]

(b)(1)

(b)(3)

On the political front, NPT accession before the 26 October elections could hurt President Botha's government, which is facing opposition from the resurgent right wing. The opposition favors maintaining the nuclear weapons option and, according to press reporting, has already criticized Botha for his apparent willingness to forsake the option. [redacted]

(b)(3)

Bureaucratic Dynamics in Pretoria

It is clear from US diplomatic reporting that disagreement exists throughout the bureaucracy, and we believe Botha will try to build a consensus on the NPT question to reduce domestic political risks. The Department of Foreign Affairs and Minister of Economic Affairs and Technology Steyn favor moving ahead on the treaty and improving nuclear links to the West, according to the US Embassy in Pretoria, whereas Minister of Defense Malan favors retaining the nuclear weapons option and opposes the treaty. Steyn apparently prevailed at a late January 1988 Cabinet meeting where it was agreed, over Malan's objections, to proceed with international consultations on the NPT, according to US diplomatic reporting. Although Botha appears to be leaning toward accession, he has a vested interest in the weapons option since he was Defense Minister when Pretoria embarked on the program. [redacted]

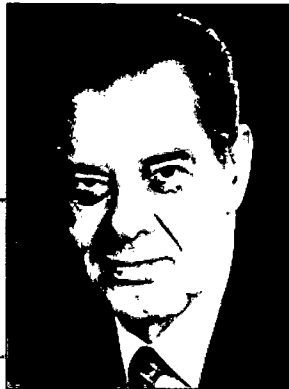
(b)(3)

~~Secret~~

Figure 5
South Africa: Nuclear Bureaucrats



P. W. Botha
State President



Dr. J. W. L. DeVilliers
*Executive Chairman
of Atomic Energy
Corporation*



Danie Steyn
*Minister of Economic
Affairs and Technology*



Magnus Malan
Minister of Defense

316642 3-88

(b)(3)

~~Secret~~

(b)(1) The buck stops with President Botha on the NPT,
 (b)(3) according to State Department reporting [redacted]
 [redacted] Minister of Economic Affairs and Technology Steyn, who oversees the nuclear industry, seems to have his ear, but other nuclear officials and South Africa's representatives in Vienna are able to influence the President only on technical matters and have not been key figures in nuclear decision making. The decision to make last September's announcement came directly from Botha, [redacted]

(b)(1) [redacted] and was not discussed in advance with Atomic
 (b)(3) Energy Corporation Executive Chairman De Villiers. Constitutionally, Botha has virtually total control over any NPT decision. The power to enter into and ratify international treaties is vested in the State President, who exercises this power in consultation with the Cabinet. Botha himself heads the Cabinet committee that formulates foreign and defense policies, the State Security Council, and its recommendations typically are rubberstamped by the full Cabinet. [redacted]

(b)(1) [redacted] Botha is
 (b)(3) feeling both external and internal pressure on the NPT issue. When he made the September 1987 announcement, he was probably influenced by a desire to improve Pretoria's image on the eve of sanctions reviews by the United States and the Commonwealth states, as well as to avoid South Africa's suspension from the IAEA. In the final analysis, however, we think the timing of any decision on accessions to the NPT will be swayed most by domestic political considerations. With elections in the offing, we think it likely Botha will search for some strategem—short of accession—that will salvage South Africa's membership in the IAEA for one more year without damaging his image as a protector of South Africa's security. With the elections over, Botha would then be free to pursue accession more vigorously. [redacted]

(b)(3) **Outlook for NPT Accession, Safeguards, and the Highly Enriched Uranium Stockpile**

On balance, we believe South Africa has decided to take steps toward NPT accession but will not join the treaty before the IAEA General Conference in September 1988. Pretoria routinely employs the stall as a

diplomatic tactic, either by agreeing to talks and then introducing issues designed to create an impasse or by making its compliance with an agreement subject to conditions unlikely to be met, thereby transferring the onus to the other parties. The South Africans have used these techniques in negotiations on Namibian independence and on safeguards at the Valindaba Semi-Commercial Enrichment Plant. [redacted]

NPT Accession

What is most likely, in our view, is that Pretoria will prolong the NPT negotiations while it seeks concessions on nuclear trade, commitments on restoring its rights of membership in the IAEA, and consensus within its own government. Pretoria also might try to make accession by its frontline neighbors—Angola, Mozambique, and Zimbabwe—a condition for its own acceptance of the treaty. Once the tolerance of its adversaries and its proponents in the IAEA is depleted and the elections are over, South Africa will probably accede to the NPT, even if it is not fully satisfied with the concessions and commitments it has engineered in the meantime. [redacted]

The most compelling factor dictating South African behavior under the NPT will be national defense and security. We judge that the Afrikaners' siege mentality—now more solidly entrenched than in the 1970s—will prevail because of the increasing need, as they perceive it, to maintain a self-sufficient, flexible defense. Although South Africa now holds clear-cut conventional military superiority in the region and the perceived threat of Soviet force penetration that motivated its pursuit of a nuclear capability is diminished (though Pretoria remains concerned about Soviet-Cuban intentions in Angola), we believe Pretoria's isolation will dictate maintenance of its nuclear weapons capability. [redacted]

Overall, therefore, we remain wary of South Africa's intentions with respect to the NPT. We believe Botha will calculate that accession is a distasteful but unavoidable prerequisite for the long-term well-being of South Africa's civil nuclear program [redacted]

~~Secret~~

(b)(1)
(b)(3)

[Redacted]

- Safeguards required by the United States as a condition for supplying the SAFARI-1 research reactor are also in place.

The Safeguards Question

Negotiations with the IAEA on a full-scope safeguards agreement would probably be difficult even after South Africa joins the NPT. Pretoria could procrastinate on negotiating an agreement—a delay with ample precedent among NPT parties, according to the US Mission in Vienna—earning yet another grace period. Negotiations would be complicated further by the fact that South African nuclear officials distrust the Agency, according to US Embassy reporting, believing it discriminates against them. Minister Steyn, for example, doubts IAEA Director General Blix’s neutrality on the safeguards question. Steyn accused him in summer 1987 of failing to transmit to the Board of Governors a communication from the Government of South Africa explaining it considered safeguards on the Valindaba Semi-Commercial Enrichment Plant as a step toward NPT accession. It was at its June 1987 meeting that the Board recommended to the General Conference that South Africa be suspended from the IAEA. [Redacted]

(b)(3)

- Arrangements for voluntary safeguards at the Hot Cell Complex at the Pelindaba National Nuclear Research Center were agreed upon with the IAEA in 1987.
- Voluntary safeguards are in place at the Vaalputs Waste Storage Site.
- A satisfactory technical approach for safeguarding the Semi-Commercial Enrichment Plant at Valindaba was agreed upon in 1986. Pretoria offered to submit this facility to safeguards, but negotiations were tedious because of Pretoria’s fear of technology compromise.
- Pretoria’s state system of accounting and control is compatible with the NPT safeguards model.

[Redacted]

(b)(1)
(b)(3)

Pretoria’s announcement in September 1987 also suggests it would insist on a condition that is unacceptable to the IAEA: termination of the agreement if South Africa’s rights in the Agency are curtailed. The IAEA rejected such a link during the negotiations on Valindaba that derailed in late 1986, according to the US Mission in Vienna. Safeguards agreements with NPT parties include the other two demands Pretoria made in 1986: permission to withdraw nuclear material from safeguards for naval propulsion reactors and termination of the agreement if South Africa’s security interests are threatened. [Redacted]

(b)(3)

The HEU Stockpile

Prospects for a full-scope safeguards agreement that provides assurance against a sequestered stockpile of HEU are uncertain. We believe it is likely that Pretoria, which has never publicized the capacity of its pilot plant, would declare only part of its inventory to the IAEA, reserving a portion for contingency purposes. It could avoid admitting past production of weapons-grade HEU by declaring to the IAEA only the 45-percent-enriched, research-reactor-grade HEU it has produced to fuel the SAFARI Research Reactor. The IAEA is obliged to accept Pretoria’s declaration at face value and has no authority to search for a possible cache of HEU [Redacted]

(b)(1)
(b)(3)

Once an agreement is negotiated, application of safeguards should not be difficult from a technical standpoint. [Redacted]

[Redacted] or, should Pretoria assert it is closing the pilot plant, to demand the plant be declared. [Redacted]

(b)(1)

(b)(1)

- Safeguards required by France as a condition for supplying the Koeberg power reactors are already in place.

~~Secret~~

(b)(1)
(b)(3)



ensuring the credibility of Pretoria's declaration will probably require extraordinary methods. London has told Washington, according to US diplomatic reporting, that it is considering suggesting some type of audit—a first for NPT safeguards agreements—by the IAEA or others. Pretoria's NPT statement leaves no doubt that it would object to any requirements that exceed the norm for NPT parties and, in our view, so would the IAEA. The IAEA, however, may be willing to undertake an investigation in the unlikely event it were asked to do so by Pretoria. [redacted]

(b)(3)

Implications

... For the IAEA

Should South Africa fail to follow through on its announced intention to join the NPT, the most immediate effect probably would be to revitalize the movement to expel it from the IAEA. Unless Pretoria can demonstrate progress, it will face an unfavorable vote at next September's General Conference, according to the US Embassies in Moscow and European capitals. If negotiations commence this year, advocates of universal membership might be able to defeat the anti-Pretoria lobby in September, according to the US Mission in Vienna; the votes of Argentina and Brazil, which influence the Latin American bloc, are, however, far from assured. Both states oppose the NPT and are likely to find it politically untenable to accept accession as a condition for any state's membership in the Agency. US diplomatic reporting suggests the Soviet Union views prospects for progress skeptically and would not block a suspension attempt again if South Africa has not joined the NPT or taken some other concrete action by September. [redacted]

(b)(3)

South Africa's longer term prospects for membership in the Agency are more difficult to judge. In our view, however, acceptance of the NPT would preserve its

membership beyond 1988 by eliminating the most relevant argument mustered against it by the African Group—failure to accept full-scope safeguards. The most vocal critics of apartheid and mining of Namibian uranium would continue to rail against Pretoria, but, without support from the West, the East, or the moderate nonaligned states, they would almost certainly fail to rejuvenate the expulsion issue. [redacted]

(b)(3)

South Africa's status in the IAEA has ramifications for the integrity of the Agency itself. On the one hand, resolution of the perennial debate over Pretoria's membership would eliminate one source of damaging politicization that has preoccupied the Agency in the 1980s and diverted it from its critical safeguards and safety roles. On the other, an ouster of Pretoria would set the stage for a renewed challenge to Israel's membership, which has also been at peril for six years, according to State Department reporting. Should Israel be expelled, the United States, in accordance with 1987 Congressional legislation, would be required to withdraw from the Agency and withhold financial support from all its programs except safeguards. [redacted]

(b)(3)

... For South Africa's Nuclear Weapons Program

Even if South Africa becomes a party to the NPT, its willingness to abide fully by the nonproliferation regime is open to question. [redacted]

(b)(1)
(b)(3)

[redacted] We judge that, in joining the NPT, it would defer additional weapons research and development and refrain from weapons production but maintain its nuclear option by withholding a portion of its HEU stockpile. Should its security position deteriorate intolerably in its view, we believe Pretoria would exercise the NPT withdrawal clause (see NPT inset on page 2) or simply violate the treaty outright. Such a calculus is consistent with the Afrikaners' view that their diplomatic isolation and pariah status force them to be prepared to face alone the Soviet threat they perceive in southern Africa. [redacted]

(b)(3)

How Moscow Views the Prospects

As a depositary government for the Non-Proliferation Treaty (NPT) and a strong supporter of the International Atomic Energy Agency (IAEA), the Soviet Union has a keen interest in the outcome of the South Africa-NPT question but remains unconvinced thus far of Pretoria's sincerity. Moscow took political heat for having opposed the IAEA ouster in September 1987, according to State Department reporting, and its demarche in November indicates Moscow expects Washington to expend political capital of its own to influence South Africa to follow through on its declaration. Moscow's opposition to the motion to expel South Africa—and its lobbying in Vienna and in capitals to that end—was driven by its interest in sustaining pressure on Pretoria as well as a desire not to introduce tension into the US-Soviet relationship before the December 1987 summit.

The Soviets are concerned that a failure to show progress will lead to South Africa's expulsion from the IAEA in September 1988, according to US diplomatic reporting, and endanger the Agency's effectiveness as an instrument of nonproliferation. The Soviets also want to preserve the IAEA's strength and credibility as an instrument of disarmament; they have been encouraging an expanded role for the IAEA in arms control verification for several years, a role touted by Director General Blix just after the INF agreement was signed.

South Africa might try to extract concessions from the Soviets by means of direct discussions, according to US diplomatic reporting. Such an objective would explain the peculiar phrasing of Botha's announcement on negotiating with "each of the nuclear weapon states." At the very least, Pretoria probably expects that direct talks would be useful symbolically and might establish a precedent that it could exploit in dealing with other issues, such as South Africa's regional security concerns. The Soviets have not been receptive, however, to the idea of official contacts or direct talks with the South Africans.

Accession would undercut the rhetoric of Pretoria's neighbors, which have repeatedly urged South Africa to sign the NPT, but we do not believe they would feel assured Pretoria had abandoned the nuclear option as a result. Skepticism might be reduced were Pretoria also to begin discussions with its neighbors on a proposed treaty declaring Africa a nuclear-weapons-free zone. South Africa stated its readiness to consider such a treaty for the first time in September 1987, according to the US Mission in Vienna, simultaneously opening the door for discussion and placing an onus on other non-NPT African states like Angola, Mozambique, Tanzania, and Zimbabwe. Even if it entered into such talks, however, we suspect Pretoria would obstruct real progress or otherwise play for time.

... For the Nonproliferation Regime

In our view, South African accession to the NPT would be a mixed blessing for the nonproliferation regime. On the positive side, it would make South Africa considerably less attractive to other proliferant states

[Redacted]

On the negative side, without extraordinary measures to verify South Africa's commitment, its accession could damage the credibility of the NPT and the nonproliferation regime itself by spotlighting—and seeming to tolerate—the existence of de facto nuclear weapon states. The same dilemma would ensue were Pakistan, India, or Israel to join. When the NPT was negotiated in the late 1960s, only five nuclear weapon states existed, their capabilities were public, and three of them—the United States, the United Kingdom, and the Soviet Union—signed the treaty. The reality of the 1980s is that, despite international controls against proliferation, several non-NPT parties probably have attained, though not publicly admitted, a capability to fabricate nuclear explosive devices.

(b)(3)

(b)(3)

(b)(3)
(b)(1)

(b)(3)

(b)(3)

(b)(3)

Because South Africa probably has the technical capability to construct such devices, ensuring its commitment to the treaty presents a difficult political and technical challenge to NPT supporters and to the IAEA. Should no reliable way be found to verify South Africa's compliance with both the spirit and the letter of the NPT, its accession would give momentum to critics of the treaty's effectiveness and present treaty supporters with a new and complex challenge when they meet in 1990 to review whether the goals of the NPT are being realized. [redacted]

... For the US-USSR Bilateral Relationship

We do not expect the US-Soviet relationship on nonproliferation to suffer more than temporary discomfort as a result of the South Africa-NPT issue. As depositary states of the treaty and coguarantors of its integrity, however, both have a stake in resolution. According to the US Embassy in Moscow, the Soviets

have already warned that, unless concrete results are achieved, they could not be counted on again to oppose suspension and that the consequences for the IAEA would be "catastrophic." The Soviet Union has called on Washington to press Pretoria to join the NPT and will publicly blame the United States should no tangible progress take place before September. Regardless of whether progress is made, Moscow will probably continue public accusations that Washington is aiding Pretoria's nuclear program. In February, for example, a *Pravda* correspondent in Zambia accused the "Western powers" of responsibility for the alleged complicity between Israel and South Africa in nuclear weapon development. [redacted]

(b)(3)

(b)(3)

~~Secret~~**Appendix****South Africa:
Chronology of Nuclear Developments****Membership in the IAEA**

1954-57	Serves on eight-nation commission that negotiates International Atomic Energy Agency (IAEA) statute.
June 1957	Ratifies statute and becomes charter member with permanent seat on Board of Governors as most advanced nuclear state in Africa.
1959-68	IAEA technical assistance totals \$107,800, all in form of fellowships.
1968	Receives last technical assistance.
1976	General Conference asks Board to review membership on Board, taking into account "the inappropriateness and unacceptability of the apartheid regime."
June 1977	Voted off Board and replaced by Egypt as "most advanced nuclear nation in Africa."
September 1979	Credentials to General Conference rejected on grounds that government did not legitimately represent majority of people (this situation continues).
1979	Terminates contributions to IAEA's Technical Assistance and Cooperation Fund.
September 1981	Excluded by Board from participation in its Committee on Assurances of Supply.
October 1983	General Conference calls on members to end all nuclear cooperation with South Africa and on Agency to consider excluding South Africa from its technical groups.
January 1984	Announces decision to require IAEA safeguards on its uranium exports and to begin safeguards negotiations on Semi-Commercial Enrichment Plant at Valindaba.
October 1985	General Conference calls on Agency to exclude South Africa from activities that could help it "persist with its exploitation of Namibian uranium."
August 1986	Safeguards negotiations on Valindaba break down.
September 1986	Suspension vote at General Conference avoided; resolution passes calling on Board to consider recommending suspension.
June 1987	Board recommends suspension of South Africa.
September 1987	Suspension vote avoided following Botha statement; issue placed on agenda of 1988 General Conference.

~~Secret~~

~~Secret~~

Nuclear Explosives Development

- 1948 Atomic Energy Act—Atomic Energy Board formed.
- 1961 Research on aerodynamic enrichment process begins.
- 1963 Accedes to Limited Test Ban Treaty, which prohibits atmospheric testing.
- 1968 Work on peaceful nuclear explosives.
- 1969 Work on design of enriched uranium pilot plant.
- 1970 Public announcement of uranium enrichment capability.
- 1971 Construction of Pilot Enrichment Plant begins.
- 1975 Pilot Enrichment Plant begins limited operation.

[Redacted]

(b)(1)

1977 Kalahari nuclear test site discovered. Prime Minister Vorster decides to halt nuclear explosives development.

1978 Mothballs but does not decommission Kalahari test site

[Redacted]

(b)(1)

1979 US nuclear test detection satellite detects optical signature over South Atlantic; Intelligence Community cannot associate event conclusively with nuclear testing.

[Redacted]

(b)(3)

~~Secret~~

~~Secret~~

Approved for Release: 2020/03/16 C05922855

~~Secret~~

Approved for Release: 2020/03/16 C05922855