

SECRET/Attachment

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RF:rw

DEPARTMENT OF STATE
WASHINGTON

September 27, 1980

MEMORANDUM FOR: *W/S, hz*

From:

Warren Christopher *WC*

Subject:

South African Nuclear Problem
(S/S 8019228)

The attached action memo is returned without decision, pending further study. The further study, which should be accomplished over the next several weeks under the general supervision of Matt Nimetz, should relate to the specifics of an arrangement regarding UN nuclear sanctions, the issue of the financial penalty for South Africa under the DOE fuel contract, and a detailed review of the anticipated implementation of such an arrangement so that the U.S. promise on UN sanctions would be valid only after effective safeguards are installed.

After the further study has been completed there should be consultation with Congressional leaders and others as appropriate, prior to seeking a Presidential decision.

Attachment:

As stated.

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8-19238 *Y*DEPARTMENT OF STATE
ACTION MEMORANDUMS/S *f*

September 8, 1980

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TO : The Secretary

THROUGH: D - Mr. Christopher

FROM : T - Mr. Nimetz *WMM*

SUBJECT: South African Nuclear Problem

SUMMARY: France is willing temporarily to replace the US as supplier of nuclear fuel to South Africa if South Africa adheres to the NPT and accepts full-scope safeguards. The French will do this only if, as long as South Africa meets its obligations, the US would join France in blocking any UN nuclear sanctions against South Africa that would directly undercut the arrangement. The French seek an early response from us.

BACKGROUND AND ANALYSIS OF ISSUES

(A more extensive discussion is attached as an Annex to this paper.)

The issue posed in this paper is how to respond to a French request for our support of an arrangement they have proposed to South Africa. The French, who are supplying the reactors for which our fuel would be used, have proposed a deal with South Africa that parallels an offer we have outstanding with South Africa: France would provide two to three years supply of low enriched uranium (LEU) and veto with others any UN nuclear sanctions resolution in return for South African adherence to the NPT and acceptance of full-scope safeguards. France has asked the US for an assurance that we also would veto any UN nuclear embargo resolution against South Africa, agree to interim French fuel supply, and not impose any financial penalty against South Africa for not getting its initial fuel supply from us.

The US contracted in 1974 to provide South Africa with LEU fuel for two French supplied nuclear power reactors (fuel shipments to begin in 1981). In 1977, we put a hold on further shipments of high enriched uranium (HEU) to South Africa. In the same year there was intelligence (including satellite evidence of a probable test site in the Kalahari Desert) that South Africa might be proceeding with a nuclear

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(XGDS-1/2 (9/5/2000 - LOCKE, Allen W.)

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explosives program. We asked South Africa for an explanation and that it put an end to any such plans; its response was ambiguous.

Subsequently, we proposed continued US nuclear cooperation (including supply of LEU and HEU) and an undertaking to block any UN nuclear embargo action, if South Africa joined the NPT and accepted full-scope safeguards. South Africa has never responded to this proposal. It says it considers us unreliable on fuel supply and on our commitment to veto UN sanctions; it regards the Administration and elements of the Congress as hostile.

By adhering to the NPT, South Africa would undertake "not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices," to accept IAEA safeguards (i.e., international inspections) on all its present and future nuclear facilities, and not to export nuclear fuel or equipment without IAEA safeguards. The first commitment would probably not preclude continued research and development on nuclear explosive devices, short of actual assembly; we would want to condition any US assurance to help block nuclear sanctions against the SAG on its refraining from such research and development as well as its meeting its NPT obligations. (This would ensure that our position in the UN was consistent with the law governing US nuclear exports.)

The second commitment would require the application of IAEA safeguards on South Africa's enrichment plant, but it would not prohibit the continued production of HEU at the facility. Safeguards can effectively detect diversion of significant quantities of produced LEU and verify an HEU cutoff. Whether they would detect diversions or stockpiling in the plant of small but strategically significant quantities of HEU depends on the procedures that would be used.

In its enrichment services contract with the US, South Africa assumed financial responsibility to take possession at the US enrichment plant of fuel produced according to schedules contained in the contracts. This is a customary provision in US enrichment services contracts. Should South Africa obtain its initial fuel requirement from France, instead of the US, it could be liable for financial penalties for not taking delivery of US-produced material on schedule. South Africa has already paid \$7 million in advance for US enrichment services. Should it be necessary to give South Africa relief from its contractual obligations, the precedent for other similar cases we now face or may later face would pose significant financial implications for the US. Your intervention with DOE would probably be required to work out an arrangement.

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The French have stressed to us the need for an early response. The appeal of the settlement to the South Africans depends on French delivery of fuel in time for start-up of the first Koeberg reactor in late 1982. (We assume there is significant French commercial interest as well, since the French will not be fully compensated for sale of the reactors until they begin operating.) Fabrication of the fuel should begin about the end of this year, and this can take place only after political arrangements and commercial contracts are completed with the US and South Africa.

EVALUATION OF OPTIONS

We have identified three options: (1) pursue the settlement essentially as proposed by the French, (2) make US support for the deal contingent on South Africa's implementation of the UN plan for Namibia and cessation of HEU production, and (3) stay with our own 1978 offer to South Africa to which there has been no response. Arguments for each option by its respective proponents follow.

OPTION 1. We advise France that if South Africa adheres to the NPT and IAEA safeguards are put into effect on all its nuclear activities, the US would: (1) agree to initial French supply of LEU fuel for the Koeberg nuclear power station in substitution for US fuel; (2) work with France to prevent any UN sanctions that would interrupt supply of fuel as long as South Africa observed its NPT and safeguards obligations and abstained from any effort to develop nuclear explosive devices. We ask that France not supply South Africa with HEU or fuel fabrication capability without consultations with the US. We meet South African concerns over its enrichment contract with DOE.

We underscore the urgency of South Africa's NPT adherence and the need to prevent another two-year South African stall; if the SAG did not accept the proposed package within a reasonable period, say six months, we might have to reconsider whether we would continue our support of this proposed settlement.

We also discuss with the French the desirability of getting South African agreement to a cut-off of production of HEU at its enrichment facility (in addition to NPT adherence and full-scope safeguards) as soon as possible after the settlement was agreed in order to limit production of HEU, improve the effectiveness of safeguards on the enrichment facility, and provide early and visible evidence of the non-proliferation benefits of the settlement. But, if the French believe an HEU cut-off would not be negotiable and reject raising the issue with the SAG, or if the SAG should refuse such a change in the terms of the settlement, fall back to

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the original elements of the settlement, proposed by the French.

ARGUMENTS FOR OPTION 1

We have little remaining time and leverage to induce South Africa to adhere to the NPT and forego nuclear explosives. The French offer to take over the elements of the "package" settlement we proposed to the South Africans is our best hope of achieving objectives important to US regional and global security interests. US and French leverage should be exercised now; it will diminish as the French reactors near completion and expansion of South Africa's enrichment facility makes the SAG less dependent on Western supply.

There are probably no longer any technical barriers to South Africa's acquisition of nuclear explosives, but its adherence to the NPT, with international inspection of all its nuclear installations (including its enrichment facility) is a valuable political barrier. It is very unlikely that the SAG would join the treaty intending from the outset to violate it.

Our failure to do everything possible to block a nuclear test explosion or a declared explosives program by South Africa would seriously exacerbate tensions in the region and reduce chances of avoiding a major black-white conflagration. In addition, black African states would claim that the US and other Western powers were responsible for assisting South Africa's nuclear explosive development. Such development could lead to further increase in Soviet influence in the region, particularly if front-line states invited a Soviet military presence to counter South Africa's nuclear capability. Major African states (Nigeria and Zaire) have argued at the NPT Review Conference the importance of South African acceptance of full-scope safeguards and adherence to the NPT.

Failure to stop a South African nuclear explosive program could seriously undermine our ability to contain the spread of nuclear explosives worldwide, lowering the barriers to proliferation by such states as Pakistan and Iraq and perhaps providing a catalyst for nuclear instabilities in the Middle East and South Asia, as well as in Africa.

Failing to go ahead could be interpreted as reneging on the deal we proposed to South Africa in 1978, thus undercutting our support for the NPT, without a plausible rationale. If we turned down the proposed settlement, or linked it to the Namibian issue, we would effectively destroy any possibility of SAG acceptance and would set an unfortunate precedent of subordinating long-term non-proliferation interests to possible near-term political pressures.

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The French might believe we had misled them about our position on South Africa with negative consequences for a range of non-proliferation issues on which we need French cooperation. These include our efforts to block the Pakistani and Iraqi nuclear programs, to have countries require full-scope safeguards as a condition of nuclear supply, and to coordinate our non-proliferation policies with our close allies.

The French proposal may be less subject to black African criticism of the US than the package involving direct US supply which we have already offered the South Africans with Presidential approval. We could achieve the same non-proliferation objectives with the French as with our offer, but without supplying the South Africans over the near term.

OPTION 2. We add two conditions for US support of the French proposal: the US could only agree to enter into an agreement with the French to veto UN nuclear sanctions resolutions against South Africa once implementation of the Namibian settlement plan has been completed; the SAG must agree immediately to cease HEU production.

ARGUMENTS FOR OPTION 2

Since the US made its offer on nuclear cooperation to the SAG in 1978, South Africa has continued to operate its Valindaba enrichment facility, and may have stockpiled small but significant quantities of weapons-grade uranium. This capability will increase with the expansion, currently underway, of the Valindaba facility. These developments, as well as the continued uncertainty about the September 22 event, substantially alter the assumptions on which our original offer was based and justify more stringent conditions. In light of the new circumstances that have evolved during the interim period, modification of the two-year old offer along the lines of Option 2 will not be considered an act of bad faith.

Neither adherence to the NPT nor acceptance of IAEA safeguards would by themselves preclude the SAG from producing and stockpiling weapons-grade HEU, or from continuing its research and development of nuclear explosive devices short of actual assembly. Nor, in the absence of the SAG commitment not to produce HEU, could we have confidence that IAEA safeguards alone would detect diversions of strategically significant quantities of HEU for possible weapons development. A SAG commitment not to produce HEU would require that either France or the US agree to supply HEU for the Safari Research reactor until fuel of reduced enrichment became available. However, this would be far preferable in both non-proliferation and political terms to an arrangement under which there are no practical or effective restraints on South Africa's own HEU production.

While a SAG commitment not to produce HEU would measurably strengthen the non-proliferation rationale for our becoming party to a nuclear cooperation and supply arrangement, it would not address the extraordinary political problems, both domestic and

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foreign, of defending such an arrangement or our commitment to veto nuclear-related UN sanctions. Most African and Third World nations in particular are convinced that South Africa has already embarked on a nuclear weapons program, and none would be persuaded that written assurances of safeguards would prevent the SAG from continuing such a program if it were determined to do so. Indeed, most would view any form of nuclear cooperation as merely enhancing South Africa's ability to pursue its own independent nuclear program.

Even if certain African states wish to see South Africa sign the NPT, it does not follow they would approve US involvement in persuading South Africa to do so absent a SAG commitment not to produce HEU or absent a Namibia settlement. It is unlikely that the African states would approve of US nuclear cooperation with South Africa unless such political conditions were part of the bargain.

While there may be no way to eliminate these political liabilities entirely, some of the adverse political impact could be mitigated if we could show that we had gained some significant political concession from South Africa in exchange for our nuclear cooperation. Namibia, in the eyes of most African states and the international community, is the one issue directly involving South Africa on which an early solution is essential. South Africa has continued to express its openness towards a Namibian solution based on the UN settlement plan, the substantive aspects of which now appear to have been resolved to the satisfaction of all concerned. But the SAG has refused to commit itself to the specific date for the plan's implementation. South Africa's evident interest in acquiring low enriched uranium for its Koeberg reactors in time for the first reactor's start-up in 1982 provides us with the added leverage that may be required to obtain the SAG's early commitment to the UN plan -- assuming, of course, that the SAG is truly prepared to meet our non-proliferation conditions. In the absence of such a condition, progress on Namibia could be adversely affected, since our offer of nuclear cooperation at this time could well lead the South Africans, as well as others in Africa and elsewhere, to mistakenly interpret our offer to mean that we are in fact not serious about Namibia.

OPTION 3. We tell the French that, having evaluated both the conditions and the timing of their proposal, we prefer to pursue directly South African adherence to the NPT under the terms of our 1978 offer.

ARGUMENTS FOR OPTION 3

The issue for decision concerns how we may best reconcile US NPT objectives with US African policy interests. The suspension in 1976 of US-South African nuclear cooperation is now

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perceived by the US public and African states as an integral part of our African policy. Re-establishment of US-South African nuclear cooperation in exchange for South African adherence to the NPT would be viewed as a distinct shift in this Administration's African policy.

The Africans are already convinced that South Africa has a nuclear weapons capability. Therefore, in their view, we would simply be covering up South Africa's nuclear weapons program with a treaty at this late date. The conflicting conclusions of the Press Panel and the DIA, which have received public attention, over the September 22 "event" and our own knowledge of South African nuclear developments over the past few years underscore our dilemma. These considerations notwithstanding, the worsened state of US-SAG relations and the current increasing unrest within South Africa are more than sufficient reasons to reconsider further pursuit of formulas for nuclear cooperation with South Africa. At a minimum, they call for caution and restraint in considering next steps.

It is argued that South Africa's mistrust of the U.S. political and regulatory process is so great that we cannot make progress with it on the NPT front; therefore, why not let the French try their hand? It is said that we've nothing to lose and, after all, we would be willing to go through with a supply deal ourselves if the SAG would join NPT. Proponents of this option disagree: there are both costs and risks. The Africans will believe we are attempting a dodge to absolve ourselves of responsibility while (a) allowing the SAG to pursue its nuclear program; and (b) serving French commercial interests. The American black community, which follows Africa, could have a similar judgment and its judgment could be highly condemnatory.

One of the greatest risks is that once we give the French our hand to play, they will begin to cut corners on SAG compliance. While we may believe we can hold them to the line, the pressures would build on us. It will be argued that the SAG is moving, that we must not foreclose this opportunity. At the same time, the French and SAG will be moving forward on nuclear technology; criticism will mount; and, we would be obliged to veto with the French any UN nuclear sanctions resolution. We would lose our clear hand to play.

There are good and compelling reasons to withdraw completely from the nuclear negotiations with South Africa in view of the changed circumstances since 1978. The advantages of South African adherence to the NPT, viewed solely from the non-proliferation perspective, have been substantially reduced. They already have a weapons-grade uranium production capability and there are questions as to whether they may be proceeding towards a weapons program.

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A balance between non-proliferation and our African interests may be achieved by returning to the previous status quo where a valid direct US offer to South Africa has not received a response. We can disengage ourselves from the French by indicating that, given the conditions and timing, we would prefer to pursue South African NPT adherence directly.

If South Africa needs the fuel, is motivated by the Koeberg 1 deadline, is honestly willing to meet US NPT and safeguards conditions on the basis of our 1978 offer -- then elimination of the French role will separate US political interests from French commercial interests and increase South Africa's incentive to meet our terms. In short, US interests would be better served and better protected by a forthright direct negotiation on purely non-proliferation terms than by an indirect negotiation through the French.

This option is, therefore, designed to disengage us from the French and return us to the situation where a valid US offer to South Africa has not received a response. This approach would prolong consideration of the question, thus serving the same purpose as Option 2 without overtly linking the Namibia and nuclear issues, possibly to the detriment of both. It would also preserve our NPT objectives and place us in a somewhat better position to protect our African interests. A continuing stand-off with South Africa over the NPT is preferable to pursuing an illusion of achieving non-proliferation objectives in South Africa by hiding behind the French.

DECISION

Option 1: Pursue settlement proposed by French
(Amb. Smith, OES, EUR, S/P, PM, IO, ACDA)

Option 2: Make US support for the French
deal contingent on South Africa's implemen-
tation of the UN plan for Namibia and
cessation of HEU production (Amb. McHenry)

Option 3: Return to our 1978 offer to
South Africa which has not received a
response (AF)

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Drafted by: S/AS: ALocke

Concurrences: S/AS - Ambassador Smith
OES - Mr. Pickering
S/P - Mr. Lake
AF - Mr. Walker
D - Mr. Deitz
P - Ms. Patterson
ACDA - Dr. Rochlin
PM - Mr. Kahan
IO - Mr. Newlin
IO/UNA - Mr. Peay
L - Mr. Bettauer
EUE - Mr. Beigel
INR - Mr. Cohen

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ANNEX

BACKGROUND AND ANALYSIS OF SOUTH AFRICAN NUCLEAR ISSUE

The United States has had a nuclear association with South Africa since the 1950s, when we purchased South African uranium for our nuclear weapons program. The US sold South Africa a nuclear research reactor in the 1960s and provided highly enriched uranium (HEU) fuel for it into the mid-1970s. In 1974, the US and South Africa concluded contracts for sale of low enriched uranium fuel (LEU) for two nuclear power reactors to be built in South Africa. Fuel shipments were scheduled to begin in 1981, anticipating completion of the power reactors in late 1982 and in 1983. These reactors are now under construction by the French at Koeberg (near Cape Town).

Because of our concern over the possible acquisition of nuclear explosives by South Africa, by mid 1976 the US put a hold on further shipments of HEU fuel to South Africa, and undertook a review of the entire issue of US nuclear cooperation with that nation. Then, in August 1977, Soviet intelligence discovered and publicized what appeared to be a site for underground testing of nuclear weapons in the Kalahari Desert of South Africa. The possibility that South Africa was developing nuclear explosives was plausible because we knew that South Africa's recently-built uranium enrichment plant was probably capable of producing enough highly enriched (weapons-grade) uranium for nuclear explosives.

US intelligence verified the find and, joined by the UK, France and the FRG, we asked South Africa for explanations and an end to any plans to test nuclear explosives. Although the South African Government did not -- and never has -- satisfactorily explained the nature of the Kalahari site, it declared: that it did not have, nor did it intend to develop, a nuclear explosive device for any purpose, peaceful or otherwise; that the so-called Kalahari facility was not a testing ground for nuclear explosives; and that there would not be any nuclear explosive testing of any kind in South Africa.

While officially welcoming these assurances as a good beginning, we informed the South Africans that remaining ambiguity concerning South Africa's nuclear intentions had significant political implications and presented a potential target for Soviet propaganda. We strongly urged South Africa to make a prompt public statement of its intent to adhere to the NPT, and also to arrange for interim international safeguards at its Valindaba enrichment plant. We told South Africa that, if these steps were taken, the resulting circumstances would permit the US to supply low enriched uranium for the two French power reactors.

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The structure of our 1977 demarche to South Africa reflected two conclusions reached by the US in the aftermath of the Kalahari episode. First, although we may have "caught" South Africa in the early stages of a nuclear weapons program, its adherence to the NPT and acceptance of safeguards on its enrichment plant could circumscribe further weapons-related activity and lend substance to protestations of peaceful intentions. Second, although the political cost to the US of supplying nuclear fuel to South Africa would be much higher post-Kalahari, this cost would be offset if by supplying we induced South Africa to sign the NPT and accept safeguards.

Further US-South African communications on the nuclear problem led to a visit by Ambassador Gerard Smith to Pretoria in June 1978. We reiterated our earlier proposal for LEU supply, offered to resume supply of HEU fuel as well, and undertook to block any UN action that would prevent our delivering the fuel in implementation of the proposed settlement. Working with South African negotiators, we drew up an ad referendum "joint minute," specifying how the US and South Africa might undertake their reciprocal obligations in a manner that ensured simultaneity and maximum mutual confidence in the process.

South Africa has never responded to our offer. It has told France that it is concerned that even if it joined the NPT, a US nuclear supply guarantee would prove vulnerable to uncertain and possibly changing US legal requirements and domestic political pressures against trade with South Africa.

Since the Smith talks, we have learned that South Africa did in fact have a sophisticated nuclear explosive development program in the 1970s. We have concluded that the Kalahari site was intended to test nuclear explosives, but was never used because the enrichment plant could not produce enough enriched uranium by the time the site was discovered in 1977. Although the test site was dismantled or mothballed, we do not know whether nuclear explosives R&D continued thereafter.

In any event, we know that the Valindaba enrichment plant has continued to operate (and, in fact, is being expanded to permit eventual self-sufficiency of enriched uranium). However, South Africa does not now have a fuel fabrication capability. While it may gain self-sufficiency in enriched uranium, it cannot now produce the fuel rods for the Koeberg reactors. South Africa will in this regard remain dependent on external sources, at least to the mid 80s.

Valindaba has produced weapons-grade uranium, although we do not know whether in sufficient quantity for a weapons program. At

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this stage, it is prudent to assume that South Africa has the uranium and design experience required to manufacture nuclear explosives on short notice. In fact, it is widely assumed that the September 22, 1979 "event" was a South African nuclear test, although there is no direct evidence to support this, nor even agreement on whether the "event" was a nuclear explosion.

Technically, it would be possible for the South Africans to operate their enrichment plant to produce only LEU, and not HEU. When we formulated and presented to the South Africans our earlier settlement proposal, we did not seek such a limit on plant operation in order not to risk straining the negotiability of the entire package. Obtaining South Africa's agreement not to produce HEU henceforth would ease the task of applying effective safeguards to the enrichment plant, and help reduce concern over the SAG's continuing to produce and stockpile unsafeguarded weapons-grade material pending implementation of full safeguards (up to 18 months). It would not address the possibility that South Africa has already stockpiled HEU or would do so before any agreement took effect.

US policy to date has been not to support UN nuclear sanctions against South Africa pending its adherence to the NPT. France has told us that it would regard UN nuclear sanctions against South Africa as directed primarily against France, since it is the only nation currently engaged in nuclear supply to South Africa. The UK has asked that we consult with it before taking any position in favor of nuclear sanctions against South Africa. Japan has expressed concern to us that nuclear sanctions against South Africa could jeopardize Japan's access to uranium produced in South Africa. West Germany is in a position similar to Japan's.

We have encouraged France to assert its leverage with South Africa in behalf of a settlement. Fully informed of the content of US-South African discussions, the French have urged South Africa to adhere to the NPT and accept safeguards, and have informed it that they would not supply fuel under any lesser conditions than those proposed by the US.

The French now think they can strike a deal with South Africa that parallels our own offer, but have asked for our formal agreement before proceeding further. Once South Africa had adhered to the NPT and brought an NPT safeguards agreement into force on all its nuclear facilities (including the enrichment plant), France would ensure that the Koeberg power plant starts up on time by supplying low enriched uranium for the first two or three years' operation. France would also veto, with others, any proposed UN sanctions against nuclear supply to South Africa. France asks the US to ensure that South Africa not suffer financial

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penalty for buying its initial fuel supply from France rather than from the US. France also asks for our formal commitment to join it in vetoing UN nuclear sanctions.

Both France and South Africa have indicated an expectation that the US will supply low enriched fuel to South Africa after the initial period of French supply. Our ability to supply fuel would depend on the SAG's continuing compliance with the NP^T and with the more demanding export requirements of the Nuclear Non-Proliferation Act of 1978, including those provisions which prohibit exports to countries engaged in nuclear explosive development activities involving nuclear material.

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