Dept. of State, RPS/IPS, Margaret P. Grafeld, Dir. (X) Release ( ) Excise ( ) Deny ( ) Declassify Date 6/8/04 Exemption.

2 September 1958

The Department's instruction of July 29 transmitted copies of National Intelligence Estimate No. 100-2-58, "Development of Nuclear Capabilities by Fourth Countries: Likelihood and Consequences" (SECRET) and solicited views, comments or criticisms of the estimate.

Attached as enclosures to this despatch are two memoranda giving the comments of the Counselor of Embassy for Economic Affairs and the Army Attache on those sections of the estimate which refer to Sweden's nuclear capabilities. In view of the detailed nature of some of these comments, it is believed preferable to submit them in toto rather than to attempt to combine the two memoranda.

With respect to paragraph 70 of the Estimate, the statement that "the major political parties and most leaders are inclined to compromise this issue by supporting the manufacture of tactical and air defense atomic weapons, while avoiding -- at least initially -- the more 'provocative' longer range missiles" is not supported by the present facts. Of the four non-Communist parties, only the leadership of the opposition Conservative Party has pleaded the case for atomic weapons as a modern defensive necessity while the three other parties, including the governing Social Democrats, have not yet taken definitive positions and are not likely to do so in the near future. In these circumstances the distinction between tactical and strategic atomic weapons has not been of much significance as yet. The Embassy therefore recommends that the sentence be revised to read as follows: "The question of domestic production of these weapons is still a matter of party and public debate, with party opinion apparently lagging somewhat behind some segments of public opinion in favor of Sweden's acquiring them."

In the circumstances outlined above, the Embassy is of the view that some qualification should be made in the flat statement which appears in the last sentence\* that "we believe that, in the absence of substantial progress in disarmament, Sweden will initiate production of nuclear weapons as the necessary materials become available. " It is suggested that the sentence be revised to read as follows: "The prospect appears to be that in the absence of substantial progress in disarmament, Sweden will probably initiate production of nuclear weapons, etc." A similar change would then be required in Paragraph 6 of the "Conclusions" section of the Estimater. DECLASSIFICATION REVIEW

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of Paragraph 70.

Declassify After \_\_\_ With concurrence CIA (per)(obtained) 5/6/04

Date 11/14/02



Subject: NIE No. 100-2-58

## General Comment

My impression is that the estimate in respect of Sweden tends to exaggerate the country's nuclear capabilities (e.g. as compared to Canada's) and to give too little weight to the bearing on the development of such capabilities of Sweden's basic foreign and national defense policies.

Paras. 2, 6, 18 and 23.

These paragraphs taken together give the impression (to me, at least) that Sweden's potential to produce atomic weapons during the next decade is about as great, if not greater, than that of Canada. In para. 2, and elsewhere Sweden is listed ahead of Canada. Quite apart from the political question of desire or determination to produce such weapons (which is answered affirmatively in para. 6, for reasons unknown to me), I find it difficult to equate Sweden's low-grade (shale) source of uranium with Canada's extensive high-grade sources; or Sweden's population and industrial resources with Canada's. Table 2, p. 7, helps to correct such an impression but does not entirely remove it. Such simple changes as the naming of Canada ahead of Sweden would help.

In para. 18, wherein it is stated that Sweden could develop adequate manpower to initiate nuclear weapons production, the cost to the economy of such a diversion of resources, including manpower, is treated rather lightly by stating that "some diversions from other efforts" would be involved. Also, in this para. (and in Table 1, p.5) the higher plutonium figures for Sweden than for Canada are arrived at only by assuming substantial Swedish imports of uranium fuel or a big expansion of domestic fuel production from the low-grade shale deposits. Either assumption would involve a substantial additional diversion of resources from other uses.

Paras. 31, 35 (footnote 4), 40, Table 3, p. 10.

Particularly in the absence of any reference to Sweden's basic foreign and national defense policies, these paragraphs have (for me, at least) an air of unreality. I do not consider myself competent to comment on paras. 31 and 35 (and related footnote), but





the expression of belief (para. 40 and Table 3, p. 10) that the Swedes, with a concerted national effort, could by 1966-68 independently obtain a limited operational nuclear missile capability with a range encompassing the 400 miles to Moscow, seems to me out of place in any serious appraisal of possibilities as well as capabilities. The chance that the Swedes would, even if they could, put forth such an effort seems to me, in the light of their basic national policies, to be nil.

Para. 48. No comment.

Para. 70.

This paragraph would be improved by a rephrasing of the sentence beginning "The major political parties --". As written, it exaggerates the extent of agreement among the major parties and leaders in support of the manufacture in Sweden of tactical and air defense atomic weapons at any time in the near or relatively near future. As to avoidance of longer range missiles, the insertion of "- at least initially - " hints at something which, in any opinion, is most unlikely to happen, namely, a basic change in foreign and national defense policies.

Para. 97.

This paragraph would, I think, be improved by drawing a distinction between defensive (tactical and air defense) weapons and longer range weapons, particularly in regard to probable Soviet reactions.

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1. Reference your memorandum on NIE No. 100-2-58, "Development of Nuclear Capabilities by Fourth Countries," the Intelligence Estimate is based primarily on the physical and economical factors that would give Fourth Countries a potential to develop nuclear capabilities. Using the same criteria in evaluating this Estimate, I feel that the conclusions are accurate and the remarks concerning Sweden are reasonable. Since the other factors, such as the feelings of the people and the defense policy of the country, are not considered, I feel that this Estimate is weighed on the side of being the worst that could happen rather than accepting conclusions which would give a more accurate forecast. The details on the specific paragraphs are given below:

Paragraph 2: Considering substantial stocks to mean the same as "limited operational capacity," as defined in Table 3, Sweden could produce a nuclear weapons and missiles capability of reaching major bloc sites within the next decade. Considering the other "ifs," such as if the defense policy is changed and if the people will accept a new role in world politics, and if the economy of the country is diverted, the conclusion that Sweden has this potential is reasonable.

Paragraph 6: I agree that Sweden will, in all probability, initiate limited nuclear weapons production as the necessary materials become available. From indications, the ground work for this development is taking place at the present time. Swedish arms manufacturers and the research and development establishments are working on the development of nuclear components and, possibly, fuels for missiles.

Paragraph 9: I agree with the Deputy Director of Intelligence, JCS. I do not feel that the acquisition of nuclear capabilities by Fourth Countries will tend to increase the chances of a general war by the expansion of local conflicts, unless a small nation is used by the USSR as a means of provoking a general war. See also, Paragraph 23, NIE 11-6-58, "The Soviet Attitude toward Disarmament."

Paragraph 18: The supposition expressed in the sentence: "If an increased supply of fuel is obtained, either through expansion of domestic processing facilities or purchases abroad, Sweden could produce plutonium at a rate of 75KG per year by 1961, 200 KG by 1963 and 400 KG by 1968," magnifies Sweden's capability. Equivalent



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suppositions that Canada would increase its production and/or modify its agreement with the United States would change the relative standing of the two countries. Table 1: This Table is merely a tabular presentation of the explanation in Paragraph 18.

Paragraph 23: For Sweden, I agree that an all out effort would be required to produce the weapons and the missiles. This all out effort would not be limited to production alone, but would require a radical psychological change by the Government and the people.

Paragraph 31: I agree based on the Air Force evaluation of airplanes. However, I feel that the AA defense on routes into USSR and major bloc targets would require raids by such large numbers of planes that the Swedish Air Force would be unable to stand the attrition rate for anything but a single surprise raid. Table 2: As far as Sweden is concerned, I think "moderate" is a suitable remark.

Paragraph 35 and Footnote 4: I agree. The Swedes have shown a great interest in The Hawk, an Army surface-to-air missile designed to defend against enemy attackers flying at low altitudes to escape detection. I feel that it is in the area of anti-aircraft defense that the Swedes will show an active interest in developing nuclear weapons.

Paragraph 40: Again, if only physical and economical factors are considered, I feel the Estimate as far as distances and scheduling is reasonable. Table 3: Table 3 is this capability in tabular form.

Paragraph 48d: I believe that the strongest factor that is influencing Sweden in obtaining more sophisticated weapons is the desire to buttress the neutral position.

Paragraph 48e: The ability to provide an independent deterrent which would prevent the involvement of Sweden in any war has been a part of the Swedish military philosophy for many years. The military forces are indoctrinated with the idea that Sweden will not be the main area of attack of any nation, but the country may become involved as a desirable supplementary area for the furtherance of a stronger nation's war aim. In such an event, the major power will not be able to devote its full strength against Sweden.



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The Swedish defenses must be strong enough to cause the aggressor to consider the price he would have to pay in defeating the vigorous opposition by the Swedes.

Paragraph 97: I agree with this conclusion. As long as the policy of Sweden is, first, neutrality or non-alliance, and, secondly, in the event of war, defense of the homeland within national boundaries, the possession of nuclear weapons by Sweden will have little influence on the relations between other powers.