

II. Background

The Nuclear Non-Proliferation Act of 1978 (NNPA) created a new category of nuclear information, designated "Sensitive Nuclear Technology," the export of which from the United States is subject to certain conditions and controls specified in the legislation. Accordingly, the administration of these controls requires, as a first step, a means of identifying information proposed to be exported which falls into the category of SNT.

Under section 4(a)(6) of the NNPA, SNT is confined to information in the fields of uranium enrichment, nuclear fuel reprocessing, and heavy water production. This section also provides additional broad criteria which delineate the information which is to be designated SNT. According to these criteria, SNT is to include any information, and only that *information* which:

- Is *not* Restricted Data;
- Is *not* "available to the public;" and
- Is "*important* to the design, construction, operation, or maintenance" of a facility for *uranium enrichment, nuclear fuel reprocessing, or heavy water production*.

The fields in which SNT may exist constitute three of the four fields in which unclassified information (other than that "which is available to the public in published form") may not be transferred abroad without specific authorization by DOE. The fourth area requiring specific authorization under part 810 is plutonium (i.e., mixed oxide) fuel fabrication. Thus, while there is an obvious overlap between SNT and unclassified information whose transfer abroad requires part 810 authorization, these two categories of information are not identical. This is so not only because plutonium fuel fabrication is not among the areas which may include SNT but because the standard of "important" is not applicable to information which requires part 810 authorizations. Any information in the designated fields which is not Restricted Data and which is not available to the public in published form and assists directly or indirectly in the production of special nuclear material requires specific authorization for transfer abroad.

It is important to note that:

- *Not all* information whose export requires part 810 specific authorization is SNT, but
- *All* information which is SNT requires part 810 specific authorization for export.

III. Scope

Although the establishment of the category of SNT and the criteria for making an SNT determination as discussed below apply most frequently to private firms, the scope of their applicability is much broader.

Section 127 of the AEA (introduced by section 305 of the NNPA) states:

"The United States adopts the following criteria which * * * will govern exports * * * from the United States of * * * any sensitive nuclear technology."

The language above makes no distinction between exports by private firms, individual persons, or U.S. Government entities. Therefore, while the DOE is exempt from section 57b and the implementing regulation 10 CFR part 810, the NNPA provisions related to SNT apply equally to all agencies of the government (including DOE) as well as private firms and individuals. Because of this, DOE participation in foreign reprocessing, enrichment, or heavy water programs is reviewed by the Office of International Security Affairs, the office with responsibility for part 810 and related matters.

IV. Methodology

A part 810 application will be analyzed by careful consideration of each of the three criteria contained in the definition of SNT to determine if information to be transferred

- Does not include Restricted Data;
- Is not "available to the public"; or
- Is "important to the design, construction, operation, or maintenance of a facility for uranium enrichment, nuclear fuel reprocessing, or heavy water production."

The first step in the process, if the application involves enrichment technology, is to determine whether the proposed transfer involves Restricted Data (the areas of reprocessing and heavy water production have been declassified and no longer contain any Restricted Data). If Restricted Data is involved, the analysis will end and no further consideration of the application under part 810 will take place. The applicant will be advised and appropriate action will be taken under other sections of the Atomic Energy Act.

The second step is a determination of whether the proposed information to be transferred is available to the public. A decision on this point must take into account paragraph (1) of Part B of Annex A of the Nuclear Supplier's Guidelines (INFCIRC/254), since the NNPA definition of SNT was drafted to be consistent with the NSG Guidelines, and allow the U.S. Government to implement its obligations under those

Guidelines. This paragraph indicates that information available to the public is that which is "for example, in published books or periodicals, or that which has been made available internationally without restrictions on its further dissemination." Data that have been made generally available to the public in any form, includes:

- Data distributed in documentary or other physical form at open conferences, lectures, trade shows, or other media open to the public; and
- Publications that may be purchased without restrictions at a nominal cost, or obtained without costs, or are readily available at libraries accessible to the public. The term "nominal cost" is intended to reflect realistically only the cost of preparing and distributing the publication and not the intrinsic value of the technical data.

If, after consideration of all the following factors, it is determined that all of the information is available to the public, the case by definition does not involve SNT. If, on the other hand, the information is not available to the public, then the determination must be made if any of the information is SNT. In determining the extent to which the information to be transferred is available to the public, the following questions should be considered:

A. Is any or all of the information contained in U.S. Government documents that would be available pursuant to a Freedom of Information Act (FOIA) request?

Note: In responding to this question it must be recognized that this goes beyond those documents that are placed on sale or given routine distribution.

B. Is any or all of the information available, for not more than a nominal fee, to the public in published documents or data banks (other than Question A) including information provided to the Nuclear Regulatory Commission (NRC) without restrictions on further dissemination?

Note: This includes government and nongovernment publications and all material which has been placed in the NRC public document room for public inspection.

C. Has any or all of the information been distributed in physical form (documents, tapes, etc.) in an open forum?

Note: This includes meetings or conferences sponsored by nationally recognized scientific or technical organizations.

D. Is any or all of the information publicly available or available internationally without restriction on further dissemination in forms other