March 27, 1998

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, DC 20436

MEMORANDUM TO THE COMMITTEE ON WAYS AND MEANS OF THE UNITED STATES HOUSE OF REPRESENTATIVES ON PROPOSED TARIFF LEGISLATION[1]

Bill no., sponsors, and sponsors' state: H.R. 2339, Rep. Nancy Johnson (CT) and Rep. Kennelly (CT)

Companion bill: None.

Title as introduced: Relating to the tariff treatment of nuclear fuel assemblies.

Summary of bill:[2]

This bill would amend the Harmonized Tariff Schedule of the United States (HTS) by adding a new additional U.S. note 3 to chapter 84, specifying that subheading 8401.30.00 applies only to fuel rods which are collected into bundles to form fuel assemblies. According to the new note, enriched uranium compound that has been shipped abroad and converted into sintered, enriched uranium dioxide pellets, and inserted into zirconium alloy tubing sealed by plugs welded into either end, are to be classified in subheading 2844.20.00, and the zirconium alloy tubing is to be classified under subheading 8109.90.00. As a result, this bill would effectively require the constructive segregation of the uranium and the tubing, and would reinstate the tariff treatment for these goods that existed under the former Tariff Schedules of the United States (TSUS) prior to 1989. The effect of this action would be to restrict the U.S. product scope of the six-digit tariff subheading for the fuel rods and to attempt to dictate the classification of the uranium and the tubing; these six-digit provisions are part of the International Convention on the Harmonized Commodity Description and Coding System (HS) of the World Customs Organization and, as such, their coverage is multilaterally determined.

Effective date: 15th day after enactment.

Retroactive effect: The applicability of the reduced duty to eligible goods would be made retroactive to January 15, 1996.

Statement of purpose:

No formal statement by the sponsors of H.R. 2339 appeared in the Congressional Record. Background information was furnished by ABB Combustion Engineering Nuclear Operations (ABB CENO) to the staffs of Representatives Kennelly and Johnson. The following is an abstract of that information:

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[1]Industry analyst: Vincent DeSapio (205-3435); attorney: Jan Summers (205-2605).
[2]See appendix A for definitions of tariff and trade agreement terms.

According to offices of Congressional sponsors, the proposed legislation seeks to recapture $1.8 million in "unintended duty" that allegedly was paid by ABB Combustion Engineering Nuclear Operations (ABB CENO) since January 15, 1996, on imports from Sweden of pelletized uranium oxide, based on the difference in tariff treatment for pelletized uranium oxide arising from the adoption of the HTS.[3]

Prior to the adoption of the HTS in 1989, the U.S. Customs Service classified shipments of bundles of nuclear fuel rods distinctly from nuclear fuel assemblies. The pelletized uranium oxide component of the nuclear fuel rod entered free of duty under TSUS item 422.50, while the zirconium alloy tubing component of the fuel rod entered under TSUS item 658.00 at a general duty rate of 5.5 percent ad valorem.[4] When the HTS was implemented in 1989, nuclear fuel rods (containing the formerly separately classified pelletized uranium oxide and zirconium tubing) were included with reactor-ready nuclear fuel assemblies and became subject to duty under HTS subheading 8401.30.00. Goods entering under HTS subheading 8401.30.00 were assessed duties of 5.9 percent and 5.2 percent ad valorem in 1996 and 1997, respectively.

According to ABB CENO, a lack of capacity in its nuclear fuel manufacturing plant in Hematite, Missouri threatened 1996 and 1997 contract deliveries of nuclear fuel assemblies to Washington Public Power Supply System. As a result, the firm was forced to ship enriched uranium to its parent company plant in Sweden to be pelletized and inserted into zirconium tubing to form the fuel rod. The material was then imported to the United States for further processing into nuclear fuel assemblies. According to ABB CENO, the company paid a total unintended duty of $1.8 million in 1996 and 1997 on the pelletized uranium oxide imported from Sweden, based on the difference in tariff treatment for pelletized uranium oxide arising from the adoption of the HTS.

Product description and uses:

Nuclear fuel assemblies are used in nuclear power plants, as part of the fission process, to generate electrical energy. Enriched uranium oxide pellets are inserted into long zirconium tubes, the ends of the tubes are sealed and the completed tubes, or "fuel rods," are then bundled and arranged into fuel assemblies that are placed inside a plant's reactor, where fission occurs.[5]

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[3]ABB CENO asserts that its February 1997 delivery of nuclear fuel assemblies to Washington Public Power Supply System was the last to involve importing of pelletized enriched uranium from Sweden. Production of the assemblies now takes place at its plant in Hematite, MO.

[4]According to ABB CENO, beginning in 1970 the U.S. Customs Service distinguished between: (1) reactor-ready nuclear fuel assemblies and (2) pelletized uranium oxide contained in zirconium tubing, that is not reactor-ready.

[5]The solid pellets within the fuel assemblies contain both U^{235} and U^{238} uranium isotopes. The U^{235} is enriched at the U.S. Department of Energy facilities to increase the concentration of fissionable material in the pellets to sustain more completely the nuclear reaction. When assemblies are placed in the nuclear reactor, atomic neutrons strike the uranium atoms in the assemblies. These atoms split or "fission" and release their own neutrons which strike other uranium atoms which they split in turn to form a chain reaction. As a result of this chain reaction, enormous amounts of heat are generated to convert water to the steam to drive the electrical power-producing turbines. The speed of the nuclear chain reaction is regulated by control rods which absorb these neutrons.

Tariff treatment:[6]

Product[7]	HTS subheading	Col. 1-general rate of duty
Fuel elements (cartridges), non-irradiated, and parts thereof	8401.30.00	4.6 percent ad val.

This duty rate is scheduled to be reduced to 3.9 percent ad valorem in 1999 and to a final rate of 3.3 percent ad valorem in 2000.

Structure of domestic industry (including competing products):

According to industry sources, almost all U.S. nuclear fuel assemblies and fuel rods are produced by five firms.

Firm	Location of main U.S. production facility
General Electric Co.	Wilmington, NC
Siemens Inc. (Germany)	Richland, WA
ABB. CENO (Sweden)	Hematite, MO
Westinghouse Inc.	Columbia, SC
Framatom-Cogema (France)	Lynchburg, VA

Nuclear fuel assemblies are composed of a series of nuclear fuel rods, which are precisely arranged into bundles and placed in the nuclear reactor with spaces between the bundles for control rods. The precise arrangement of the fuel rods in the assembly differs according to the type of reactor for which the assemblies have been designed. All domestic uranium (in the form of uranium hexafluoride) for use in nuclear fuel assemblies is enriched in the U.S. Department of Energy's enrichment facilities in Paducah, KY and Portsmouth, OH. Most firms presently source at least part of their supplies of pelletized uranium oxide, zirconium tubing, or completed fuel rods from foreign production facilities. Uranium pellets are produced in the United States by ABB CENO, General Electric, Westinghouse, and Siemens Inc., while zirconium tubing is produced by General Electric, Westinghouse, and Sandvik.

Private-sector views:

The Commission contacted three firms accounting for a large segment of U.S. production of nuclear fuel assemblies.[8] The companies submitted comments on this bill, which are set out in Appendix C.

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[6]See appendix B for column 1-special and column 2 duty rates.

[7]If imported and presented separately, the uranium pellets would be classifiable in subheading 2844.20.00 (with a general duty rate of free) and the zirconium tubing in subheading 8109.90.00 (at a 1998 general duty rate of 4.1 percent ad val.).

[8]Mr. Rob Wallace, Director of Government and Industry Programs, General Electric Company, Washington, DC, 2/2/98; Mr. B.N. Femreite, Vice President of Manufacturing, Siemens & Co., 2/2/98; and James A. Fici, Vice President and General Manager, Westinghouse Electric Company, 2/9/98.

U.S. consumption:

	1994	1995	1996
		($1,000)	
U.S. production[1]	500,000	500,000	500,000
U.S. imports	1,699	2,185	6,148
U.S. exports	82,554	83,738	67,301

Principal import sources in 1996: Sweden, Russia, and Croatia, in order of importance.
Principal export markets in 1996: Taiwan, Republic of Korea, and Japan, in order of importance.

[1]Estimate of 1996 U.S. production was provided by ABB CENO. According to ABB CENO, annual production of bundled nuclear fuel assemblies for the period 1994-1996 was relatively stable.

Effect on customs revenue[9]:

Future (1998-1999) effect: Because the vast majority of the value of the nuclear fuel rod is composed of pelletized uranium oxide, which enters the United States free of duty under HTS subheading 2844.20, the constructive segregation intended by H.R. 2339 would allow most of the value of these rods to enter free of duty. The estimated annual loss of tariff revenues would be approximately $389,000, based on the level of U.S. imports recorded under HTS subheading 8401.30.00 in 1997.

1998: [$9,146,000 x 4.6%] = $421,000
1999: [$9,146,000 x 3.9%] = $356,694

Retroactive (1996-1997) effect: The total amount of U.S. customs revenue collected under HTS subheading 8401.30.00 during 1996 and 1997 was $739,000 ($318,000 in 1996 and $421,000 for the first 11 months of 1997). This figure would then represent the maximum loss in tariff revenue that would occur as a result of the retroactive application of the measure, assuming importers file claims covering all eligible entries. This figure exceeds the $1.8 million in duty payments reported by ABB CENO for the period.

Technical comments:

It is not legally permissible for the United States to unilaterally change the scope of a six-digit level provision (subheading 8401.30, which was not subdivided when included in the HTS), or to attempt to specify the classification of a good at the 6-digit level. Moreover, as noted above, if the uranium and the tubing are separately imported (that is, not in the form of fuel rods), they already fall in the provisions named in the proposed note, but if they are imported in the form of fuel rods, they must be classified as “parts of fuel elements” because that term is more specific in its description of the goods in their condition as imported than either provision for the materials comprising the rods.

[9]Actual revenue loss may be understated in the event of a significant increase in imports over this period.

However, in the alternative, the bill could suspend the general rate of duty on HTS subheading 8401.30.00, or it could subdivide HS subheading 8401.30 and create two new permanent eight-digit U.S. tariff rate lines, one with a “free” rate of duty for individual fuel rods that are to be bundled as fuel assemblies and a second with the existing duty rate of 4.6 percent ad valorem for “other” goods.

APPENDIX A

TARIFF AND TRADE AGREEMENT TERMS

In the **Harmonized Tariff Schedule of the United States** (HTS), chapters 1 through 97 cover all goods in trade and incorporate in the tariff nomenclature the internationally adopted Harmonized Commodity Description and Coding System through the 6-digit level of product description. Subordinate 8-digit product subdivisions, either enacted by Congress or proclaimed by the President, allow more narrowly applicable duty rates; 10-digit administrative statistical reporting numbers provide data of national interest. Chapters 98 and 99 contain special U.S. classifications and temporary rate provisions, respectively. The HTS replaced the Tariff Schedules of the United States (TSUS) effective January 1, 1989.

Duty rates in the **general** subcolumn of HTS column 1 are most-favored-nation (MFN) rates, many of which have been eliminated or are being reduced as concessions resulting from the Uruguay Round of Multilateral Trade Negotiations. Column 1-general duty rates apply to all countries except those enumerated in HTS general note 3(b) (Afghanistan, Cuba, Laos, North Korea, and Vietnam), which are subject to the statutory rates set forth in **column 2**. Specified goods from designated MFN-eligible countries may be eligible for reduced rates of duty or for duty-free entry under one or more preferential tariff programs. Such tariff treatment is set forth in the **special** subcolumn of HTS rate of duty column 1 or in the general notes. If eligibility for special tariff rates is not claimed or established, goods are dutiable at column 1-general rates. The HTS does not enumerate those countries as to which a total or partial embargo has been declared.

The **Generalized System of Preferences** (GSP) affords nonreciprocal tariff preferences to developing countries to aid their economic development and to diversify and expand their production and exports. The U.S. GSP, enacted in title V of the Trade Act of 1974 for 10 years and extended several times thereafter, applies to merchandise imported on or after January 1, 1976 and before the close of June 30, 1998. Indicated by the symbol "A", "A*", or "A+" in the special subcolumn, the GSP provides duty-free entry to eligible articles the product of and imported directly from designated beneficiary developing countries, as set forth in general note 4 to the HTS.

The **Caribbean Basin Economic Recovery Act** (CBERA) affords nonreciprocal tariff preferences to developing countries in the Caribbean Basin area to aid their economic development and to diversify and expand their production and exports. The CBERA, enacted in title II of Public Law 98-67, implemented by Presidential Proclamation 5133 of November 30, 1983, and amended by the Customs and Trade Act of 1990, applies to merchandise entered, or withdrawn from warehouse for consumption, on or after January 1, 1984. Indicated by the symbol "E" or "E*" in the special subcolumn, the CBERA provides duty-free entry to eligible articles, and reduced-duty treatment to certain other articles, which are the product of and imported directly from designated countries, as set forth in general note 7 to the HTS.

Free rates of duty in the special subcolumn followed by the symbol "IL" are applicable to products of Israel under the **United States-Israel Free Trade Area Implementation Act** of 1985 (IFTA), as provided in general note 8 to the HTS.

Preferential nonreciprocal duty-free or reduced-duty treatment in the special subcolumn followed by the symbol "J" or "J*" in parentheses is afforded to eligible articles the product of designated beneficiary countries under the **Andean Trade Preference Act** (ATPA), enacted as title II of Public Law 102-182 and implemented by Presidential Proclamation 6455 of July 2, 1992 (effective July 22, 1992), as set forth in general note 11 to the HTS.

Preferential or free rates of duty in the special subcolumn followed by the symbol "CA" are applicable to eligible goods of Canada, and rates followed by the symbol "MX" are applicable to eligible goods of Mexico, under the **North American Free Trade Agreement**, as provided in general note 12 to the HTS and implemented effective January 1, 1994 by Presidential Proclamation 6641 of December 15, 1993. Goods must originate in the NAFTA region under rules set forth in general note 12(t) and meet other requirements of the note and applicable regulations.

Other special tariff treatment applies to particular **products of insular possessions** (general note 3(a)(iv)), **products of the West Bank and Gaza Strip** (general note 3(a)(v)), goods covered by the **Automotive Products Trade Act** (APTA) (general note 5) and the **Agreement on Trade in Civil Aircraft** (ATCA) (general note 6), **articles imported from freely associated states** (general note 10), **pharmaceutical products** (general note 13), and **intermediate chemicals for dyes** (general note 14).

The **General Agreement on Tariffs and Trade 1994** (GATT 1994), pursuant to the Agreement Establishing the World Trade Organization, is based upon the earlier GATT 1947 (61 Stat. (pt. 5) A58; 8 UST (pt. 2) 1786) as the primary multilateral system of disciplines and principles governing international trade. Signatories' obligations under both the 1994 and 1947 agreements focus upon most-favored-nation treatment, the maintenance of scheduled concession rates of duty, and national treatment for imported products; the GATT also provides the legal framework for customs valuation standards, "escape clause" (emergency) actions, antidumping and countervailing duties, dispute settlement, and other measures. The results of the Uruguay Round of multilateral tariff negotiations are set forth by way of separate schedules of concessions for each participating contracting party, with the U.S. schedule designated as Schedule XX.

Pursuant to the **Agreement on Textiles and Clothing** (ATC) of the GATT 1994, member countries are phasing out restrictions on imports under the prior "Arrangement Regarding International Trade in Textiles" (known as the **Multifiber Arrangement** (MFA)). Under the MFA, which was a departure from GATT 1947 provisions, importing and exporting countries negotiated bilateral agreements limiting textile and apparel shipments, and importing countries could take unilateral action in the absence or violation of an agreement. Quantitative limits had been established on imported textiles and apparel of cotton, other vegetable fibers, wool, man-made fibers or silk blends in an effort to prevent or limit market disruption in the importing countries. The ATC establishes notification and safeguard procedures, along with other rules concerning the customs treatment of textile and apparel shipments, and calls for the eventual complete integration of this sector into the GATT 1994 over a ten-year period, or by Jan. 1, 2005.

Rev. 8/12/97

APPENDIX B

SELECTED PORTIONS OF THE
HARMONIZED TARIFF SCHEDULE OF THE UNITED STATES

(Appendix not included in the electronic version of this report.)

APPENDIX C

OTHER ATTACHMENTS

(Appendix not included in the electronic version of this report.)

I

105TH CONGRESS
1ST SESSION

H. R. 2339

Relating to the tariff treatment of nuclear fuel assemblies.

IN THE HOUSE OF REPRESENTATIVES

JULY 31, 1997

Mrs. JOHNSON of Connecticut (for herself and Mrs. KENNELLY of Connecticut) introduced the following bill; which was referred to the Committee on Ways and Means

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A BILL

Relating to the tariff treatment of nuclear fuel assemblies.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. NUCLEAR FUEL ASSEMBLIES.

(a) IN GENERAL.—The Additional U.S. Notes to chapter 84 of the Harmonized Tariff Schedule of the United States (19 U.S.C. 3007) are amended by adding at the end the following new note:

''3. Subheading 8401.30.00 applies only to fuel rods which are collected into bundles to form fuel assemblies. Enriched uranium compound shipped abroad and converted into sintered, enriched

uranium dioxide pellets and then inserted into zirconium alloy tubing which is sealed by the means of plugs which are welded into either end are to be classified as follows:

''(a) The uranium pellets are to be classified under subheading 2844.20.00 as uranium oxide.

''(b) The zirconium tubing is to be classified as an article of base metal in subheading 8109.90.00.''.

(b) EFFECTIVE DATE.—The amendment made by this section applies to goods entered, or withdrawn from warehouse for consumption, on or after the 15th day after the date of the enactment of this Act.

SEC. 2. RETROACTIVE APPLICATION.

(a) IN GENERAL.—Notwithstanding section 514 of the Tariff Act of 1930 or any other provision of law, upon proper request filed with the Customs Service before the 90th day after the date of the enactment of this Act, any entry of eligible goods—

(1) that was made after January 15, 1996, and before the 15th day after the date of the enactment of this Act, and

(2) with respect to which there would have been a lesser duty if the amendment made by section 1(a) applied to such entry,

shall be liquidated or reliquidated as if such amendment applied to such entry.

(b) ELIGIBLE GOODS.—For purposes of this section, the term ''eligible goods'' means goods classified under subheadings 2844.20.00 and 8109.90.00 of the Harmonized Tariff Schedule of the United States, pursuant to Additional U.S. Note 3 to chapter 84 of such Schedule, as added by section 1(a) of this Act.

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