

C-E Power Systems
Combustion Engineering, Inc.
1000 Prospect Hill Road
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PDR

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U.S. NRC

CE POWER
SYSTEMS



1981 DEC 21 AM 11 57

EXPORT/IMPORT
AND
INTERNAT'L SAFEGUARDS

December 21, 1981

XSNM01901

11002695

Assistant Director
Export/Import and International Safeguards
United States Nuclear Regulatory Commission
Washington, D.C. 20555

Re: Export License Application for Initial Core Fuel for Two Nuclear Steam
Supply Systems to Mexico

Dear Sir:

Pursuant to the Code of Federal Regulations, Title 10, Part 110, Combustion Engineering, Inc. hereby files its application for a license to export nuclear fuel loadings for two 1300 electrical megawatt nuclear steam supply systems to the United States of Mexico. The information required by 10CFR, Part 110, to be included with this application, is contained in the attachment to this letter. Mexico's Comision Federal de Electricidad, the ultimate user of the fuel, has issued specifications for the fuel and we will be one of the bidders responding to these specifications. A contract has not been received, and, therefore, much of the information furnished at this time must be approximate.

We look forward to your consideration of this application and will be happy to supply any additional information required.

Very truly yours,

Combustion Engineering, Inc.

J. M. West
Vice President
Nuclear Power Systems Division

JMW/pas

Attachment

8201200255 811221
PDR XPORT
XSNM-1901 PDR

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Attachment to Application
for 1981 DEC 21 AM 11 57
Export of Initial Core Nuclear Fuel Loadings
to the United States of Mexico

EXPORT/IMPORT
AND
INTERNAT'L SFGRDS

- A. Name and U.S. address of applicant.

Combustion Engineering, Inc.
1000 Prospect Hill Road
Windsor, Connecticut 06095

Attention: Mr. Richard W. DeVane, Jr.

- B. Name and address of supplier of equipment or material, if different from the applicant.

Same

- C. Name and address of ultimate consignee.

Comision Federal de Electricidad
Rio Rodano 14
06500 Mexico 5, D.F.

- D. Name and address of intermediate consignee.

None

- E. Date of proposed first shipment.

June, 1989

- F. Date of proposed completion of final shipment.

June, 1992

- G. Contractual delivery dates, if established.

Not yet established.

- H. Proposed expiration date of export license.

December, 1994

- I. End-use of material or equipment by all consignees, intermediate and ultimate, with sufficient detail to permit accurate evaluation of the justification for the proposed export.

The equipment consists of nuclear fuel assemblies which will be used to provide the initial fuel loading for two nuclear power plants of approximately 1300 electrical megawatt capacity.

J. General description of the equipment.

The equipment consists of two fuel loadings, each containing 241 fuel assemblies. The fuel assemblies consist of a 16x16 array of fuel rods and associated structure. Each fuel rod consists of uranium dioxide pellets containing slightly enriched uranium. The pellets are contained within a Zircaloy tube to make up the fuel rod.

K. For nuclear reactors, the design power level in thermal or electrical watts.

Approximately 1300 electrical megawatts.

L. Name of installation, if known, in which the equipment is to be used.

Tentatively, Laguna Verde Power Station, Nuclear Plant No. 2 (Units 3&4).

M. Location where the equipment is to be used.

Tentatively: Laguna Verde
Near Veracruz, Mexico

N. Date when equipment is needed abroad.

Starting December, 1989 through June, 1992.

O. Total dollar value of all items to be exported under the required license.

Not yet determined.

P. A list of the items proposed to be exported. Such list need only identify the items by the categories listed in paragraphs a. through e. of Appendix A.

Items to be exported include the items identified in 10 CFR 110, Appendix A, paragraphs (a) (6) and (f).

- Q. The applicable contract number, if known, of any material supplied under a Department of Energy enrichment, lease, or sale contract.

Contract has not yet been obtained.

- R. Where materials are intended for use in production or utilization facility, estimated date of first use, by ultimate or intermediate consignee.

June, 1990

- S. Quantity in grams or kilograms (curies for byproduct material) of: (1) the material in the form exported, (2) any contained uranium or plutonium, and (3) the contained U-235 in enriched uranium.

The fuel assemblies contain uranium in the form of uranium dioxide (UO₂). Sixty-nine of the assemblies contain a total of 29,500 kilograms of uranium enriched to 1.92 percent uranium-235 by weight. One hundred and eight of the assemblies contain 42,950 kilograms of uranium with an enrichment of 2.73 weight percent. Sixty-four of the assemblies contain 26,600 kilograms of uranium with an enrichment of 3.27 weight percent.

- T. Chemical and physical form, including, for enriched uranium, the weight percentage of isotopic enrichment, and, for plutonium, the sum of the percentages of Pu-239 content and Pu-241 content.

Each of the two nuclear fuel loadings contains 100,000 kilograms of uranium with enrichments detailed in S above. The total uranium 235 contained in each fuel loading is 2608 kilograms.

- U. If known, the country of origin of source and special nuclear material including the country where any special nuclear material was produced.

Not known.

Initial Core

Laguna Verde - Unit 3	99,050 Kgs U	/	2,608 Kgs U-235
Laguna Verde - Unit 4	99,050	/	2,608
<u>Total</u>	<u>198,100 Kgs U</u>	/	<u>5,216 Kgs U-235</u>

3.27%
maximum