

APR 27 1984

The Honorable Harold L. Volkmer  
United States House of Representatives  
Washington, D.C. 20515

Dear Congressman Volkmer:

This letter is in response to your letter of March 23, 1984 to Chairman Palladino. Your letter correctly presumes that the Nuclear Regulatory Commission is considering a proposed rule to limit the use of high-enriched uranium (HEU) in research and test reactors. The intent of the proposed rule is to reduce the risk of theft or diversion of HEU from these facilities. The reduction in domestic use of HEU fuel is also intended to encourage similar action by foreign research reactor operators.

The Commission is acutely aware of the potential impacts of the proposed rule on specific facilities such as the University of Missouri at Columbia. Provisions of the proposed rule are attempting to minimize these impacts by:

- (1) recognizing that certain projects or programs cannot be reasonably accomplished without the use of HEU fuel and, therefore, may require exemption; and
- (2) considering HEU fuel replacement schedules which would minimize facility design and operational impacts as well as the financial burdens associated with conversion.

The Commission also has directed its Advisory Committee on Reactor Safeguards to review and comment on the proposed rule prior to a final decision regarding publication. As you may be aware, the publication of a proposed rule will allow a comment period - typically 60 days. The Commission is specifically soliciting outside views, including those of its licensees, on the extent of the impacts you have raised.

I have directed that a copy of the proposed rule be sent to you when it is published in the Federal Register. The proposed rule will also be sent to all potentially affected NRC licensees including Dr. Brugger, as director of the University reactor facility.

Sincerely,

(Signed) William J. Dircks

William J. Dircks  
Executive Director for Operations

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jd-1

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United States House of Representatives  
Washington, D.C. 20515

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COMMITTEE ON SCIENCE AND TECHNOLOGY  
U.S. HOUSE OF REPRESENTATIVES  
WASHINGTON, D.C. 20515

SUBCOMMITTEE ON ENERGY DEVELOPMENT AND APPLICATIONS  
SUBCOMMITTEE ON ENERGY RESEARCH AND PRODUCTION

Hearing on Conversion of Research and Test Reactors  
to Low-Enriched Uranium (LEU) Fuel

Tuesday, September 25, 1984  
2:00 - 5:00 P.M.  
Room 2318 Rayburn House Office Building

Witness List

Panel 1: U.S. Nuclear Regulatory Commission (NRC)

Honorable Frederick Bernthal  
Acting Chairman

Accompanied by:

Honorable James Asselstine  
Commissioner

Panel 2: NRC Advisory Committee on Reactor Safeguards (ACRS) and Others

Jesse Ebersole, Chairman  
NRC ACRS

Edwin L. Zebrosky  
Electric Power Research Institute

Accompanied by:

J. Carson Mark, Chairman  
Subcommittee on Safeguards and Security



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

April 9, 1984

The Honorable Alan Simpson, Chairman  
Subcommittee on Nuclear Regulation  
Committee on Environment and Public Works  
United States Senate  
Washington, D. C. 20510

Dear Mr. Chairman:

This is in response to your letter of March 18, 1984. While the Commission has asked the staff to prepare a proposed rule for converting research reactors that now use high enriched uranium (HEU) to low enriched uranium (LEU), that rule would be premised on Congress authorizing the Department of Energy to fund the conversion program. (Our directive to the staff is enclosed for your information.) There are no NRC funds budgeted for such a purpose.

In our opinion, it would be more appropriate for another Federal agency, such as DOE, to provide funding assistance for conversion of HEU to LEU rather than to fund this as an NRC research project. However, the Commission agrees that Federal funding of the conversion effort is justified because the government played a significant role in the establishment of these research reactors for the national interest.

Sincerely,

Nunzio J. Palladino

Enclosure:  
As Stated

cc: Senator Gary Hart

~~445154259~~ 4p.

El16



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

April 9, 1984

The Honorable Mark Hatfield, Chairman  
Subcommittee on Energy and Water Development  
Committee on Appropriations  
United States Senate  
Washington, D. C. 20510

Dear Mr. Chairman:

This is to follow-up Commissioner Gilinsky's March 2, 1984 letter to you. While the Commission has asked the staff to prepare a proposed rule for converting research reactors that now use high enriched uranium (HEU) to low enriched uranium (LEU), that rule would be premised on Congress authorizing the Department of Energy to fund the conversion program. (Our directive to the staff is enclosed for your information.) There are no NRC funds budgeted for such a purpose.

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Sincerely,

Nunzio J. Palladino

Enclosure:  
As Stated

cc: Senator J. Bennett Johnston

~~5495154265~~ 4p.





UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

April 9, 1984

The Honorable Morris K. Udall, Chairman  
Subcommittee on Energy and the Environment  
Committee on Interior and Insular Affairs  
United States House of Representatives  
Washington, D. C. 20515

Dear Mr. Chairman:

This is to follow-up Commissioner Gilinsky's March 2, 1984 letter to you. While the Commission has asked the staff to prepare a proposed rule for converting research reactors that now use high enriched uranium (HEU) to low enriched uranium (LEU), that rule would be premised on Congress authorizing the Department of Energy to fund the conversion program. (Our directive to the staff is enclosed for your information.) There are no NRC funds budgeted for such a purpose.

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Sincerely,

*Nunzio J. Palladin*  
Nunzio J. Palladin

Enclosure:  
As Stated

cc: Rep. Manuel Lujan

~~6445154209~~ LP.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

April 9, 1984

The Honorable Tom Beville, Chairman  
Subcommittee on Energy and Water Development  
Committee on Appropriations  
United States House of Representatives  
Washington, D. C. 20515

Dear Mr. Chairman:

This is to follow-up Commissioner Gilinsky's March 2, 1984 letter to you. While the Commission has asked the staff to prepare a proposed rule for converting research reactors that now use high enriched uranium (HEU) to low enriched uranium (LEU), that rule would be premised on Congress authorizing the Department of Energy to fund the conversion program. (Our directive to the staff is enclosed for your information.) There are no NRC funds budgeted for such a purpose.

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Sincerely,

Nunzio J. Palladino

Enclosure:  
As Stated

cc: Rep. John Myers

~~8175154272~~ 4p.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

April 9, 1984

The Honorable Richard L. Ottinger, Chairman  
Subcommittee on Energy Conservation and Power  
Committee on Energy and Commerce  
United States House of Representatives  
Washington, D. C. 20515

Dear Mr. Chairman:

This is to follow-up Commissioner Gilinsky's March 2, 1984 letter to you. While the Commission has asked the staff to prepare a proposed rule for converting research reactors that now use high enriched uranium (HEU) to low enriched uranium (LEU), that rule would be premised on Congress authorizing the Department of Energy to fund the conversion program. (Our directive to the staff is enclosed for your information.) There are no NRC funds budgeted for such a purpose.

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Sincerely,

Nunzio J. Palladino

Enclosure:  
As Stated

cc: Rep. Carlos Moorhead

~~6445154277~~ 4p.



release

4/10/84

NOTE TO: Bill Dircks

PROPOSED RULE FOR LIMITING THE USE OF HEU IN RESEARCH REACTORS

I have looked at the RES proposed amendment to 10 CFR Part 50 to "Limit the Use of High Enriched Uranium (HEU) in Nonpower Reactors" requested by the Commission. The proposed rule requires timely conversion of low enriched fuel unless continued use of HEU can be justified. About 31 NRC licensed nonpower reactors (including the GE Test Reactor and the UCLA reactor) could be affected by the proposed rule. Of these, 25 are owned and operated by universities, some are owned by private business and one is owned by an agency of the Federal Government.

My concerns are

- (1) Rule impacts such as changes to reactor fuel and configurations, procedures and staffing (potentially significant licensing issues) need more work to demonstrate practicality.
- (2) Safety (public and occupational) impacts resulting from changes to reactors and reactor operations need to be identified and considered.
- (3) Safety and safeguards risks associated with refueling (including transportation) need to be identified and considered.
- (4) As noted in the enclosed letter from Congressman Volkmer, the rule "...could cause scientific and financial difficulties" for nonpower reactor licensees.
- (5) The rule provides for exemption - continued use of HEU. Since each nonpower reactor is uniquely used, I would expect 31 letters like the one from Congressman Volkmer. If these exemptions are granted, the rule would have little if any effect concerning conversion from HEU to LEU.
- (6) The cost benefit analysis is weak. Apparently, the Commission has made the judgment that the proposed rule is needed.

The proposed rule is not within the purview of the CRGR unless you request that the CRGR review the proposed rule.

Vic Stello

~~6545147236~~ 4p.

E/17

June 12, 1984

Mr. John C. McKinley  
Advisory Committee on Reactor Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Mr. McKinley:

In regard to the Advisory Committee on Reactor Safeguards June 12 meeting to review the low-enriched uranium proposed rule for the conversion of research reactors if "technically feasible," and if fuels are "available" and "acceptable," I am concerned that the emphasis placed on related safeguard measures for Category II to provide interim protection of our HEU will produce a far greater problem for research reactors than the conversion to LEU. I have been told that NMSS has indicated to the Commission that the research reactor community had no strong feeling about the interim requirements and a voluntary program was acceptable. That is far from the case. At the TRIGA Owners Conference of March 1984, that group informed Mr. Dube of NMSS that we prefer to "negotiate" these proposed requirements as a reactor type and as a group rather than a site-specific requirement. This was our reply when offered the option of "voluntary license condition," "being ordered to modify our licenses" or "negotiating for rule changes."

I caution overreaction to safeguards requirements and the resulting harm done when university research reactors become "locked-up" and can not provide their intended function of research, teaching, and training. We will be taking these drastic measures which will result in consideration by our administrators to close our facilities. Just look at the UCLA hearings and their impact on the Northrop reactor. That reactor will be shut down within the next six months in part due to administrative reaction to the UCLA hearings.

Sincerely,

Donald E. Feltz, Director  
Nuclear Science Center  
Texas A&M University System  
F. E. Box 89  
College Station, Texas 77843  
(409) 845-7551

Dictated by telephone from Mr. Feltz  
to Joan Kirkland, June 12, 1984, 10:15 AM  
634-1413

~~5545-48266~~ Lp.

E/20