



OFFICE OF THE
SECRETARY

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

June 21, 1983

MEMORANDUM FOR: William J. Dircks, Executive Director
for Operations

FROM: Samuel J. Chilk, Secretary *[Signature]*

SUBJECT: PROPOSED COMMISSION POLICY TO REDUCE
ENRICHMENT AT DOMESTIC RESEARCH REACTORS

The Commission (with all Commissioners agreeing) has agreed that a proposed rule be developed with the following provisions:

- (1) No new research or test reactors be licensed for use of HEU fuel unless the applicant shows that the unique purposes of the project cannot be achieved without using HEU fuel.
- (2) At each refueling, existing research and test reactors must replace burned up HEU fuel with fuel having appreciably lower enrichment than the original,
 - (a) if that would be technically feasible with existing fuel technology at the time of refueling, and
 - (b) unless the license shows that the unique purposes of the project could not be achieved without using HEU fuel.
- (3) Both (1) and (2) are based on Congress funding DOE to provide the appreciably lower enrichment and LEU fuel for university reactors.

The rulemaking should also request comments as to what extent economic feasibility should influence (1) and (2).

The Office of International Programs should also keep the State Department informed.

You should develop the proposed rule with help from OPE and return it for final Commission action.

(EDO)

(SECY Suspense: 8/15/83)

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Chairman Palladino, while agreeing to have the staff begin development of the proposed rule, is not convinced at this time of the need for the rule. He would expect to have the staff brief the Commission on this matter before extensive efforts are expended in developing the proposed rule.

Commissioner Gilinsky adds: "The proposed rule, as described in this SRM, would allow research reactor owners to continue to fuel their reactors with highly-enriched uranium -- a nuclear explosive -- by claiming that the unique purpose of their project requires HEU. The SRM also states that the proposed rule should ask for comments on the economics of switching from HEU to LEU. I would like the Commission to adopt a stronger rule which would not allow any new civilian reactors to be licensed using nuclear explosive fuel, regardless of the purpose. I would also not consider economics as a strong basis for allowing continued use of HEU (nuclear explosive) fuel in existing reactors.

"The Commission's lax approach is inconsistent with its policy statement on HEU, which was intended to encourage research reactor owners abroad to use lower enrichment fuel instead of HEU to cut down on exports of that dangerous nuclear explosive material. The loopholes that would allow U.S. reactors a pretext not to switch will influence owners of foreign research reactors."

cc: Chairman Palladino
Commissioner Gilinsky
Commissioner Ahearne
Commissioner Roberts
Commissioner Asselstine
OGC
OPE