

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

June 19, 1980

DOCKET NUMBER

PETITION RULE PRM-51-6 (11)

(45 FR 25557)

Secretary of the Commission  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

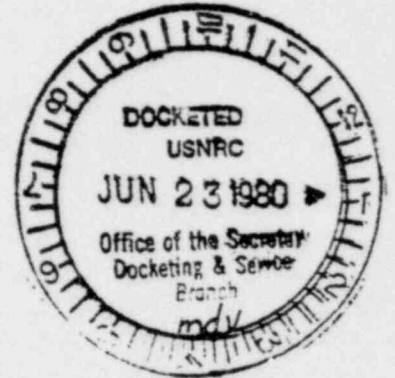
Attention: Docketing and Service Branch

Dear Sir:

The Tennessee Valley Authority (TVA) is pleased to provide comments on the petition for rulemaking filed by Catherine Quigg as noticed in the April 15, 1980, Federal Register (45 FR 25557-25558). The petition requests the NRC to prepare a generic environmental impact statement for the use of high burnup nuclear fuel.

While we agree that proposals to irradiate fuel to high burnup raise questions about fuel performance, we believe that these questions are being properly addressed by detailed analyses and small-scale demonstrations to confirm the analyses. All demonstration projects at nuclear plants will be conducted in accordance with the plant technical specifications which limit radioactive releases to the values set by the existing NRC regulations. This developmental program for high burnup fuel is not intended to change the existing regulatory limits of permissible radioactive release. It is intended to develop high burnup fuel that can be safely used without increasing the potential radioactive release beyond the existing regulatory limits which are already used in the safety evaluation of each plant. We believe that this program will not result in any greater radiological impact beyond that already expected from an existing facility. Thus, we believe the petition should be denied.

Additionally, there is general agreement within the industry that temperature, not burnup, is the dominant factor in determining how much fission gas is released from fuel pellets (for example, see letter to the editor, "Comments on Fission-Gas Release From Fuel at High Burnup in Volume 1, No. 6," Nuclear Safety, Volume 20, No. 4,



Acknowledged by card. 6/23/80. mdv.

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July-August 1979, pages 417-421). Burnup is a factor in determining fission gas release, but higher burnup does not necessarily mean more fission gas will be released from the pellets.

We appreciate the opportunity to comment on this petition for rulemaking.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*L. M. Mills by RLD*

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