ES-005-3



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June 12, 1980

Mr. Samuel J. Chilk
Secretary of the Commission
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

DOCKET NUMBER
PETITION RULE PRM-51-6 (6)
(45 FR 25557)

Dear Mr. Chilk:

I have reviewed a letter from Catherine Quigg, dated March 6, 1980, addressing:

> Petition for Rulemaking on Generic Impacts of High Burnup Nuclear Fuel.

The letter cites data from a report I published in 1977(1), relating to burnups on spent fuel. Since the report was published, additional data have come to our attention, both from foreign and domestic fuel. The following cases are pertinent to evaluations of burnup effects on fuel irradiation and water storage:

1) The highest burnups on commercial water reactor fuel that we are aware of occurred in the Zorita reactor.(2) That program involved 237 removable fuel rods that were irradiated in modified fuel assemblies. Fuel rods irradiated for three cycles attained rod average burnups to 57,000 MWd/MTU. However, two rods reached rod average burnups of 62,000 MWd/MTU.(3) The Zorita campaign demonstrated that Zircaloy-clad PWR fuel was capable of high-burnups. Several rods were examined. The remaining rods were placed in dry storage.

2) Six Zircaloy-clad Shippingport fuel assemblies were first irradiated in December 1957. The fuel assemblies each contained 120 fuel rods and remained in the reactor until 1974, reaching a burnup of ~41,000 MWd/MTU. The fuel therefore has been in water for 23 years, either at reactor or pool conditions. The fuel received a detailed examination(4), which indicated that the fuel performed well.

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(1) A. B. Johnson, Jr., Behavior of Spent Nuclear Fuel in Water Pool Storage, BNWL-2256, September 1977.

(2) E. Roberts et al. "Fuel Modeling and Performance of High Burnup Fuel Rods," ANS Topical Meeting on Water Reactor Fuel Performance, St. Charles, Illinois, May 1977

(3) A. B. Johnson, Jr., et al., Annual Report-FY 1979, Spent Fuel and Fuel Pool Component Integrity. PNL-3171, May 1980.

(4) E. Hillner, Corrosion and Hydriding Performance Evaluation of Three Zircaloy-2 Clad Fuel Assemblies After Continuous Exposure in PWR Cores 1 and 2 at Shippingport, PA. WAPD-TM-1412, January 1980.

L-4-1, pt. 51
PRM-51-6

Acknowledged by card. 6/18/80. mdv..

3) Fuel which reached burnups of 39,000 MWd/MTU in the Obrigheim reactor (PWR) was discharged in 1975.[3][5][6] Eighteen rods without defects are inspected periodically by nondestructive methods (destructive examinations are to be instituted if unusual behavior is detected by nondestructive inspection). Ten rods with clearly evident reactor-induced defects also are inspected. There is no evidence that the rods are degrading during water storage.

4) Four fuel assemblies recently were discharged from the Oconee 1 reactor after reaching burnups of ~40,000 MWd/MTU.

5) Four fuel assemblies recently were discharged from the Zion reactor with burnups near 48,000 MWd/MTU. Another 60 assemblies have reached burnups near 40,000 MWd/MTU.

Both the Department of Energy and the Electric Power Research Institute have designed complementary high burnup demonstration programs to assess results of relatively high burnups on fuel and cladding parameters. (We are also aware of a high-burnup demonstration program in the German Federal Republic.) The assemblies receive detailed inspections at interim points in the irradiation, to assure that major degradation is not occurring. Thus, the demonstrations provide a well-characterized, responsible approach to assess the reliability of extending burnups to achieve better fuel i.e., uranium utilization.

The Department of Energy (DOE) Spent Fuel and Fuel Pool Component Integrity program has approached the investigators conducting the high burnup programs regarding prospects to assume responsibility for extended surveillance of the high burnup fuel during water storage. The contacts suggest that working relationships can be arranged. Thus, several years of surveillance on the high-burnup fuel would be available before any sizable inventory of high-burnup fuel would be discharged to spent fuel pools.

In summary, commercial Zircaloy-clad fuel rods have reached rod average burnups to 62,000 MWd/MTU. Demonstration programs are underway to develop a well-characterized inventory of high-burnup assemblies. Plans are being developed to subject assemblies from the inventory to periodic surveillance to characterize the behavior during water pool storage. I

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(5) K. L. Huppert, "Spent Fuel Storage - Philosophies and Experience." Proc. NEA Sem. Storage of Spent Fuel Elements, Madrid, Spain, June 20-23, 1978.

(6) M. Peehs, W. Petri, H. P. Fuchs, and F. Schlemmer. "Behavior of Spent LWR Fuel Assemblies." Proc. NEA Sem. Storage of Spent Fuel Elements, Madrid, Spain, June 20-23, 1978.

propose that the combination of reactor and pool surveillance is a responsible approach to define the behavior of high-burnup fuel.

Sincerely,

A. B. Johnson, Jr.
Staff Scientist
Corrosion Research & Engineering

ABJ:pl

## NATIONAL SCIENCE FOUNDATION

### Advisory Council; Meeting

In accordance with the Federal Advisory Committee Act, Pub. L. 92–463, the National Science Foundation announces the following meeting:

Name: NSF Advisory Council.
Place: Room 540, National Science Foundation, 1800 G Street, N.W., Washington, D.C. 20550.
Date: Thursday, May 1, and Friday, May 2, 1980.
Time: 9:00 a.m. until 5:00 p.m., both days.
Type of Meeting: Open.
Contact Person: Mr. Bruce Darling, Executive Secretary, NSF Advisory Council, National Science Foundation, Room 518, 1800 G Street, N.W., Washington, D.C. 20550. Telephone (202) 632–4384.
Purpose of Advisory Council: The purpose of the NSF Advisory Council is to provide advice and counsel to the NSF Director and principal members of his staff on Foundation-wide issues which require the expertise of the many and varied disciplines and program interests represented in the Foundation.
Summary Minutes: May be obtained from the contact person at above stated address.
Agenda: To review progress by the four task groups of the NSF Advisory Council and to meet with the Director and Deputy Director and NSF staff.

Dated: April 9, 1980.

M. Rebecca Winkler,
*Committee Management Coordinator.*

[FR Doc. 80–11291 Filed 4–14–80; 8:45 am]
BILLING CODE 7555–01–M

### Availability of Advisory Committee Reports

The National Science Foundation has filed with the Library of Congress reports of six NSF advisory committees.

The reports were filed as required by the Federal Advisory Committee Act and are available for public inspection and use at the Library of Congress, Room 256, Rare Book Division, Washington, DC, and at the Committee Management Office, National Science Foundation, Room 247, Washington DC.

The names and titles of the committee submitting reports are:

(1) Advisory Committee for Atmospheric Sciences
Atmospheric Sciences into the 1980's
(2) Advisory Committee for Environmental Biology
Report of the Oversight Review Committee of the Population Biology and Physiological Ecology Programs
(3) Advisory Committee for Physics
Gravitational Radiation Detector Projects Report
Report of the NSF Subcommittee to Review NSF-Supported Nuclear Science Laboratories
Report of the Advisory Committee on the Review of Gravitational Physics
(4) Advisory Committee on Post-International Phase of Ocean Drilling (IPOD) Science
The Merits and Potential of a Proposed Ocean Drilling Program for the 1980's
(5) DOE/NSF Nuclear Science Advisory Committee
Recommendations for FY 1981 Facility Construction
The 1978 Census of Basic Nuclear Scientists in the USA
A Long Range Plan for Nuclear Science
(6) National Science Foundation Advisory Council
Equipment Needs and Utilization Accountability in Research

M. Rebecca Winkler,
*Committee Management Coordinator.*

April 10, 1980.

[FR Doc. 80–11290 Filed 4–14–80; 8:45 am]
BILLING CODE 7555–01–M

## NUCLEAR REGULATORY COMMISSION

[Docket No. PRM–51–6]

### Catherine Quigg; Filing of Petition for Rulemaking

**AGENCY:** U.S. Nuclear Regulatory Commission.

**ACTION:** Publication of petition for rulemaking by Catherine Quigg.

**SUMMARY:** The Nuclear Regulatory Commission (NRC) is publishing for public comment a petition for rulemaking filed by Catherine Quigg, Research Director, Pollution and Environmental Problems, Inc. The petition, which has been assigned Docket No. PRM–51–6, requests the NRC to amend 10 CFR Part 51, "Licensing and Regulatory Policy and Procedures for Environmental Protection," to require the preparation of a generic environmental impact statement for high burnup nuclear fuel as used in commercial nuclear reactors, stored in spent fuel pools or cooling racks, or potentially as processed in reprocessing plants or disposed of in permanent sites.

**DATE:** Comment period expires June 16, 1980.

**ADDRESSES:** A copy of the petition for rulemaking is available for public inspection in the Commission's Public Document Room, 1717 H Street, N.W., Washington, DC. A copy of the petition may be obtained by writing to the Division of Rules and Records, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

All persons who desire to submit written comments or suggestions concerning the petition for rulemaking should send their comments to the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docket and Service Branch.

**FOR FURTHER INFORMATION CONTACT:** Joseph M. Felton, Director, Division of Rules and Records, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC, 20555, Telephone: 301–492–7211.

**SUPPLEMENTARY INFORMATION:** The petitioner states that with the decision not to reprocess, the Federal government and the utilities want to use more uranium in existing nuclear fuel in light water reactors across the country. To that end, the U.S. Department of Energy (DOE) has initiated cost-shared high burnup projects with Duke Power Company and Arkansas Power & Light. The DOE is also supporting two pellet clad interaction (p.c.i.) projects with Consumers Power Company and Commonwealth Edison Company.

The petition also states that on March 7, 1979 the NRC issued a permit to the Commonwealth Edison Company allowing the irradiation of four Zion fuel assemblies to extend burnups in Zion 2, up to about 55,000 MWD/MTU. Zion's Technical Specifications previously provided for a burnup limit of 38,000 MWD/MTU. The petitioner indicates that there has been no experience with fuel size fuel assemblies irradiated to these burnups, but nonetheless the NRC issued a Negative Declaration stating the higher burnups would have no appreciable environmental impact.

The petitioner states that these experiments and others are being conducted without an Environmental Impact Statement, even though they could cause significant and widespread long and short term effects on the human environment. The petitioner says that her major concern is the nationwide program of high burnup fuel in nuclear reactors that is sure to follow these fairly limited experiments. She requests, therefore, that 10 CFR Part 51 be amended to require that a full Environmental Impact Statement be prepared covering the generic environmental impacts of high burnup nuclear fuel as used in commercial nuclear reactors, stored in spent fuel pools or cooling racks, and potentially as processed in reprocessing plants or disposed of in permanent sites.

The petitioner concludes that the use of high burnup fuel could have the following significant effects upon the human environment:

1. Greater fission gas releases from nuclear reactors.

2. Increased fission gas releases from spent fuel pools.

3. Production of inferior grade nuclear spent fuel which can lead to long term environmental hazards.

4. Potential for greater radiological impact in reactor and spent fuel pool accidents.

5. Increased radioactive releases during reprocessing.

The petitioner's arguments with respect to each of the above potential effects are set forth in the petition.

Dated at Washington, D.C., this 8th day of April 1980.

For the Nuclear Regulatory Commission.

Samuel J. Chik,

*Secretary of the Commission.*

[FR Doc. 80-11224 Filed 4-14-80; 8:45 am]

BILLING CODE 7590-01-M

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## Privacy Act of 1974; Notices of System of Records, Proposed Minor Amendments

**AGENCY:** United States Nuclear Regulatory Commission.

**ACTION:** Proposed Minor Amendments of Systems of Records.

**SUMMARY:** The Nuclear Regulatory Commission is proposing minor amendments to the NRC Systems of Records, NRC-22. The amendments clarify and update the information contained in the NRC Systems of Records, necessitated by the division of the Personnel Performance Appraisals Systems into two sections. The additional section will incorporate the new Senior Executive Service into the System and establish a separate System location.

**COMMENT DATE:** Comments are due on or before May 15, 1980.

**ADDRESS:** Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Service Branch.

**FOR FURTHER INFORMATION CONTACT:** Sarah N. Wigginton, FOI/PA Branch, Division of Rules and Records, Office of Administration, U.S. Nuclear Regulatory Commission, Phone: (301) 492-8133.

**SUPPLEMENTARY INFORMATION:** In accordance with the Privacy Act of 1974, the Nuclear Regulatory Commission has published notices of those systems of records maintained by the NRC which contain personal information about individuals and from which such information can be retrieved by an individual identifier. The notices were published as a document subject to publication in the annual compilation of Privacy Act documents.

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and sections 552 and 552a of Title 5 of the United States Code, as amended, notice is hereby given that adoption of the following amendments to the NRC System of Records is contemplated. All interested persons who desire to submit written comments or suggestions for consideration in connection with the purposed amendments should send them to the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Service Branch by May 15, 1980. Copies of comments on the proposed amendments may be examined at the Commission's Public Document Room at 1717 H Street, N.W., Washington, DC.

1. System of Records NRC-22, "Personnel Performance Appraisals—NRC," is amended to read as follows:

**NRC-22**

**SYSTEM NAME:**

Personnel Performance Appraisals—NRC: Part A, GG-15 employees and below; Part B, Senior Executive Service and equivalent employees.

**SYSTEM LOCATION:**

Part A: Division of Organization and Personnel, Office of Administration, NRC, 7910 Woodmont Avenue, Bethesda, Maryland.

Part B: Chairman, Performance Review Board, 7735 Old Georgetown Road, Bethesda, Maryland.

Duplicate system—duplicate systems exist, in whole or in part, at the locations listed in Addendum I, Parts 1 and 2.

**CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:**

NRC employees.

**CATEGORIES OF RECORDS IN THE SYSTEM:**

This system of records contains evaluations of employees, evaluation criteria and methods, supervisory appraisals of performance and career development potential, and other related records.

**AUTHORITY FOR MAINTENANCE OF THE SYSTEM:**

a. Section 161(d), Atomic Energy Act of 1954, as amended, 42 U.S.C. 2201(d)(1976);

b. 5 U.S.C. 4311, et seq.

**ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:**

The records may be used for any of the routine uses specified in the Prefatory Statement.

**POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:**

**STORAGE:**

Maintained on paper in the folders.

**RETRIEVABILITY:**

Records are accessed by name.

**SAFEGUARDS:**

Maintained in locked file cabinets. Access to and use of these records are limited to those persons whose official duties require such access.

**RETENTION AND DISPOSAL:**

Part A: Retained 1 year, or until subsequent rating is prepared, whichever is later.

Part B: Retained for 5 years, or until the fifth annual appraisal is completed, whichever is later.

**SYSTEM MANAGER(S) AND ADDRESS:**

Part A: Chief, Personnel Operations Branch Division of Organization and Personnel Office of Administration U.S. Nuclear Regulatory Commission Washington, DC 20555

Part B: Chairman, Performance Review Board U.S. Nuclear Regulatory Commission Washington, DC 20555

**NOTIFICATION PROCEDURE:**

Director, Office of Administration U.S. Nuclear Regulatory Commission Washington, DC 20555

**RECORD ACCESS PROCEDURES:**

Same as "Notification procedure" for each part.

**CONTESTING RECORD PROCEDURES:**

Same as "Notification procedure" for each part.

**RECORD SOURCE CATEGORIES:**

Part A: Individual to whom record pertains and employee's supervisor.

Part B: Individual to whom record pertains and employee's supervisors: any documents and sources used to develop critical elements and performance standards for that Senior Executive Service position.

Dated at Bethesda, Maryland this 4th day of April, 1980.

For the Nuclear Regulatory Commission.

William J. Dircks,

*Acting Executive Director for Operations.*

[FR Doc. 80-11226 Filed 4-14-80; 8:45 am]

BILLING CODE 7590-01-M

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## Advisory Committee on Reactor Safeguards, Subcommittee on Reliability and Probabilistic Assessment; Meeting

The ACRS Subcommittee on Reliability and Probabilistic Assessment

Pollution & Environmental Problems, Inc.
P.O. Box 309
Palatine, Illinois 60067
March 6, 1980



Mr. Samuel J. Chilk
Secretary of the Commission
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

RE: Petition for Rulemaking on Generic Impacts of High Burnup Nuclear Fuel

Dear Mr. Chilk:

With the decision not to reprocess, the federal government and the utilities want to use more uranium in existing nuclear fuel in lightwater reactors across the country. To that end, the U.S. Department of Energy (DOE) has initiated cost-shared high burnup projects with Duke Power Company and Arkansas Power & Light. The DOE is also supporting two pellet clad interaction (p.c.i.) projects with Consumer Power Company and Commonwealth Edison.

On March 7, 1979 the NRC issued a permit to ComEd allowing the irradiation of four Zion spent fuel assemblies to extended burnups in Zion 2, up to about 55,000 MWD/MTU. Zion's Technical Specifications provide for a burnup limit of 38,000 MWD/MTU. The NRC admits there has been no experience with full size fuel assemblies irradiated to these burnups, but nonetheless issued a Negative Declaration stating the higher burnups would have no appreciable environmental impact.

These experiments and others are being conducted without an Environmental Impact Statement, even though they could cause significant and widespread long and short term effects on the human environment. My major concern is the nationwide program of high burnup fuel in nuclear reactors that is sure to follow these fairly limited experiments. Testifying at a recent Illinois legislative hearing, Eugene Voiland, manager of the Morris Operation spent fuel pool, said he anticipates the use of high burnup fuel in reactors across the country in coming years.

According to NEPA, "major Federal actions significantly affecting the quality of the human environment" require "a detailed Environmental Impact Statement (EIS) by the responsible government official. In accordance with 10CFR, Part 2.802, please consider this letter my formal petition to the U.S. to amend 10CFR Part 51 to require that a full Environmental Impact Statement be prepared covering the generic environmental impacts of high burnup nuclear fuel as used in commercial nuclear reactors, stored in spent fuel pools or cooling racks; and potentially as processed in reprocessing plants or disposed of in permanent sites.

Acknowledged by card 3-17-80, ere

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The following specific comments relate to potential significant generic impacts of high burnup fuel on the human environment and constitute the basis for my request:

1. Greater fission gas releases from nuclear reactors. According to According to Nuclear Safety, Vol. 19, No. 6, Nov-Dec. 1978: "...comments from the research community indicate growing evidence for an increased rate of fission-gas release in lightwater reactor fuels (LWR), particularly above 30,000 MWD/MTU. Dr. Peter Lang, acting director for LWR development, Division of Nuclear Power, DOE, also projects greater fission gas releases as a side effect of higher fuel burnup times.

   In its Safety Evaluation Report on increased fuel burnup at Zion, the NRC concedes that "Irradiating fuel to extended burnups will increase the amount of long-lived fission products and "could increase the fraction of failed fuel in the core over that previously experienced." The NRC states: "Therefore, although the licensee may release more radioactivity from Zion 2 during this extended burnup program than during previous cycles, compliance with technical specifications will maintain concentrations of radioactivity within the allowed limits."

   In other words, the NRC, without notifying the public of the quantity or kind of increased radioactivity releases from the Zion Station, decided on our behalf that this increased amount of radioactivity is acceptable to us. The NRC made this decision unilaterally without notifying the public or without benefit of public hearings or input. We call to question the democracy and ethics of this decision-making process, especially as it applies to the future widespread application of high burnup nuclear fuel on a nationwide scale.

   The public is entitled to know quantatively and qualitatively the radionuclide emissions attributable to higher burnup, in advance of those releases. The benefits to the utilities of greater uranium utilization should not be the determining factor in higher burnup approvals.

2. Increased fission gas releases from spent fuel pools. Higher irradiation damage to fuel may occur with higher burnup. Dr. Peter Lang states that current LWRs have not experienced excessive corrosion on the outside surface of the fuel rods. He suggests, however, that: "If burnups and residence times are increased significantly, it is possible that a thicker layer of oxide and crud deposits may develop, raising the oxide cladding

interface temperature sufficiently to accelerate corrosion."

I submit that the above-stated possibility of fuel corrosion raises serious questions regarding the quality of spent fuel produced under higher burmup. If the fuel is more corroded, the radioactive emissions to and from the spent fuel pool and subsequently to the atmosphere and public will be higher.

The public, in the absence of an EIS, is being asked to accept the risk of greater fission gas releases from spent fuel pools in the future -- without even an estimate of the quantity and makeup of these emissions or their effects on the human environment.

3. Production of inferior grade nuclear spent fuel which can lead to long term environmental hazards. Previous government research, including NUREG-0404, is based on low burmup fuel. It is useless in predicting pool storage behavior of high burmup fuel.

The public is currently being asked to accept greatly increased amounts of spent fuel at the sites of nuclear reactors across the country, often in highly populated areas. The NRC's NUREG-0404 assures citizens that "At-reactor spent fuel can be increased...with no sacrifice to public health and safety" and "The environmental impact of the proposed increased at-reactor spent fuel storage was negligible...based on existing pool water technology."

It should be pointed out that existing pool water technology and research is based on low burmup fuel. A.B. Johnson, Jr., in his "Behavior of Spent Nuclear Fuel in Water Pool Storage," notes the maximum burmup of stored commercial fuel is 33,200 MWD/MTU and for military 36,000 MWD/MTU. The NRC's projections for safe storage of spent fuel are thus based on limited low burmup pool storage experience; with no experience beyond 36,000 MWD/MTU including military.

The spent fuel product of the future, if high burmup is permitted on a a widescale, is of unknown quality and is anticipated by some scientists to have decidedly poorer structural characteristics and integrity than present low burmup specimens. As the NRC grants permission to more and more utilities to go to higher burmup, the quality of spent fuel will probably be degraded; at best it is unknown.

The low burmup spent fuel storage experience at the Morris Operation and that researched by A.B. Johnson, Jr. of Battelle Laboratory becomes

irrelevant as a basis for spent fuel behavior predictions as the United States moves toward higher burnup. I submit that NUREG-0404 should be declared null and void as a document on which to base spent fuel safety and environmental considerations.

Before proceeding with reactor-scale experiments that could endanger their health and environment, the public is entitled to scientific projections and analyses of high burnup. These should include, but not be limited to, risks of premature rod failure, estimations of increased fission gas releases and fuel rod internal pressure, likelihood of corrosion and hydriding of cladding and structural materials and expectations of fuel assembly dimensional and structural changes. We should be given a reasonable explanation of the reasons why the above research cannot be carried on in industry and government laboratories, before proceeding with experimentation in the human environment.

4. Potential for greater radiological impact in reactor and spent fuel pool accidents. The projected impact of high burnup on reactor and spent fuel accidents has not been revealed to the public. The impact of larger radioactive gas releases from high burnup fuels in a loss of coolant accident, either in the reactor or the spent fuel pool, should be an important consideration in allowing utilities permission for higher burnup. According to R.O. Meyer, Director of Safety Systems, Office of Nuclear Reactor Regulations, U.S. NRC: "...the NRC has reason to believe that the plant safety analyses underpredicted fission gas releases at high burnups."

   The public is entitled to know the corrected estimates for increase in fission gas release due to high burnup; especially since all indications are that fission gas release is a direct function of burnup.

5. Increased radioactive releases during reprocessing. The radioactivity in spent fuel increases proportionately with fuel burnup as do waste discharges. For example, the content of krypton-85 goes from 6,000 curies per metric ton at 20,000 MWD/MTU, and 8,000 curies per metric ton at 35,000 MWD/MTU -- to 9,100 curies per metric ton at 40,000 MWD/MT. With higher burnup fuels, the tritium released in liquid discharges from a reprocessing plant will increase drastically. West Valley expected tritium releases to go from 1,200 curies per month to as much as 20,000 curies per month with high burnup fuel. (Source: "Nuclear Fuel Reprocessing: Radiological Impact of West Valley," by Dr. Philip Hatfield, in The Nuclear Cycle, prepared by the Union of Concerned Scientists, MIT Press, Cambridge, Mass., 1975.

In conclusion, I urgently petition the U.S. Nuclear Regulatory Commission for rulemaking on the generic environmental impact of high burmup nuclear fuel in commercial lightwater nuclear reactors and in the storage, reprocessing or disposal of said fuel after irradiation.

The NRC's adoption of generic regulations regarding high burmup fuel is a necessity if public health and safety is to be protected.

Sincerely,

Catherine Quigg

Catherine Quigg, research director
Pollution & Environmental Problems, Inc.
P.O. Box 309
Palatine, Illinois 60067

(312/381-6695)