Proposed Rules

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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

NUCLEAR REGULATORY COMMISSION

10 CFR Part 72

[Docket No. PRM–72–4]

Prairie Island Coalition; Denial of Petition for Rulemaking

AGENCY: Nuclear Regulatory Commission.

ACTION: Denial of petition for rulemaking.

SUMMARY: The Nuclear Regulatory Commission (NRC) is denying a petition for rulemaking (PRM) submitted by the Prairie Island Coalition (PRM–72–4). The petitioner requested that the NRC undertake rulemaking to examine certain issues regarding the potential for thermal shock and corrosion of spent fuel in dry cask storage; amend its regulations governing the storage of spent nuclear fuel in dry storage casks to define the parameters of acceptable degradation of spent fuel in dry cask storage; amend its regulations to define the parameters of retrievability for spent nuclear fuel in dry cask storage; and require licensees to demonstrate safe cask unloading capability before a cask may be used at an independent spent fuel storage installation (ISFSI).

ADDRESSES: Copies of the petition for rulemaking, The **Federal Register** notice of receipt, the public comments received, and NRC's letter to the petitioner may be examined at the NRC Public Document Room, 11555 Rockville Pike, Rockville, MD.

You may also access these documents on NRC's interactive rulemaking website at *http://ruleforum.llnl.gov*. For information about the interactive rulemaking site, contact Ms. Carol Gallagher, 301–415–5905; e-mail (CAG@nrc.gov).

FOR FURTHER INFORMATION CONTACT: Gordon Gundersen, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, telephone 301–415–6195, e-mail (geg1@nrc.gov).

SUPPLEMENTARY INFORMATION:

The Petition

On March 12, 1998 (63 FR 12040), the NRC published a notice of receipt of a petition for rulemaking filed by the Prairie Island Coalition (PIC). The petition consists of the issues presented in paragraphs 13, 14, and 15 of the document attached to an August 26, 1997, letter from George Crocker, PIC, to L. Joseph Callan, Executive Director for Operations, NRC. The issues in the remainder of the August 26, 1997, document were submitted as a petition under 10 CFR 2.206 of the Commission's regulations. The Director of the Office of Nuclear Reactor Regulation responded to this petition in a Director's Decision (DD–98–02) published on February 20, 1998 (63 FR 8703). Similar issues were addressed by the Director in a decision (DD–97–18) published on September 8, 1997 (62 FR 47227). Those issues concerned the degradation, retrievability, and unloading of spent nuclear fuel from dry storage casks.

The petitioner requested an amendment of the regulations in 10 CFR part 72 to define the parameters of spent fuel degradation that are acceptable to the NRC under 10 CFR 72.122(h). Section 72.122(h) provides that spent fuel cladding must be protected during storage against degradation that leads to gross ruptures or that the fuel must be confined such that degradation will not pose an operational safety concern. The petitioner is concerned about the potential effect of spent fuel degradation on the ability of licensees to unload a dry storage cask safely. PIC contended that the NRC has not adequately addressed the possibility of damage to spent fuel caused by thermal shock when cool water refloods a cask that contains dry spent nuclear fuel. The petitioner also contended that the NRC has not adequately addressed degradation of spent nuclear fuel resulting from the loss of helium from failed cask seals or because of the passage of time. The petitioner stated that no procedures have been developed to ensure operational safety or to assess worker or offsite radiation exposure when degraded spent fuel must be unloaded.

The petitioner also requested an amendment to the regulations in 10 CFR part 72 that govern storage of spent nuclear fuel in dry storage casks to define the parameters of retrievability of spent fuel required by the NRC under 10 CFR 72.122(l). Section 72.122(l) states that spent fuel storage systems must be designed to allow ready retrievability of the spent fuel for future processing or disposal. PIC is concerned that the NRC has not taken into account the potential problems that may be encountered in unloading a cask to retrieve spent fuel.

Lastly, the petitioner requested an amendment to the regulations to require licensees to demonstrate the ability to unload spent nuclear fuel safely from a dry storage cask before a cask can be used at an ISFSI. The petitioner contended that if a licensee can demonstrate ability to unload spent nuclear fuel safely from a cask in a pool after long-term storage, the public will have assurance that a spent fuel storage cask can be unloaded. PIC believes that although the NRC's regulations do not require a licensee to be able to unload a cask immediately, the NRC clearly requires a licensee to be able to unload the spent fuel at some point. The petitioner also believes that because in-pool unloading of spent fuel from a dry storage cask (that has contained the fuel for a protracted period) has not been completed, there is sufficient reason to require a licensee to demonstrate the capability to unload a dry cask underwater. PIC stated that it would be satisfied if a licensee can demonstrate the ability to unload spent nuclear fuel from a dry storage cask at some reasonable point in time.

Public Comments on the Petition

The notice of receipt of the PRM invited interested persons to submit comments. The NRC received letters from 12 commenters: The State of Utah, five private organizations, three associated industries (including one from the Nuclear Energy Institute (NEI)), and three private individuals. The comments focused on the main elements of the petition-degradation, retrievability, and unloading of spent nuclear fuel from dry storage casks. The NRC also received responses from the petitioner and one of the commenters on many of the points raised in the comments. The NRC reviewed and considered comments and responses in developing its decision on this petition.

Eight of the commenters supported this petition for rulemaking.

Commenters supporting the petition pointed out that a number of degradation modes exist for dry cask storage systems, including flawed cask fabrication, neutron flux and irradiation, liquid metal embrittlement, metal creep, hot metal reactivity, and thermal shock. These commenters believe that any of these modes of degradation may render unloading procedures ineffectual in terms of protecting workers, the public, and the environment from unacceptable radiation exposure. They believe that a rulemaking is needed to create procedures that ensure the safe management of the waste during a variety of contingency situations that may arise as a result of degradation.

One commenter believes that a rulemaking is needed to provide a direct connection between NRC requirements and concerns about fuel integrity and the procedures necessary for monitoring, retrieving, repairing, and maintaining cask systems. The rulemaking would serve to reduce the uncertainties surrounding degradation, loading, and transfer of nuclear waste and should provide for the development of contingency analysis of the interaction between storage timelines, technologies, and degradation factors.

Other commenters supported the rulemaking proposed by the petitioner to address a variety of issues, including the viability of retrieval of spent fuel from dry storage casks, the need to specify procedures for managing cladding degradation, the need to determine how damaged spent fuel will be managed after unloading (since damaged spent fuel cannot be placed in another cask), and whether special unloading procedures are needed for dual-purpose casks (which not only store fuel for an extended period but also transport the spent fuel to a repository or storage facility) because during transport the fuel may be subject to vibration and accidents.

The State of Utah believes that a rulemaking is needed because the set of dry storage parameters is too vague and does not provide sufficient guidance for the NRC staff or cask designers. Further, the State believes that dry storage systems have operated with extremely thin safety margins, as evidenced by the welding problems experienced with the VSC–24 casks. In particular, the State notes that NRC's experience with the unloading of spent fuel from transportation casks does not provide a basis for confidence that storage casks can be successfully unloaded because of key differences between the two, primarily that the State believes that the cladding temperature in transportation casks is much cooler than the cladding temperature in storage casks and that transportation casks are used for a brief period, after which the fuel and cask interior can be inspected, which is not true for storage casks. The State also supports the petitioner's request that the NRC's regulations should require a physical demonstration of unloading ability and believes that a physical demonstration is particularly important at an off site ISFSI, given that the reactor and the spent fuel pool that supplied the irradiated fuel may no longer exist.

The three industry commenters opposed the petition. The NEI observed that two Director's Decisions (DD–97–18 and DD–98–02) addressed the same issues with respect to the Prairie Island ISFSI and stated that the Director's responses demonstrate that there is no generic issue regarding safely unloading dry spent fuel storage casks, and hence no need for rulemaking. In NEI's view, experience, testing, and computer modeling have all shown that the combination of an inert atmosphere and temperature limits provides a robust basis to conclude that the integrity of the fuel will be maintained during the licensed storage period. NEI also believes that the fact that thousands of spent fuel assemblies have been successfully unloaded from shipping casks without damage—and that most of these shipping casks are designed for fuel temperatures higher than storage casks—provides confidence that storage cask unloading will not result in fuel damage. Moreover, NEI points out that the petition does not present any relevant technical, scientific, or other data to support the need for rulemaking.

A cask manufacturer, Transnuclear, Inc., commented that Transnuclear metal casks are designed to store fuel below a maximum allowable fuel cladding temperature in an inert medium (helium) and that this is a well-established method of preventing cladding degradation. This commenter also stated that thermal shock to spent fuel assemblies is not a problem, that spent fuel assemblies have been successfully unloaded from shipping casks without damage, and that most of these shipping casks are designed for higher fuel temperatures than storage casks. Therefore, thermal shock will not present a significant problem when the casks are reflooded with spent fuel pool water before being unloaded. The commenter states that fuel temperature limits as high as 570 degrees Celsius have been approved for transportation packages and that unloading of fuel from a transportation cask into a spent fuel pool without causing fuel degradation has been demonstrated in the United States and France. In the case of unloading fuel from a storage cask, the commenter believed that the thermal shock phenomenon will be much less significant because of the lower fuel temperature (usually less than 300 degrees Celsius). In addition, the thermal shock is minimized by following procedures that allow the fuel to gradually cool down to the boiling point of water (100 degrees Celsius) before being submerged in the pool.

The petitioner reviewed the comments received on its petition and provided a response. In the petitioner's view, rules governing procedures for safe management of contingency conditions during unloading do not presently exist and are needed. The petitioner states that the whole point of its request for rulemaking is that lack of actual knowledge about how waste materials will behave during storage and unavoidable management operations makes contingency planning necessary in order to protect against worker and public radiation exposure likely to occur if contingency procedures are not in place. The petitioner believes that phenomena such as high temperature zinc reactivity and thermal shock will allow site personnel very little time to evaluate the situation and initiate corrective action.

Reasons for Denial

The NRC is denying the petition for the following reasons:

The petitioners identified several concerns pertaining to the lack of specific guidance in the unloading procedure to address a scenario in which significant fuel degradation occurs during storage. The NRC staff agrees with the petitioners that such a scenario would complicate the unloading process by requiring additional measures and precautions to limit the release of radioactive materials from the cask into parts of the reactor facility and nearby environs. Currently, unloading procedures used by part 72 licensees include a hold point to sample the atmosphere within the cask cavity to test for radioactive and flammable gases before venting the cask cavity and removing the cask lid. On the basis of the analysis of the gas sample, the unloading procedure includes a step to allow personnel to determine whether additional measures or precautions are needed to safely unload the cask.

While acknowledging many of the petitioner's concerns regarding the potential difficulties in retrieving degraded fuel from dry storage casks, the NRC staff concluded that licensees need not be required to incorporate specific guidance into the normal unloading procedure to address this

unlikely situation. This conclusion is based on the NRC staff's acceptance of current practices and that the required compensatory actions and precautions needed to address such contingency situations may vary significantly, depending on the actual results from the analysis of the gas sample. On the basis of licensees' experiences in developing and implementing plans to address the problem of fuel assemblies damaged during reactor operations, in handling radioactive wastes of various forms, and in resolving other comparable problems, the NRC staff has confidence that licensees could, if necessary, develop plans to retrieve damaged fuel from a storage cask while minimizing the radiological consequences to plant workers and the general public. In addition, the NRC staff is confident that the technical problems associated with retrieving degraded fuel could be overcome. Furthermore, requirements for planning and executing such an activity are contained in the licenses issued for each ISFSI and power reactor, and in NRC regulations at 10 CFR parts 20, 50, and 72. Therefore, the NRC staff has accepted gas sampling and defined hold or decision points before breaching the cask confinement boundary as an adequate means of addressing concerns pertaining to the unlikely degradation of fuel assemblies during storage. In addition, the NRC inspects loading and unloading procedures during preoperational testing to confirm their adequacy.

The NRC believes that the petitioner is incorrect in asserting that 10 CFR 72.122(h) needs to be revised to define parameters of acceptable spent fuel degradation. The NRC believes that an applicant may store spent fuel without significant degradation in a safe technical manner without additional prescriptive requirements. In the present case, 10 CFR 72.122(h) specifies the performance-based outcome that must be achieved by the licensee. The applicant must address all relevant considerations to achieve the outcome specified in the regulation. Specifically, paragraph (h)(1) of 10 CFR 72.122 states, in part that: ''[t]he spent fuel cladding must be protected during storage against degradation that leads to gross ruptures or the fuel must be otherwise confined such that degradation of the fuel during storage will not pose operational safety problems with respect to its removal from storage.''

Research, experience, testing, and computer modeling have all shown that the combination of an inert atmosphere and establishment of cladding temperature limits provides an adequate technical basis for concluding that the fuel integrity will be maintained during the licensed storage period. Industry experience in unloading transportation casks under water without incurring fuel damage and limited experience in unloading storage casks provides confidence that storage cask unloading will also not result in fuel damage. Additional experience on the long-term performance of spent fuel storage systems has been gained from NRC-sponsored studies. Specifically, the NRC studied spent nuclear fuel assemblies that have been out of the reactor for approximately 20 years. In September 1999, a Castor-V/21 cask that has been at the Idaho National Engineering and Environmental Laboratory since 1985 was reopened, and the cask internals, fuel assemblies, and several rods were visually inspected. This cask contained 21 spent pressurized water reactor fuel assemblies (with burnup in the 30–35 GWd/MTU range) from the Surry Nuclear Power Plant. These fuel assemblies have been in continuous storage in this cask for approximately 15 years. The examinations found no evidence of significant degradation of the Castor-V/21 cask systems important to safety from the initial cask loading in 1985 to the time of examination in 1999. The fuel examination found no long-term fuel degradation, thus confirming the adequacy of existing practices to protect the fuel.

The NRC believes that the petitioner and the commenters have not provided adequate justification for revising the requirements in 10 CFR 72.122(l) to include specific parameters for retrievability. The NRC reviews an applicant's method of retrievability to determine if it is appropriate for use rather than specifying in the regulations exactly how retrievability is to be accomplished. Each site must have specific procedures in place that are exclusively associated with that site, and the licensee should have the flexibility of achieving the outcome specified in 10 CFR 72.122(l).

Furthermore, Regulatory Guide 3.61, ''Standard Format and Content of Topical Safety Analysis Reports for a Spent Fuel Dry Storage Facility'' contains an outline of the specific information needed, and NUREG–1536, ''Standard Review Plan for Dry Cask Storage Systems'' provides guidance to the NRC staff performing safety reviews of dry cask storage systems. These documents provide guidance to applicants and the NRC staff to ensure that the safety analysis report (SAR), the safety evaluation report, and the Certificate of Compliance contain commitments to prepare and validate procedures, and to train qualified personnel in their use so that spent fuel can be retrieved safely from a dry storage cask.

The NRC staff agrees with the petitioner's premise that actually unloading a storage cask would likely result in licensees learning lessons that could improve unloading procedures. The staff does not agree that additional demonstration of the unloading procedure is warranted. In addition to the NRC staff's review of the procedure for unloading casks, reasonable assurance that the casks can be safely unloaded is provided by a variety of experiences related to the use and storage of radioactive materials. These experiences include preoperational tests and dry-run exercises that are performed to verify key aspects of unloading procedures for casks; related research sponsored by the commercial nuclear industry, the U.S. Department of Energy, and the NRC; actual loading and unloading of transportation casks; loading of storage casks; handling of spent fuel assemblies under various conditions; and performing relevant maintenance and engineering activities associated with reactor facilities. In addition, as discussed below, there is recent experience from unloading a spent fuel storage cask at Surry. Accordingly, the NRC believes that the request of the petitioner and some commenters to require a demonstration of cask unloading before a cask can be used at an ISFSI is unnecessary.

The NRC staff also believes that adequate assurances are in place to ensure safe cask unloading. As part of the review described in NUREG–1536, the NRC staff verifies that the SAR has requirements for cask unloading procedures. The NRC inspects procedures, training and qualification, and ISFSI operations. Further, requiring a full demonstration of cask unloading could result in unnecessary radiation exposure to workers and the public.

The NRC staff's view that adequate assurances are in place to ensure safe cask unloading are borne out by the practical experience in retrieving dry storage casks that have been stored with spent fuel for a number of years. In 2000, two TN–32 spent fuel storage casks at Surry were retrieved from the storage pad because of indications of a failed seal. In one case, the seal monitoring system had developed a leak. The cask was returned to the pool, the seals replaced, the monitoring system repaired, and the cask leak tested. The cask was then returned to the ISFSI pad. The second cask had a leak in the secondary seal. The primary seal was intact. The cask was returned to the pool and the lid removed to

replace the seals. Localized corrosion was discovered on the sealing surface of the lid. The fuel was unloaded while repairs were made to the sealing surface. After the sealing surfaces were restored and the seals replaced, the cask was reloaded, leak tested, and returned to the storage pad. During these operations, no releases of radiation to the environment occurred and no spent fuel degradation was found. These two casks were initially loaded and placed in storage in 1996. More information can be found in NRC Inspection Report 72–002/2000–06.

The petitioner believes that the NRC has not evaluated phenomena such as high-temperature zinc reactivity and thermal shock that will allow site personnel very little time to evaluate the situation and initiate corrective actions. The NRC staff reviews areas such as thermal loading, inadvertent criticality, and structural or containment failure for normal and abnormal conditions that are addressed by the designer of the storage system. NRC places thermal load limit restrictions on casks approved for use and requires that fuel be stored in an inert atmosphere. Although no adverse effects of zinc on the cladding of the spent fuel stored in NRC certified casks have as yet been identified, NRC has initiated a research project to investigate the possible effects of zinc on spent fuel cladding.

The NRC staff believes that the petitioner has identified a valid concern regarding the potential recovery of fuel assemblies that unexpectedly degrade during storage. However, in this unlikely event, the NRC staff has concluded that there is reasonable assurance that a licensee can safely unload degraded fuel or address other problems. This conclusion is based on the NRC's defense-in-depth approach to safety that includes requirements to design and operate spent fuel storage systems that minimize the possibility of degradation; requirements to establish competent organizations staffed with experienced, trained, and qualified personnel; and NRC inspections to confirm safety and compliance with requirements. The NRC staff finds acceptable these procedures for detecting degraded fuel through sampling and, on the basis of the sample results, the implementation of appropriate recovery provisions that reflect the ALARA (as low as is reasonably achievable) requirements. The NRC staff's acceptance of this approach is based on the fact that the spent fuel storage cask can be maintained in a safe condition during the time needed to develop the necessary procedures and to assemble the appropriate equipment before proceeding with cask unloading. The NRC staff also relies on the considerable radiological safety experience available in the nuclear industry in its assessment that appropriately detailed procedures can be prepared for the specific circumstances in a timely manner.

For the reasons cited in this document, the NRC denies this petition.

Dated at Rockville, Maryland, this 18th day of January, 2001.

For the Nuclear Regulatory Commission.

William D. Travers,

Executive Director for Operations.

[FR Doc. 01–3025 Filed 2–5–01; 8:45 am]

BILLING CODE 7590–01–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 438

[FRL–6941–8]

RIN 2040–AB79

Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards for the Metal Products and Machinery Point Source Category; Announcement of Meeting

AGENCY: Environmental Protection Agency (EPA).

ACTION: Announcement of meeting.

SUMMARY: EPA is conducting an additional public meeting and hearing on the pretreatment standards for the Metal Products and Machinery (MP&M) proposed rule in Chicago, Illinois on March 8, 2001.

EPA proposed effluent limitations guidelines and standards for the MP&M Industry in the **Federal Register** on January 3, 2001 (66 FR 425). In that document EPA announced public meetings and pretreatment hearings in three locations: Oakland, CA; Dallas, TX; and Washington, DC. Based on stakeholder requests, EPA is adding an additional public meeting and pretreatment hearing in Chicago, IL. For information on the specific location, see the **ADDRESSES** section below.

DATES: EPA is conducting a public meeting (9:00 AM–12:00 PM) and hearing on the pretreatment standards (1:00 PM–4:00 PM) for the MP&M proposed rule on March 8, 2001.

ADDRESSES: The Metal Products and Machinery public meeting and pretreatment hearing will be held at the EPA Region 5 offices in the Metcalfe Federal Building, 77 West Jackson Blvd., Room 331, Chicago, IL (312) 353–2000.

FOR FURTHER INFORMATION CONTACT: Mr. Michael Ebner at (202) 260–5397 or Ms. Shari Barash at (202) 260–7130 or by E-mail: ebner.michael@epa.gov or barash.shari@epa.gov.

SUPPLEMENTARY INFORMATION: During the public meeting, EPA will present information on the applicability of the proposed regulation, the technology options selected as the basis for the proposed limitations and standards, and the compliance costs and pollutant reductions. EPA will also allow time for questions and answers during this session. During the pretreatment hearing, the public will have the opportunity to provide oral comment to EPA. EPA will not address any issues raised during the pretreatment hearing at that time, but these comments will be recorded and included in the public record for the rule. Persons wishing to present formal comments at the public hearing should contact Mr. Michael Ebner before the hearing and should have a written copy of their comments for submittal.

Documents related to the proposed regulation are available on the MP&M web site (*http://www.epa.gov/ost/guide/mpm/rule.html*).

If you wish to submit written comments on the proposed MP&M rule, the comment period closes on May 3, 2001. Please see the Notice of Proposed Rulemaking in the **Federal Register** (66 FR 425; January 3, 2001) for information on ''How to Submit Comments.''

Geoffrey H. Grubbs,

Director, Office of Science and Technology.

[FR Doc. 01–3089 Filed 2–5–01; 8:45 am]

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FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 51

[CC Docket No. 98–147; CC Docket No. 96–98; FCC 01–26]

Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: This document clarifies the Commission's rules with regard to an incumbent local exchange carrier's (LEC) obligation to provide line sharing in those instances in which the loop is serviced by a remote terminal, and seeks