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

RIN 3150–AF84

Minor Revision of Design Basis Accident Dose Limits for Independent Spent Fuel Storage and Monitored Retrievable Storage Installations

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) proposes to amend its regulations governing the dose limits and the dose calculational methodology used in design basis accident analyses for Independent Spent Fuel Storage Installations (ISFSI) and Monitored Retrievable Storage Installations (MRS). This proposed rule would amend ISFSI and MRS design basis accident dose limits to conform to the dose calculational methodology currently used in the regulations that specify standards for protection against radiation and make a minor change to match the Environmental Protection Agency's (EPA) regulations. This action is needed to make limits for design basis accidents at ISFSI and MRS installations consistent with dose methodology specified in the regulations, and to afford licensees the flexibility provided by dose methodology when performing design basis accident analyses.

DATES: The comment period expires May 4, 1998. Comments received after this date will be considered if it is practical to do so, but the Commission is able to assure consideration only for comments received on or before this date.

ADDRESSES: Mail written comments to: Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001. Attention: Rulemakings and Adjudications Staff. Comments may be delivered to One White Flint North, 11555 Rockville Pike, Rockville, MD 20852, between 7:30 am and 4:15 pm on Federal workdays.

You may also provide comments via the NRC's interactive rulemaking web site through the NRC home page (http://www.nrc.gov). This site provides the availability to upload comments as files (any format) if your web browser supports that function. For information about the interactive rulemaking site, contact Ms. Carol Gallagher, (301) 415–6215; e-mail CAG@nrc.gov.

Certain documents related to this rulemaking, including comments received, may be examined at the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. These same documents also may be viewed and downloaded electronically via the interactive rulemaking website established by NRC for this rulemaking.

FOR FURTHER INFORMATION CONTACT: Naiem S. Tanious, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, telephone (301) 415–6103; e-mail: INTERNET:NST@NRC.GOV

SUPPLEMENTARY INFORMATION:

Background

Paragraph (b) of section 72.106 establishes the dose limit for a design basis accident at an independent spent fuel storage installation (ISFSI) or a monitored retrieval storage installation (MRS). The dose limit in § 72.106(b) is based on the dose calculational methodology contained in International Commission on Radiological Protection Publication Number 2 (ICRP–2, 1959). The ICRP–2 methodology was subsequently revised in ICRP Publication Number 26 (ICRP–26, 1977), and was incorporated into 10 CFR Part 20 when Part 20 was revised in 1991.

The calculational methodology in the revised Part 20 no longer quantifies dose in terms of whole body dose and individual organ dose. Instead, the dose is quantified as a risk equivalent dose. In this manner, the doses absorbed by the whole body and the individual organs can be summed to a single quantity relating to risk.

Under the Part 20 calculational methodology, deep-dose equivalent (H_d), which applies to the external whole-body exposure, is defined at 10 CFR 20.1003 as the dose equivalent at a tissue depth of 1 cm (1000 mg/cm^2). The committed dose equivalent (CDE) ($H_{T,50}$) is defined at § 20.1003 to mean the dose equivalent to organs or tissues of reference (T) that will be received from an intake of radioactive material by an individual during the 50-year period following the intake. The committed effective dose equivalent (CEDE) ($H_{E,50}$) is defined at § 20.1003 as the sum of the products of the weighting factors applicable to each of the body organs or tissues that are irradiated and the committed dose equivalent to these organs or tissues ($H_{E,50} = \Sigma w_T H_{T,50}$). The total effective dose equivalent (TEDE) is the sum of the deep-dose equivalent (for external exposure) and the committed effective dose equivalent (for internal exposures).

The ICRP–26 methodology was not incorporated into Part 72 at the time Part 20 was revised. Part 72 contains two regulations that specify dose limits: § 72.104, which sets dose limits during normal operations and anticipated occurrences; and § 72.106, which sets dose limits for design basis accidents.

The main objective of this proposed rule is to revise § 72.106(b) to incorporate the methodology in 10 CFR Part 20. A second objective of the rule is to make a minor word change to § 72.104(a) to match the language used by EPA in 40 CFR 191.03(a).

Discussion

At present, § 72.106(b), Controlled area of an ISFSI or MRS provides:

> (b) Any individual located on or beyond the nearest boundary of the controlled area shall not receive a dose greater than 5 rem to the whole body or any organ from any design basis accident. The minimum distance from the spent fuel or high-level radioactive waste handling and storage facilities to the nearest boundary of the controlled area shall be at least 100 meters.

This 0.05 Sv (5 rem) limit to the whole body or any organ would be amended in the proposed rule to conform with the Part 20 dose calculational methodology. The amended limit would become the more limiting of the TEDE of 0.05 Sv (5 rem), or the sum of the deep dose equivalent and the committed dose equivalent to any individual organ or tissue (other than the lens of the eye) of 0.5 Sv (50 rem). The amendment would also include a separate dose limit for the lens of the eye of 0.15 Sv (15 rem); and for the skin or any extremity, a shallow dose equivalent of 0.5 Sv (50 rem). The use of separate dose limits for the eye,

skin, and extremities would conform with the dose calculational methodology used in Part 20 and would ensure that no observable effects (e.g., induction of cataracts in the lens of the eye) would occur as a result of any accidental radiation exposure.

This action would make § 72.106 consistent with Part 20 dose calculational methodology. This action would also provide Part 72 licensees flexibility when performing design basis accident analyses because they would be able to use organ weighting factors to calculate the dose to the maximally exposed organ. In addition, Part 72 licensees would no longer need to comply with one calculational methodology for their radiation protection programs (i.e., the revised Part 20 methodology) and another methodology for their design basis accident analyses.

This proposed rule does not revise § 72.104(a) to incorporate ICRP–26 methodology because doing so would render this regulation incompatible with the Environmental Protection Agency's regulation at 40 CFR 191.03(a) which is applicable to ISFSI and MRS licensees. However, 40 CFR 191.03(a) phrases the standard in terms of dose limits to the whole body and any critical organ; whereas, § 72.104(a) phrases the standard in terms of dose limits to the whole body and any organ. The NRC staff proposes to make § 72.104(a) more consistent with 40 CFR 191.03(a) by inserting the word critical before the word organ. The critical organ (listed in Table 1 of ICRP–2) associated with an intake of radioactive material is considered to be that organ of the body whose damage by the radiation results in the greatest damage to the body.

Environmental Impact: Categorical Exclusion

The NRC has determined that this proposed regulation is the type of action described in categorical exclusion 10 CFR 51.22(c)(2). Therefore neither an environmental impact statement nor an environmental assessment have been prepared for this proposed regulation.

Paperwork Reduction Act Statement

This proposed rule does not contain a new or amended information collection requirement, and therefore is not subject to requirements of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). Existing information collection requirements were approved by the Office of Management and Budget, approval numbers 3150–0002, 3150–0127, and 3150–0132.

Public Protection Notification

If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

Regulatory Analysis

To determine whether the amendments to 10 CFR Part 72 are appropriate, the NRC staff considered the following two alternatives:

1. The No-Action Alternative

This alternative is not acceptable to the NRC for the following reasons. Section 72.106(b) would continue to be inconsistent with Part 20. Part 72 licensees would demonstrate compliance with the dose limits in Part 20 using the 1977 dose calculational methodology of ICRP–26 for their radiation protection programs as required by §§ 72.24(e) and 72.44(d). However, Part 72 licensees would continue to use the 1959 dose calculational methodology of ICRP–2 in addressing radiation dose from a design basis accident as required in § 72.106(b). Thus, licensees would not be able to take advantage of the flexibility provided by the dose calculational methodology used in Part 20 when performing design basis accident analyses. Therefore, this alternative was not pursued.

2. Amendments of 10 CFR Part 72

In this option, the NRC staff considered preparing a proposed rule to amend the dose limiting design objective in § 72.106(b) to 5 rem TEDE. This is consistent with the intent of the existing § 72.106(b) and updates the dose calculational methodology to that used for demonstration of compliance with Part 20. Updating the dose calculational methodology also would increase the organ dose limit, CDE, from 5 rem to 50 rem; allow for the use of risk-based weighting factors for each organ or tissue to determine the 50 year CEDE; and provide licensees with additional flexibility in conducting and submitting design basis accident analyses to demonstrate compliance with the requirements in § 72.106(b).

In addition to the increased flexibility provided, licensees would no longer need to comply with one calculational methodology for radiation protection programs (i.e., the revised Part 20 methodology) and another methodology for design basis accident analyses.

Moreover, design basis accident analyses for ISFSIs and MRS installations would use the same dose calculational methodology as design basis accident analyses for a geologic repository operations area (10 CFR 60.136(b)). This alternative was chosen by the NRC.

This constitutes the regulatory analysis for this proposed rule. As discussed above, this rule does not impose any new requirements. Therefore, there will be no additional cost burden to Part 72 licensees or the Federal Government.

Regulatory Flexibility Certification

As required by the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission certifies that this rule, if adopted, will not have a significant economic impact upon a substantial number of small entities. The proposed rule would provide licensees with additional flexibility in conducting and submitting design basis accident analyses to demonstrate compliance with the requirements in § 72.106(b). In addition, the licensees would no longer need to comply with one calculational methodology for their radiation protection programs (i.e., the revised Part 20 methodology) and another methodology for their design basis accident analyses.

The proposed rule, if adopted, would not impose any additional obligations on entities that may fall within the definition of ''small entities'' as set forth in Section 601(3) of the Regulatory Flexibility Act; or within the definition of ''small business'' as found in Section 3 of the Small Business Act, 15 U.S.C. 632; or within the size standards adopted by the NRC on April 11, 1995 (60 FR 18344).

Backfit Analysis

The NRC has determined that the backfit rule, 10 CFR 72.62, does not apply to this proposed rule, and a backfit analysis is not required, because these amendments do not involve any provisions that would impose backfits as defined in 10 CFR 72.62(a). The rule does not constitute a backfit under 10 CFR 72.62, because it does not require a change to existing structures, systems, components, procedures, or organization. Further, the rule would not result in a more stringent outcome than the existing rule, and therefore current licensees who are in compliance with the existing rule would not be required to make any changes or take any action. New applicants and license renewal applications would be able to take advantage of some additional flexibility in the dose calculations that is afforded by the rule.

Agreement State Implementation Issues

Under the ''Policy Statement on Adequacy and Compatibility of

Agreement State Programs'' approved by the Commission on June 30, 1997 (62 FR 46517), this rule is classified as compatibility Category ''NRC.'' This regulation addresses areas of exclusive NRC authority. However, a State may adopt these provisions for the purposes of clarity and communication, as long as the State does not adopt regulations or program elements that would cause the State to regulate this area.

List of Subjects in 10 CFR Part 72

Criminal penalties, Manpower training programs, Nuclear materials, Occupational safety and health, Reporting and recordkeeping requirements, Security measures, Spent fuel.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 553; the Commission is proposing to adopt the following amendments to 10 CFR Part 72.

PART 72—LICENSING REQUIREMENTS FOR THE INDEPENDENT STORAGE OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE

1. The authority citation for Part 72 continues to read as follows:

Authority: Secs. 51, 53, 57, 62, 63, 65, 69, 81, 161, 182, 183, 184, 186, 187, 189, 68 Stat. 929, 930, 932, 933, 934, 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2071, 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2201, 2232, 2233, 2234, 2236, 2237, 2238, 2282); sec. 274, Pub. L. 86–373, 73 Stat. 688, as amended (42 U.S.C. 2021); sec. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); Pub. L. 95–601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102–486, sec. 7902, 106 Stat. 3123 (42 U.S.C. 5851); sec. 102, Pub. L. 91–190, 83 Stat. 853 (42 U.S.C. 4332); secs. 131, 132, 133, 135, 137, 141, Pub. L. 97–425, 96 Stat. 2229, 2230, 2232, 2241, sec. 148, Pub. L. 100–203, 101 Stat. 1330–235 (42 U.S.C. 10151, 10152, 10153, 10155, 10157, 10161, 10168).

Section 72.44(g) also issued under secs. 142(b) and 148(c), (d), Pub. L. 100–203, 101 Stat. 1330–232, 1330–236 (42 U.S.C. 10162(b), 10168(c), (d)). Section 72.46 also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239); sec. 134, Pub. L. 97–425, 96 Stat. 2230 (42 U.S.C. 10154). Section 72.96(d) also issued under sec. 145(g), Pub. L. 100–203, 101 Stat. 1330–235 (42 U.S.C. 10165(g)). Subpart J also issued under secs. 2(2), 2(15), 2(19), 117(a), 141(h), Pub. L. 97–425, 96 Stat. 2202, 2203, 2204, 2222, 2224 (42 U.S.C. 10101, 10137(a), 10161(h)). Subparts K and L are also issued under sec. 133, 98 Stat. 2230 (42 U.S.C. 10153) and sec. 218(a), 96 Stat. 2252 (42 U.S.C. 10198).

§ 72.104 [Amended]

2. In § 72.104, the introductory text of paragraph (a) is revised to read as follows:

§ 72.104 Criteria for radioactive materials in effluents and direct radiation from an ISFSI or MRS.

(a) During normal operations and anticipated occurrences, the annual dose equivalent to any real individual who is located beyond the controlled area must not exceed 25 mrem to the whole body, 75 mrem to the thyroid and 25 mrem to any other critical organ as a result of exposure to:

* * * * *

3. In § 72.106, paragraph (b) is revised to read as follows:

§ 72.106 Controlled area of an ISFSI or MRS.

* * * * *

(b) Any individual located on or beyond the nearest boundary of the controlled area may not receive from any design basis accident the more limiting of a total effective dose equivalent of 0.05 Sv (5 rem), or the sum of the deep-dose equivalent and the committed dose equivalent to any individual organ or tissue (other than the lens of the eye) of 0.5 Sv (50 rem). The eye dose equivalent shall not exceed 0.15 Sv (15 rem) and the shallow dose equivalent to skin or to any extremity shall not exceed 0.5 Sv (50 rem). The minimum distance from the spent fuel or high-level radioactive waste handling and storage facilities to the nearest boundary of the controlled area must be at least 100 meters.

* * * * *

Dated at Rockville, Maryland, this 3rd day of March 1998.

For the Nuclear Regulatory Commission.

L. Joseph Callan,

Executive Director for Operations.

[FR Doc. 98–7114 Filed 3–18–98; 8:45 am]

BILLING CODE 7590–01–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 97–CE–14–AD]

RIN 2120–AA64

Airworthiness Directives; Cessna Aircraft Company 180, 182, and 185 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This document proposes to adopt a new airworthiness directive (AD) that would apply to all Cessna Aircraft Company (Cessna) 180, 182, and 185 series airplanes equipped with wing extension supplemental type certificate (STC) SA00276NY. The proposed action would require inspecting between wing station (W.S.) 90 and W.S. 110 for an angle stiffener at the lower wing spar splice. If the angle stiffener is not installed, the proposed action would require installing a reinforcing strap. The proposed action is the result of failed test results revealing that the wings of these Cessna airplanes, without the stiffener, do not meet the applicable design requirements after being modified by the above STC. The actions specified by the proposed AD are intended to prevent wing failure during flight, which, if not corrected, could cause loss of control of the airplane.

DATES: Comments must be received on or before May 15, 1998.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 97–CE–14–AD, Room 1558, 601 E. 12th Street, Kansas City, Missouri 64106. Comments may be inspected at this location between 8 a.m. and 4 p.m., Monday through Friday, holidays excepted.

Service information that applies to the proposed AD may be obtained from Air Research Technology, Inc., 3440 McCarthy, Montreal, Quebec, Canada H4K 2P5; telephone (514) 337–7588; facsimile (514) 337–3293. This information also may be examined at the Rules Docket at the address above.

FOR FURTHER INFORMATION CONTACT: Sol Maroof, Aerospace Engineer, New York Aircraft Certification Office, 10 Fifth Street, 3rd Floor, Valley Stream, New York, 11581–1200; telephone (516) 256–7522; facsimile (516) 568–2716.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.