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Rulemaking item

DOCKET NUMBER
PROPOSED RULE **PR 50**
(54 FR 46624)

DOCKETED
[5000-01]

'90 APR 23 AIO:23

NUCLEAR REGULATORY COMMISSION

10 CFR Part 50

RIN: 3150-AD19

OFFICE OF SECRETARY
GOVERNING & SERVICE
BRANCH

Stabilization and Decontamination Priority and Trusteeship Provisions

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending the provisions of its property/accident recovery insurance regulations applicable to commercial power reactor licensees. The changes (1) clarify the scope and timing of the stabilization and decontamination processes after an accident at a covered reactor; (2) specify that the insurance is required to ensure that commercial power reactor licensees will have sufficient funds to carry out their obligation to clean up and decontaminate after an accident; and (3) eliminate the requirement that insurance proceeds after an accident are paid to an independent trustee. This rule responds to issues raised in three petitions for rulemaking.

EFFECTIVE DATE: [Insert the date of publication in the Federal Register]

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pub. 4/2/90
55FR 12163
DS10

FOR FURTHER INFORMATION CONTACT: Robert S. Wood, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Telephone (301) 492-1280.

SUPPLEMENTARY INFORMATION:

1. Background

After the receipt of three petitions for rulemaking assigned Docket Nos. (PRM-50-51) from Linda S. Stein, Steptoe & Johnson, counsel to American Nuclear Insurers and MAERP Reinsurance Association (ANI/MAERP); (PRM-50-51A) from J.B. Knotts, Jr., Bishop, Cook, Purcell & Reynolds, counsel to the Edison Electric Institute (EEI), the Nuclear Utility Management and Resources Council (NUMARC) and several power plant licensees; and (PRM-50-51B) from Peter D. Lederer, Baker & McKenzie, counsel to Nuclear Mutual Limited and Nuclear Electric Insurance Limited (NML and NEIL-II), the Commission published a notice of receipt requesting public comment on the petitions in the Federal Register of September 19, 1988 (53 FR 36335). The petitions were filed in response to a final rule on changes in property insurance requirements published by the Commission on August 5, 1987 (52 FR 28963). These petitions sought (1) clarification of the scope and timing of the stabilization process after an accident at a covered reactor; (2) clarification of the procedures by which the NRC determines and approves expenditures of funds necessary for decontamination and cleanup, and clarification of how such procedures affect both insurer's needs to secure appropriate proofs of loss and when payments may be

made for non-cleanup purposes; (3) a change in the terminology of the required insurance from "property" insurance to "decontamination liability" insurance so as to better forestall claims on insurance proceeds by a licensee's bondholders; and (4) rescission of the provision that proceeds of the required insurance are to be paid to an independent trustee, who will disburse the proceeds for decontamination and cleanup of the facility before any other purpose.

Four comments were received on the petitions for rulemaking, all of which supported the amendments recommended in the petitions. The Commission responded to the comments received on the petitions in a proposed rule published on November 6, 1989 (54 FR 46624). This final rule, in effect, grants these petitions and completes NRC action in response to PRMs 50-51, 50-51A, and 50-51B.

II. Analysis of and Response to Comments

On November 6, 1989, the Commission published in the Federal Register (54 FR 46624) a proposed rule to amend 10 CFR 50.54(w). The rule was developed in response to the three petitions for rulemaking discussed above. As of January 18, 1990, the NRC received seven comments on the proposed rule. Six comments came from electric utilities or their representatives. One comment came from the Association of the Bar of the City of New York. All commenters essentially supported the Commission's rulemaking, although some took issue with specific provisions. Two aspects of the proposed rule, in particular, were opposed by several commenters. The first is the statement in the preamble

of the proposed rule that the NRC retains the authority to require an independent trustee to hold and to disburse insurance proceeds in individual cases, if warranted. Further, the NRC expressed its intention that if the NRC obtains authority to receive and retain insurance proceeds itself, it will consider whether to exercise this authority and the best method of implementing the authority (54 FR 46624, at p. 46627).

In support of their objections, the commenters refer to the case cited in the proposed rule -- *In re Smith-Douglass* (Nos. 87-1683, -1684 (4th Circuit, September 6, 1988)) -- and take issue with the Commission's conclusion that the decision in this case justifies future reimposition of a trusteeship requirement. The Commission continues to believe that uncertainties remain with respect to interpretation of this and similar decisions. Consequently, if the Commission concludes that future conditions warrant reinstitution of the trusteeship requirement, it will reopen this issue for reconsideration. If the Commission does make such a decision, however, it will provide ample opportunity for public comment at that time. Because no provision of this final rule is affected by these concerns, the Commission proposes no further discussion or action at this time.

The second issue raised by several commenters concerns how the Commission might address possible increases in accident cleanup costs resulting from inflation or other factors. Commenters expressed the opinion that there is insufficient experience from which to develop an effective formula to estimate future accident cleanup costs. Furthermore, such a formula would not be able to

account for advances in technology that might reduce future costs. Commenters suggest that rather than use a formula to estimate future cleanup costs and consequently establish future insurance requirements, the NRC reevaluate accident cleanup costs every 3 to 5 years by conducting specific studies using then-current technology. One commenter recommended using a simple formula based on the Consumer Price Index to estimate future cleanup costs.

Since publication of the proposed rule, the NRC's contractor has updated NUREG/CR-2601¹ (hereinafter cited as Addendum 1) which provided the basis for the \$1.06 billion in insurance currently required. The report found that in 1989 dollars, approximately \$1.03 billion would be needed for cleanup after a severe accident at a reference boiling water reactor. In addition, depending on whether a 4 percent or an 8 percent inflation rate is assumed, an additional \$186.5 million to \$409.9 million would be needed to cover incremental cost escalation during the cleanup process. In evaluating these costs, the contractor considered labor, energy, waste disposal, and nuclear insurance as those cost components with the greatest potential effect on cost escalation.

¹"Technology, Safety and Costs of Decommissioning Reference Light Water Reactors Following Postulated Accidents -- Addendum 1," Pacific Northwest Laboratory, to be published. This report will be available by approximately May 1990 for purchase from the U.S. Government Printing Office, P. O. Box 37082, Washington, DC 20013-7082. A notice of availability will be published.

Except for nuclear insurance, these factors are the same as those used in the Commission's decommissioning rule, although the relative weights of the factors vary (53 FR 24018, June 27, 1988)(See 10 CFR 50.75(c)(2)). The Commission notes, however, that commenters had ample opportunity to evaluate and comment upon the technical studies that the NRC used as the basis for its decommissioning requirements. No such opportunity has been available heretofore for Addendum 1. Consequently, the Commission concludes that the public interest would best be served if the issue of whether and to what extent the amount of accident cleanup insurance should increase is deferred pending public comment on Addendum 1. As part of its conclusion, the Commission further notes that most licensees already carry accident cleanup insurance in amounts that exceed the maximum amount predicted by the formula in Addendum 1. Thus, there is no compelling health or safety reason to increase the required amount of insurance in advance of public comment. Concurrently, the Commission believes that the public comments on Addendum 1 will enable the Commission to make more informed decisions in connection with any future rulemaking proceeding to increase the amount of required insurance.

Individual commenters also have raised specific concerns with the proposed rule. These concerns include the stabilization priority threshold, the 60-day priority period, and the cleanup plan. One commenter indicates that, pursuant to proposed 10 CFR 50.54(w)(4)(i), insurance proceeds would only be required to be dedicated to stabilization and decontamination if the estimated costs exceeded \$100 million. Further, this priority would initially apply to stabilization costs for 60 days and could be extended in 60-day increments. Within 30 days after the reactor

is stabilized, the licensee is required to submit a cleanup plan which must be approved by the Director of the Office of Nuclear Reactor Regulation. This commenter also suggests that the rule should clarify (a) whether the NRC or the licensee provides the cost estimate, and (b) how the Director of the Office of Nuclear Reactor Regulation determines the length of the stabilization priority and the criteria for approving the cleanup plan.

The NRC believes that these and similar issues have been discussed in previous rulemaking and that additional specificity may be cumbersome and counterproductive. The Commission clearly intends to rely on licensees to prepare initial cost estimates of accidents, although it is conceivable that the Commission could prepare its own confirmatory estimates if unusual circumstances warranted. Furthermore, a cut-off figure of \$100 million represents a relatively minor accident where the availability of funds would not, as a practical matter, be at issue. Thus, it is very unlikely that the Commission would dispute estimates unless they significantly exceeded \$100 million. Further, section 50.54(w)(4)(i) explicitly defines what constitutes stabilization. Therefore, it is unlikely that serious disagreements would arise concerning when a reactor is stabilized.

However, if disputes over stabilization should arise, the Commission's Rules of Practice under 10 CFR Part 2 provide adequate procedures to resolve them. Similarly, Part 2 procedures are also available to resolve disputes that may arise over the content of cleanup plans. The Commission notes that the proposed rule was drafted in response to the suggestions of petitioners representing most power reactor licensees and their insurers. The petitioners did not raise

these specific issues in their petitions or in comments on the proposed rule. Consequently, the Commission concludes that the suggested changes to the proposed rule are not needed.

One commenter takes issue with the following statement in the Regulatory Analysis published in connection with the proposed rule: "Although the effect of these formulas, if developed and adopted, would be to increase the required amount of insurance for some licensees, there should be little impact on insurance costs to licensees because almost all licensees buy the maximum amount of insurance available" (54 FR 46624, at p. 46628, November 6, 1989). This commenter states that, "This may have been true in the past, however we do not agree with this assessment. In fact, we did not automatically purchase the maximum amount of insurance available this year following an increase in available coverage."

Notwithstanding this commenter's decision not to buy additional insurance, the Commission notes that the maximum amount of insurance currently offered exceeds by a significant margin the amount that would be required if the maximum figure suggested in Addendum 1 were adopted. Most licensees currently purchase substantially more than this maximum. Thus, the Commission stands by the statement in question.

These amendments provide relief from restrictions under regulations due to take effect on April 4, 1990. Therefore, pursuant to 5 U.S.C. §553(d)(1), the Commission is making the rule effective on the date of publication in the Federal Register without the customary 30-day waiting period.

III. Finding of No Significant Environmental Impact; Availability

Noting that the text of the final rule is identical to that of the proposed rule, the Commission has reviewed the environmental assessment and finding of no significant environmental impact published in the Federal Register on November 6, 1989 (54 FR 46624, at 46627) in connection with the proposed rule. On the basis of that review, and after considering the public comments and determining that such comments do not affect the conclusion reached in the earlier finding of no significant impact, the Commission has concluded that this amendment to 10 CFR 50.54(w) is not a major Federal action significantly affecting the quality of the human environment, and therefore, an environmental impact statement is not required.

The environmental assessment and finding of no significant impact on which this determination is based are available for inspection and copying at the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC.

IV. Paperwork Reduction Act Statement

This final rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). The final rule has been referred to the Office of Management and Budget for review and approval.

Public reporting burden for this collection of information is estimated to average 2,000 hours per response, including time for reviewing instructions,

searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Information and Records Management Branch (MNBB-7714), U.S. Nuclear Regulatory Commission, Washington, D.C. 20555; and to the Paperwork Reduction Project (3150-0011), Office of Management and Budget, Washington, D.C. 20503.

V. Regulatory Analysis

On November 6, 1989, the Commission published in the Federal Register (54 FR 46624) a proposed rule to amend 10 CFR 50.54(w). The rule was developed in response to three petitions for rulemaking. Notice of receipt of these petitions was published in the Federal Register on September 19, 1988 (53 FR 36335). These petitions sought clarification of the stabilization and decontamination priority provisions and rescission of the trusteeship provisions currently contained in 10 CFR 50.54(w). The petitions further stated that the trusteeship provisions may actually have an effect counter to their intended purpose by delaying the payment of claims and thus possibly the cleanup process. The rule developed in response to the petitions for rulemaking should help clarify the mechanism by which accident cleanup funds may be guaranteed to be used for their intended purpose. Even without formal stabilization and decontamination priority and trusteeship provisions, the NRC has authority to take appropriate enforcement action to order cleanup in the unlikely event of an accident. By rescinding the trusteeship requirement, the Commission would be

eliminating licensees' costs to obtain trustee services. Thus, the rule will not create substantial costs for licensees.

The rule will not have significant impacts on State and local governments and geographical regions, on the environment, or create substantial costs to the NRC or other Federal agencies. The foregoing discussion constitutes the regulatory analysis for this rule.

VI. Regulatory Flexibility Certification

As required by the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the Commission certifies that this final rule does not have a significant economic impact upon a substantial number of small entities. The rule only affects licensees of nuclear power plants. None of the holders of these licenses fall within the scope of the definition of "small entities" set forth in the Regulatory Flexibility Act or the Small Business Size Standards set out in regulations issued by the Small Business Administration at 13 CFR Part 121.

VII. Backfit Analysis

The NRC has determined that the backfit rule, 10 CFR 50.109, does not apply to this rule because this rule will not impose a backfit as defined in §50.109(a)(1). Therefore, a backfit analysis is not required for this rule.

List of Subjects in 10 CFR Part 50

Antitrust, Classified information, Fire protection, Incorporation by reference, Intergovernmental relations, Nuclear power plants and reactors, Penalty, Radiation protection, Reactor siting criteria, Reporting and recordkeeping requirements.

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. 552 and 553, the NRC is adopting the following amendment to 10 CFR Part 50.

PART 50 - DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

1. The authority citation for Part 50 continues to read as follows:

Authority: Secs. 102, 103, 104, 105, 161, 182, 183, 186, 189, 68 Stat. 936, 937, 938, 948, 953, 954, 955, 956, as amended, sec. 234, 83 Stat. 1224, as amended (42 U.S.C. 2132, 2133, 2134, 2135, 2201, 2232, 2233, 2236, 2239, 2282); secs. 201 as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 50.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5851). Section 50.10 also issued under secs. 101, 185, 68 Stat. 936, 955, as amended (42 U.S.C. 2131, 2235); sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.13, 50.54(dd) and 50.103 also issued under sec. 108, 68

Stat. 939, as amended (42 U.S.C. 2138). Sections 50.23, 50.35, 50.55, and 50.56 also issued under sec. 185, 68 Stat. 955 (42 U.S.C. 2235). Sections 50.33a, 50.55a and Appendix Q also issued under sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.34 and 50.54 also issued under sec. 204, 88 Stat. 1245 (42 U.S.C. 5844). Sections 50.58, 50.91, and 50.92 also issued under Pub. L. 97-415, 96 Stat. 2073 (42 U.S.C. 2239). Section 50.78 also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Sections 50.80 through 50.81 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Appendix F also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§50.46(a) and (b), and 50.54(c) are issued under sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b)); §§50.7(a), 50.10(a)-(c), 50.34(a) and (e), 50.44(a)-(c), 50.46(a) and (b), 50.47(b), 50.48(a), (c), (d), and (e), 50.49(a), 50.54(a), (i), (i)(1), (1)-(n), (p), (q), (t), (v), and (y), 50.55(f), 50.55a(a), (c)-(e), (g), and (h), 50.59(c), 50.60(a), 50.62(c) 50.64(b), and 50.80(a) and (b) are issued under sec. 161i, 68 Stat. 949, as amended (42 U.S.C. 2201(f)); and §§50.49(d), (h), and (j), 50.54(w), (z), (bb), (cc), and (do), 50.55(e), 50.59(b), 50.61(b), 50.62(b), 50.70(a), 50.71(a)-(c) and (e), 50.72(a), 50.73(a) and (b), 50.74, 50.78, and 50.90 are issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

2. Section 50.54 is amended by revising paragraph (w) to read as follows:

§50.54 Conditions of licenses.

* * * * *

(w) Each electric utility licensee under this part for a production or utilization facility of the type described in §50.21(b) or §50.22 shall take reasonable steps to obtain insurance available at reasonable costs and on reasonable terms from private sources or to demonstrate to the satisfaction of the Commission that it possesses an equivalent amount of protection covering the licensee's obligation, in the event of an accident at the licensee's reactor, to stabilize and decontaminate the reactor and the reactor station site at which the reactor experiencing the accident is located, provided that:

- (1) The insurance required by paragraph (w) of this section must have a minimum coverage limit for each reactor station site of either \$1.06 billion or whatever amount of insurance is generally available from private sources, whichever is less. The required insurance must clearly state that, as and to the extent provided in paragraph (w)(4) of this section, any proceeds must be payable first for stabilization of the reactor and next for decontamination of the reactor and the reactor station site. If a licensee's coverage falls below the required minimum, the licensee shall within 60 days take all reasonable

steps to restore its coverage to the required minimum. The required insurance may, at the option of the licensee, be included within policies that also provide coverage for other risks, including, but not limited to, the risk of direct physical damage.

- (2)(i) With respect to policies issued or annually renewed on or after _____, [insert a date 1 year after the effective date of the rule] the proceeds of such required insurance must be dedicated, as and to the extent provided in this paragraph, to reimbursement or payment on behalf of the insured of reasonable expenses incurred or estimated to be incurred by the licensee in taking action to fulfill the licensee's obligation, in the event of an accident at the licensee's reactor, to ensure that the reactor is in, or is returned to, and maintained in, a safe and stable condition and that radioactive contamination is removed or controlled such that personnel exposures are consistent with the occupational exposure limits in 10 CFR Part 20. These actions must be consistent with any other obligation the licensee may have under this chapter and must be subject to paragraph (w)(4) of this section. As used in this section, an "accident" means an event that involves the release of radioactive material from its intended place of confinement within the reactor or on the reactor station site such that there is a present danger of release off site in amounts that would pose a threat to the public health and safety.

- (ii) The stabilization and decontamination requirements set forth in paragraph (w)(4) of this section must apply uniformly to all insurance policies required under paragraph (w) of this section.
- (3) The licensee shall report to the NRC on April 1 of each year the current levels of this insurance or financial security it maintains and the sources of this insurance or financial security.
- (4)(i) In the event of an accident at the licensee's reactor, whenever the estimated costs of stabilizing the licensed reactor and of decontaminating the reactor and the reactor station site exceed \$100 million, the proceeds of the insurance required by paragraph (w) of this section must be dedicated to and used, first, to ensure that the licensed reactor is in, or is returned to, and can be maintained in, a safe and stable condition so as to prevent any significant risk to the public health and safety and, second, to decontaminate the reactor and the reactor station site in accordance with the licensee's cleanup plan as approved by order of the Director of the Office of Nuclear Reactor Regulation. This priority on insurance proceeds must remain in effect for 60 days or, upon order of the Director, for such longer periods, in increments not to exceed 60 days except as provided for activities under the cleanup plan required in paragraphs (w)(4)(iii) and (iv) of this section, as the Director

may find necessary to protect the public health and safety. Actions needed to bring the reactor to and maintain the reactor in a safe and stable condition may include one or more of the following, as appropriate:

- (A) Shutdown of the reactor;
- (B) Establishment and maintenance of long-term cooling with stable decay heat removal;
- (C) Maintenance of sub-criticality;
- (D) Control of radioactive releases; and
- (E) Securing of structures, systems, or components to minimize radiation exposure to onsite personnel or to the offsite public or to facilitate later decontamination or both.

(ii) The licensee shall inform the Director of the Office of Nuclear Reactor Regulation in writing when the reactor is and can be maintained in a safe and stable condition so as to prevent any significant risk to the public health and safety. Within 30 days after the licensee informs the Director that the reactor is in this condition, or at such earlier time as the licensee may elect or the Director may for good cause direct, the licensee shall prepare and submit a cleanup plan for the Director's approval. The cleanup plan must identify and contain an estimate of the cost of each cleanup operation

that will be required to decontaminate the reactor sufficiently to permit the licensee either to resume operation of the reactor or to apply to the Commission under §50.82 for authority to decommission the reactor and to surrender the license voluntarily. Cleanup operations may include one or more of the following, as appropriate:

- (A) Processing any contaminated water generated by the accident and by decontamination operations to remove radioactive materials;
- (B) Decontamination of surfaces inside the auxiliary and fuel-handling buildings and the reactor building to levels consistent with the Commission's occupational exposure limits in 10 CFR Part 20, and decontamination or disposal of equipment;
- (C) Decontamination or removal and disposal of internal parts and damaged fuel from the reactor vessel; and
- (D) Cleanup of the reactor coolant system.

(iii) Following review of the licensee's cleanup plan, the Director will order the licensee to complete all operations that the Director finds are necessary to decontaminate the reactor sufficiently to permit the licensee either to resume operation of the reactor or to apply to the Commission under §50.82 for authority to decommission the reactor and to surrender the

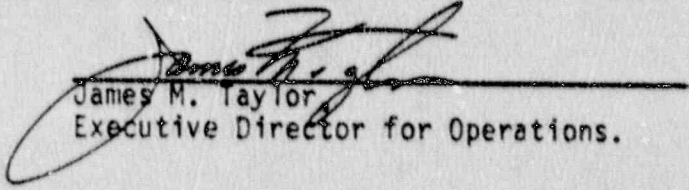
license voluntarily. The Director shall approve or disapprove, in whole or in part for stated reasons, the licensee's estimate of cleanup costs for such operations. Such order may not be effective for more than 1 year, at which time it may be renewed. Each subsequent renewal order, if imposed, may be effective for not more than 6 months.

(iv) Of the balance of the proceeds of the required insurance not already expended to place the reactor in a safe and stable condition pursuant to paragraph (w)(2)(i) of this section, an amount sufficient to cover the expenses of completion of those decontamination operations that are the subject of the Director's order shall be dedicated to such use, provided that, upon certification to the Director of the amounts expended previously and from time to time for stabilization and decontamination and upon further certification to the Director as to the sufficiency of the dedicated amount remaining, policies of insurance may provide for payment to the licensee or other loss payees of amounts not so dedicated, and the licensee may proceed to use

in parallel (and not in preference thereto) any insurance proceeds not so dedicated for other purposes.

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Dated at Rockville, Maryland, this 23rd day of March 1990.

For the Nuclear Regulatory Commission.


James M. Taylor
Executive Director for Operations.