ENCLOSURE F

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JAN 25 1982

ALL RESEARCH AND TEST REACTORS

On December 14, 1981, the Commission approved publication in the Federal Register of proposed rulemaking that would amend the dates and associated power levels for submittal of emergency plans by certain research and test reactor licensees. This notice of proposed rulemaking was published on December 31, 1981 (46 FR 63315).

The current status of revised guidance criteria for research and test reactor emergency planning is as follows:

1. DRAFT II, dated November 29, 1981, of the revision to American National Standard, ANSI/ANS-15.16-1978, "Emergency Planning for Research Reactors",[1] was developed as a parallel effort with the NRC staff to provide specific acceptance criteria for complying with the applicable requirements set forth in Appendix E to 10 CFR Part 50.

   These guidance criteria provide a basis for NRC licensees to develop acceptable radiological emergency response plans and improve emergency preparedness at their facilities. The American National Standards Committee N-17, "Research Reactors, Reactor Physics, and Radiation Shielding", approved the revised Standard for interim use and comment on December 31, 1981.

2. Revision 1 to Regulatory Guide 2.6, "Emergency Planning for Research and Test Reactors (For Interim Use and Comment)", will endorse DRAFT II, dated November 29, 1981, of the revision to American National Standard, ANSI/ANS-15.16-1978 as providing an acceptable basis for research and test reactor licensees to develop radiological emergency response plans. This document will be published shortly and comments on this Regulatory Guide are invited.

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[1]Copies may be obtained from the American Nuclear Society, 555 North Kensington Avenue, La Grange Park, IL 60525

3. In addition, we are developing a related document, NUREG-0849, "Standard Review Plan for Preparation and Evaluation of Radiological Emergency Plans for Research and Test Reactors (For Interim Use and Comment)". The estimated date for issuance is February 1, 1982.

Sincerely,

Darrell G. Eisenhut, Director
Division of Licensing

Enclosure:
Federal Register
Notice

ENCLOSURE G

ENCLOSURE G

NUCLEAR REGULATORY COMMISSION

10 CFR PART 50

EMERGENCY PLANNING AND PREPAREDNESS
FOR RESEARCH AND TEST REACTORS:
EXTENSION OF SUBMITTAL DATES

AGENCY: Nuclear Regulatory Commission

ACTION: Final Rule

SUMMARY: The Nuclear Regulatory Commission is amending its regulations in order to: (1) increase the thermal power level threshold for the submittal of emergency plans, from 500 kilowatts thermal to 2 megawatts thermal, (2) extend the submission date for emergency plans for those facilities having power levels of 2 megawatts and above to four months after the effective date of the rule and (3) require all research and test reactors below 2 megawatts thermal to submit emergency plans by November 3, 1982.*

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* The power levels described here refer to steady-state power levels.

EFFECTIVE DATE: [Inset date of publication in the FEDERAL REGISTER]

FOR FURTHER INFORMATION CONTACT: Kenneth E. Perkins, Acting Chief, Incident Response and Development Branch, Division of Emergency Preparedness, Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555 (Telephone: 301-492-4614).

SUPPLEMENTARY INFORMATION:

I. Amendments to 10 CFR Part 50 and Appendix E to Part 50

On August 19, 1980, the Nuclear Regulatory Commission published in the FEDERAL REGISTER (45 FR 55402) amendments to its regulations concerning the upgrading of emergency planning and preparedness. The effective date for these regulations was November 3, 1980.

Among other things, the revised regulations required each licensee authorized to possess and/or operate a research or test reactor facility with power levels greater than or equal to 500 KW thermal, under licenses of the type specified in 10 CFR 50.21(c), to submit emergency plans to the Director of Nuclear Reactor Regulation for approval within one year from the effective date of the rule, i.e. by November 3, 1981. A similar requirement for such reactors with power levels less than 500 KW thermal requires emergency plan submittals by November 3, 1982.

II. The Amendment to 10 CFR 50.54(r)

The NRC staff evaluated the capabilities of the 24 licensees operating at 500 KW thermal or above to submit revised emergency plans by November 3, 1981 which would meet all of the requirements in the emergency planning and preparedness regulations. See 10 CFR § 50.54(r), (q) and Appendix E to Part 50.

These 24 licensees were not able to submit emergency plans fully complying with 10 CFR Part 50 requirements by November 3, 1981. This inability to meet the November 3, 1981 date for submitting emergency plans is attributed to the delay in development of revised guidance criteria for the preparation of emergency plans for research and test reactors that are consistent with the amended regulations.

On December 31, 1982, a proposed rule was published in the FEDERAL REGISTER (46 FR 63315) for those test and research reactor licensees required to submit emergency plans by November 3, 1981, the proposed rule would have (1) increased the thermal power level threshold for the submittal of emergency plans, from 500 kilowatts thermal to 2 megawatts thermal, (2) extended the submission date for emergency plans for those facilities having power levels of 2 megawatts and above, to four months after the effective date of the rule and (3) required all research and test reactors below 2 megawatts thermal to submit emergency plans by November 3, 1982.

On January 11, 1982, a copy of the FEDERAL REGISTER notice was sent to all nonpower reactor licensees to alert them of the proposed rulemaking and provide adequate time for comments. On January 25, 1982, an information letter was transmitted to all test research and test reactor licensees by the Office of Nuclear Reactor Regulation. This letter further alerted licensees of the proposed rulemaking and provided additional information on the current status of guidance criteria for use in the development of acceptable radiological emergency response plans for their facilities.

The FEDERAL REGISTER notice of proposed rulemaking invited public comment during a 30-day period ending February 1, 1982. Four comments were received from NRC licensees on the proposed amendment. Two fully supported the proposed rule, and the other two, although generally favorable, were primarily concerned about the schedule for upgraded guidance criteria and suggested that the submittal date for emergency plans be one year from the publication date of the FEDERAL REGISTER notice concerning upgraded guidance criteria.

The January 25, 1982 letter provided the status of the guidance criteria. Two guidance documents were referenced in this letter, American Nuclear Society/American National Standards Institute (ANS/ANSI) Standard 15.16 and NRC Regulatory Guide 2.6, Revision 1. ANS/ANSI Standard 15.16 was published in January 1982. NRC Regulatory Guide 2.6, Revision 1 will endorse ANS/ANSI Standard 15.16 and is scheduled to be published in draft

form for comment in March 1982. Because of the time required for regulatory guide approval procedures, this document probably will not become final before June or July. Therefore, the staff will issue a generic letter to all research and test reactor licensees requesting that they use ANS/ANSI Standard 15.16 and Draft Regulatory Guide 2.6 to meet the requirement of this final rule by [insert date four months from the date of publication of the notice in the FEDERAL REGISTER]. With regard to the two commenters, who are in the less than 2 megawatt category, requests to extend the date to one year from the publication date of the guidance, the staff considers that the extension by a full year from the original date they were to submit emergency plans is sufficient time for preparation. This is particularly true as these licensees were provided drafts of the ANS/ANSI 15.16 Standard during its development and that Regulatory Guide 2.6 only endorses that Standard.

While compliance by affected licensees with the November 3, 1981 date for submittal of emergency plans has been delayed, the Commission considers that the state of emergency preparedness has significantly improved within the last year at research and test reactor facilities. This improvement has been confirmed by licensee participation and exchange of information in the development of guidance criteria for preparation and evaluation of radiological emergency response plans for research and test reactors. In addition, all research and test reactor licensees (65 total) presently have emergency plans prepared pursuant to 10 CFR Part 50 prior to the Commission's adoption of the upgraded emergency planning regulations in 1980.

Credible accidents for research and test reactors have been evaluated by the Commission and are discussed in the proposed amendment which was published in the FEDERAL REGISTER (46 FR 63315) on December 31, 1981. The Commission concluded that the power level threshold of 2 megawatts thermal more accurately reflects the power level at which the potential for any significant offsite consequences exist. Based on this and the above information the Commission finds that there exists sufficient reason to believe that appropriate protective measures can and will be taken to assure protection of the health and safety of the public in the event of a radiological emergency. This amendment is effective on publication because it "relieves a restriction" under Section 553(d)(1), Administrative Procedure Act.

Regulatory Flexibility Certification

In accordance with the Regulatory Flexibility Act of 1980, 5 U.S.C. § 605(b), the NRC certifies that this rule will not have a significant economic impact on a substantial number of small entities. The final rule concerns an extension of the date for research and test reactor licensees to submit emergency plans complying with 10 CFR Part 50, Appendix E, to the Nuclear Regulatory Commission for approval. Accordingly, there is no significant economic impact on a substantial number of small entities, under the Regulatory Flexibility Act of 1980.

Paperwork Reduction Act Statement

Pursuant to the provisions of the Paperwork Reduction Act of 1980 (Pub.L 96-511), the NRC has made a preliminary determination that this final rule does not impose new recordkeeping, information collection, or reporting requirements.

PART 50 - DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

The authority citation for Part 50 reads as follows:

AUTHORITY: Sections 103, 104, 161, 182, 183, 189, 68 Stat. 936, 937, 948, 953, 954, 955, 956, as amended (42 U.S.C. 2133, 2134, 2201, 2232, 2233, 2239); secs. 201, 202, 206, 88 Stat. 1243, 1244, 1246 (42 U.S.C. 5841, 5842, 5846), unless otherwise noted. Section 50.78 also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Sections 50.80-50.81 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Sections 50.100-50.102 issued under sec. 186, 68 Stat. 955 (42 U.S.C. 2236). For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273), § 50.54(i) issued under sec. 161i, 68 Stat. 949 (42 U.S.C. 2201(i)); §§ 50.70, 50.71, and 50.78 issued under sec. 161o, 68 Stat. 950, as amended; (42 U.S.C.2201(o)), and the laws referred to in Appendices.

1. Paragraph (r) of 10 CFR § 50.54 is revised to read as follows: 1/ 2/

§ 50.54 Conditions of Licenses.

* * * * *

(r) Each licensee who is authorized to possess and/or operate a research or test reactor facility with an authorized power level greater than or equal to [500 KW] 2 MW thermal, under a license of the type specified in § 50.21(c), shall submit emergency plans complying with 10 CFR Part 50, Appendix E, to the Director of Nuclear Reactor Regulation for approval by [insert date four months from publication of notice in the FEDERAL REGISTER]. Each licensee who is authorized to possess and/or operate a research or test reactor facility with an authorized power level less than [500 KW] 2 MW thermal, under a license of the type specified in § 50.21(c), shall submit emergency plans complying with 10 CFR Part 50, Appendix E, to the Director of Nuclear Reactor this amendment by November 3, 1982.

* * * * *

1/ The regulation is typed in comparative test in order to simplify review.

2/ Attachment 1 to this enclosure is typed as a clean copy for publication.

Dated at this day of , 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

Samuel J. Chilk

Secretary of the Commission

ATTACHMENT 1 TO ENCLOSURE G

Attachment 1 to Enclosure G

1. Paragraph (r) of 10 CFR § 50.54 is revised to read as follows:

§ 50.54 Conditions of Licenses

(r) Each licensee who is authorized to possess and/or operate a research or test reactor facility with an authorized power level greater than or equal to 2 MW thermal, under a licensee of the type specified in § 50.21(c), shall submit emergency plans complying with 10 CFR Part 50, Appendix E, to the Director of Office of Nuclear Reactor Regulation for approval by [Insert date four months from the date of publication of the notice in the FEDERAL REGISTER]. Each licensee who is authorized power level less than 2 MW thermal, under a license of the type specified in § 50.21(c), shall submit emergency plans complying with 10 CFR 50, Appendix E, to the Director of Office of Nuclear Reactor Regulation for approval by November 3, 1982.

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Dated at this day of , 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

Samuel J. Chilk

Secretary of the Commission

ENCLOSURE H

ENCLOSURE H

DRAFT CONGRESSIONAL LETTER

Dear Mr. Chairman:

Enclosed for the information of the Subcommittee on is a copy of a notice of a final amendment to the NRC regulations published in the FEDERAL REGISTER.

The Nuclear Regulatory Commission is amending its regulations in order to: (1) increase the thermal power level threshold, for the submittal of emergency plans, from 500 kilowatts thermal to 2 megawatts thermal, (2) extend the submission date for emergency plans for those facilities having power levels of 2 megawatts and above to four months after the effective date of the rule and (3) require all research and test reactors below 2 megawatts thermal to submit emergency plans by November 3, 1982.*

The Commission evaluated the capabilities of certain (above 500 KW) research and test reactor licensees to submit emergency plans by November 3, 1981 which would meet the requirements of the revised emergency planning regulations published August 19, 1980, and has found these licensees were unable to comply fully with the regulations.

The affected licensees' inability to meet the November 3, 1981 date for submitting adequate emergency plans has been attributed to the delay in

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* The power levels described here refer to steady-state power levels.

development of revised guidance criteria for the preparation of emergency plans for research and test reactors that are consistent with the amended regulations.

While compliance with the date to submit emergency plans by affected licensees (those with power levels above 500 KW) will be delayed, the Commission considers that the state of emergency preparedness has significantly improved within the past year at research and test reactor facilities. This improvement has been confirmed by licensee participation in the development of guidance criteria for preparation and evaluation of radiological emergency response plans for research and test reactors.

Credible accidents for research and test reactors have been evaluated by the Commission and are discussed in the proposed amendment which was published in the FEDERAL REGISTER on December 31, 1981. Based on this and the above information, the Commission finds that there exists sufficient reason to believe that appropriate protective measures can and will be taken to assure protection of the health and safety of the public in the event of a radiological emergency.

Sincerely,

Robert B. Minogue, Director
Office of Nuclear Regulatory Research

Enclosure:
FEDERAL REGISTER Notice of Final Rule

ENCLOSURE I

ENCLOSURE I

STAFF REVIEW AND CONCLUSIONS - TMI ACTION PLAN REVIEW

The NRC has conducted a preliminary review of this amendment to the regulation to determine that it satisfies the applicable requirements developed as a result of the TMI-2 Action Plan. Briefly, those criteria and the NRC's preliminary conclusions are as follows:

1. The amendment to the regulations are needed: Affected licensees were not able to fully meet the November 3, 1981 date to submit emergency plans which met the requirements in the revised emergency planning and preparedness regulations. The licensees' inability to meet the November 3, 1981 date has been attributed to the unforeseen difficulties in providing licensees with revised guidance criteria for the preparation at emergency plans for research or test reactors that are consistent with the Commission's regulations. Therefore, there is a need for a revision to the regulations.

2. The direct and indirect effects of the regulation have been considered: The decision to defer the date for certain research or test reactors to submit emergency plans is made, as described above, to account for the delay in development of guidance criteria for emergency plan preparation. This deferment does not represent any fundamental departure from the rationale the Commission used in adopting and sustaining the requirement for research and test reactor facilities to submit emergency plans. It is the staff's continued judgment that the preparation of radiological emergency response plan is a key consideration in the protection of the public health and

safety in the event of radiological emergency. The emergency planning rule is premised on assurances that adequate protective measures can and will be taken in the event of a radiological emergency. Every aspect of the rule, except the date and associated power levels for research and test reactors to submit emergency plans, would still be required. The staff recognizes the continued need for this requirement and urges all licensees to submit radiological emergency response plans as soon as practicable but not later than the specified dates of four months after effective date of rule or November 3, 1982 according to each reactor's authorized power level.

3. Alternative approaches have been considered and the least burdensome of the acceptable alternatives has been chosen: The alternative approach to proposed rulemaking would be for the Commission to enforce the specified dates of November 3, 1981, or November 3, 1982 as the dates to submit emergency plans. This alternative would be more burdensome on the NRC's resources and on the affected licensees than the alternative chosen.

4. Public comments have been considered and an adequate response has been prepared: The FEDERAL REGISTER notice of proposed rulemaking invited public comment during a 30-day period ending February 1, 1982. Four comments were received from NRC licensees on the proposed rule. Two fully supported

the proposed rule, and the other two, although generally favorable, were primarily concerned about the schedule for upgraded guidance criteria and suggested that the submittal date for emergency plans be one year from the publication date of the FEDERAL REGISTER notice concerning upgraded guidance criteria.

The January 25, 1982 letter provided the status of the guidance criteria. Two guidance documents were referenced in this letter, American Nuclear Society/American National Standards Institute Standard (ANS/ANSI) Standard 15.16 and NRC Regulatory Guide 2.6, Revision 1. ANS/ANSI Standard 15.16 was published in January 1982. NRC Regulatory Guide 2.6, Revision 1 will endorse ANS/ANSI Standard 15.16 and is scheduled to be published in draft form for comment in March 1982. Because of the time required for regulatory guide approval procedures, this document probably will not become final before June or July. Therefore, the staff will issue a generic letter to all research and test reactor licensees requesting that they use ANS/ANSI Standard 15.16 and Draft Regulatory Guide 2.6 to meet the requirement of this final rule effective four months after publication of the notice in the FEDERAL REGISTER. With regard to the two commenters, who are in the less than 2 megawatt category, requests to extend the date to one year from the publication date of the guidance, the staff considers that the extension by a full year from the original date they were to submit emergency plans is sufficient time for preparation. This is particulary true as these licensees were provided drafts of the ANS/ANSI 15.16 Standard during its development and that Regulatory Guide 2.6 only endorses that Standard.

While compliance by affected licensees with the November 3, 1981 date for submittal of emergency plans has been delayed, the Commission considers that the state of emergency preparedness has significantly improved within the last year at research and test reactor facilities. This improvement has been confirmed by licensee participation and exchange of information in the development of guidance criteria for preparation and evaluation of radiological emergency response plans for research and test reactors. In addition, all research and test reactor licensees (65 total) presently have emergency plans prepared pursuant to 10 CFR Part 50 prior to the Commission's adoption of the upgraded emergency planning regulations in 1980.

Credible accidents for research and test reactors have been evaluated by the Commission and are discussed in the proposed rule which was published in the FEDERAL REGISTER on December 31, 1981. The Commission concludes that the power level threshold of 2 megawatts thermal more accurately reflects the power level at which the potential for any significant offsite consequences exist. Based on this and the above information, the Commission finds that there exists sufficient reason to believe that appropriate measures can and will be taken to assure protection of the health and safety of the public in the event of a radiological emergency and therefore adopts the rule as proposed.

5. The regulation is written so that it is understandable to those who must comply with it: The final rule has been reviewed against this criterion.

6. An estimate has been made of the reporting burdens or recordkeeping requirements necessary for compliance with the regulation: The final rule change does not increase any such burdens or requirements which may otherwise exist, nor does it establish any new reporting burdens or recordkeeping requirements.

7. The name, address, and telephone number of a knowledgeable agency official has been identified: See contacts listed in proposed FEDERAL REGISTER notice.

8. A plan for evaluating the regulation after its issuance has been developed: Public comments, licensee and NRC staff experience, and other inputs will be examined on a periodic basis to determine the effectiveness of the final rule.

Based upon the foregoing review of the final regulation, the NRC has preliminarily concluded that this regulation satisfies the applicable criteria.

NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

AUG 4 1976

OFFICE OF THE
CHAIRMAN

MEMORANDUM FOR: Lee Gossick

FROM: Chairman Rowden

SUBJECT: INFORMATION REPORT: ANALYSIS OF RADIOGRAPHY OVEREXPOSURES (SECY-76-146)

This Information Report does a good job of defining the circumstances contributing to the serious problem of radiography overexposures, including those resulting from the use of portable radiography devices. It also points up the difficulties which arise in resolving an issue which needs the joint treatment of the several cognizant offices in order to produce a solution of maximal benefit to NRC.

In this case, the report specifically states that "the problem is one of compliance, not with the development of standards," (p. 10). Compliance problems in this area, of course, require the collaborative efforts of NMSS (for materials licensing), I&E (for inspection and enforcement) and Standards for adequate solution. Thus, what is needed now is to build on the Information Report with a Policy Paper which spells out a coordinated NRC Action Plan for remedying the problem of radiography overexposures on a schedule which reflects the importance of radiography to safety. The paper specifically should address the following items suggested in the report:

1. Development of a training standard for education of radiographers;

2. Assurance of licensee commitment to the training standard through the amendment of Part 34 of license conditioning;

3. Development of performance criteria, utilizing inspection findings for radiography devices;

4. Development of regulations for review of radiography device designs against performance criteria;

5. Development of regulations for the licensing of the manufacture and distribution of radiography devices;

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ENCLOSURE D

6. Development of enforceable radiography safety standards; and

7. Improved requirements for alarms and radiation monitoring devices.

OSD, I&E, and NMSS should closely coordinate the writing of this paper so that it spells out the proposed actions and displays the interrelationships among the three offices in carrying out an Action Plan.

cc: Commissioner Mason
Commissioner Gilinsky
Commissioner Kennedy
Peter Strauss
Sam Chilk
Ben Huberman