



## RULEMAKING ISSUE

(Affirmation)

SECY-88-246

September 1, 1988

For: The Commissioners

From: Victor Stello, Jr.  
Executive Director for Operations

Subject: FINAL RULE ON EMERGENCY PLANNING AND  
PREPAREDNESS REQUIREMENTS FOR NUCLEAR POWER  
PLANT FUEL LOADING AND INITIAL LOW POWER  
TESTING

Prior History: SECY-88-109

Background: On May 9, 1988, the Commission published in  
the Federal Register (53 FR 16435) a proposed  
rule clarifying and amending the emergency  
planning and preparedness requirements for  
fuel loading and low power testing of  
nuclear power plants. The need for the rule  
surfaced in the context of the Seabrook  
licensing proceeding, where an Appeal Board  
decision on the necessity of a prompt  
notification system prior to low power  
testing focused attention on a discrepancy in

Contacts:  
Martin G. Malsch, OGC  
492-1740

Mike Jamgochian, RES  
492-3918

8809050137-XA

3277

DF02

the existing 10 CFR § 50.47(d) between the language of the rule itself and certain statements in the Statement of Considerations accompanying the rule's promulgation in 1982. In SECY-88-109 (April 20, 1988), the NRC Staff recommended amending the rule consistent with the analysis done in 1982 to clarify that, while the 1982 rule on its face requires no consideration of offsite elements of emergency planning for low power testing, certain offsite elements enumerated in the 1982 Statement of Considerations must be satisfied for low power. The Staff recommended that prompt notification of the public not be required before low power, since even in a worst case analysis of a low likelihood accident, such notice would be far in excess of what would reasonably be needed.

Discussion:

A. Response to Proposed Rulemaking

The proposed rule produced a huge volume of public comment. Nearly 1700 comments have been received to date. The overwhelming majority came from private citizens, mostly in the New England area. Comments also came from utilities, industry groups, State and local

government agencies and officials, members of Congress (Sens. Kerry and Humphrey, Cong. Markey), the Department of Energy and several local and national environmental groups. FEMA did not comment. The comments ran approximately two to one in favor of promulgation of the proposed rule. The favorable comments came primarily from private citizens and citizens' groups, with a sprinkling from utilities, industry organizations such as NUMARC, one local government official and the Department of Energy. Of the comments opposed to promulgation of the rule, approximately 500 were form letters from residents of the area surrounding the Seabrook nuclear power plant. The remaining 60 to 70 comments in opposition were from private citizens, State and local government officials, the three above-named members of Congress and environmental groups.

The great majority of comments, particularly those supporting the rule, addressed the licensing of the Seabrook facility more than they did the generic emergency planning question raised by the rulemaking. Most of

those who wrote in support of the rule expressed the opinion that the facility was ready to be licensed, that the power the facility would generate was needed and that licensing should not be allowed to be held up by political forces. Many also endorsed the Commission's technical conclusions that the risk is sufficiently small, the core fission product less and the time available to take action so great in the unlikely event of an accident at low power that prompt public notification is not necessary to protect the public health and safety.

The majority of comments against the rule, including the 500 form letters, expressed the opinion that the Commission was compromising public health and safety in order to put Seabrook on line. Fifteen major comments were identified for analysis:

1. The risk assessments upon which the rule is based are based on operation over a short time frame. However, there is no time limit for low power testing.
2. The technical basis for both the current rule and the 1982 rule is flawed in that, at 5% power, substantial inventories of biologically significant fission products will be developed in from eight to forty days. Thus, while the inventory of all radionuclides developed during low power testing is reduced

compared to full power operation, the inventory of radionuclides with public health significance still poses a substantial prompt public health hazard. In addition, the inexperience of the operators during low power testing and the newness of the system create a greater potential for undiscovered defects and incidents.

3. Testing at low power is riskier than full power operation because it involves deliberately defeating safety systems.

4. The Chernobyl accident occurred while the reactor was at low power. Why does the NRC still say that the risk of low power testing is low?

5. Low power licensing fails the cost-benefit analysis required by NEPA.

6. A low power license should not be issued when it is not certain that a full power license will ever be granted. The Shoreham reactor was irradiated unnecessarily.

7. The proposed rule states that the safety analysis performed in 1982 is still valid. After performing that analysis, the NRC decided to require that certain offsite aspects of emergency plans be in place prior to low power licensing. The NRC has given no rationale for changing the rule, while admitting that the previous analysis is still valid.

8. The NRC has previously stated that review of the licensee's onsite response mechanism will necessarily include aspects of some offsite elements. Why is the NRC changing this position?

9. The new rule does not address the risk of a terrorist attack or sabotage at low power.

10. The risks of an accident at low power are not confined to those onsite. If an accident were to occur at low power, public panic could ensue.

11. The change in proposed Section 50.47(b)(9) to modify the requirement for

provisions for monitoring off-site consequences from "in use" to "available" will create unacceptable delay in the identification of an actual or potential hazard to the public stemming from a radiological emergency.

12. The original rule justified retention of emergency planning for research reactors, but not for commercial reactors, since research reactors were perceived to be located in areas of high population density. This contradicts the Commission's current posture that the relatively lower risks of low power testing justify elimination of offsite safety measures, since it concedes that there is an accident risk at low power serious enough that a research reactor (much smaller than a power reactor) needs a full emergency plan.

13. The Atomic Energy Act prohibits authorization of low power testing prior to completion of public hearings on all issues material to full power licensing.

14. The proposed rule was designed to allow the Seabrook facility to receive its low power license. The Commission should not promulgate a rulemaking designed to license a specific facility rather than to promote the public health and safety. The issue should be addressed in the pending Seabrook adjudication, not in a rulemaking.

15. Members of the public may need immediate medical attention in the event of an accident at low power. The new rule does not provide that arrangements for medical services will be in place for those offsite.

#### B. The Final Rule

The draft final rule is essentially the same as the proposed rule but with some modifications and clarifications in response to public comments. The analysis of the fifteen major comments is contained in the Statement of Considerations, which is

self-explanatory. First, the changes in response to public comment are a clarification that the purpose of low power licensing is low power testing and operator training, not operation. Second, the final rule will continue staff practice of requiring, prior to low power, that onsite systems for monitoring releases will be "in use", and not merely "available".

This rule does not resolve the issue remaining open in the Seabrook case as to whether applicants in other cases would be required to file a state, local or utility plan before issuance of any low power license. Such a change would be beyond the scope of this rulemaking. In order to provide guidance to the NRC staff in processing future applications, we recommend that this ambiguity be resolved by the Commission in the near future.

Alternative:

For the Commission to decline to promulgate the draft final rule and to address the emergency planning and preparedness requirements for fuel loading and low power testing in the context of the Seabrook adjudication under existing rules.

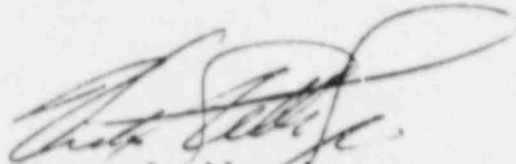
Pro - This option will avoid possible litigation on the rule.

Con - This option continues to present the difficulties discussed by OGC in its analysis of ALAB-883.

Coordination: OGC has reviewed this paper and has no legal objection.

Recommendation: Approve the draft final rule as attached.

Sunshine Act: An affirmation session open to the public is all that is legally required. However, because of the large volume of public comment and the Congressional interest shown, the Commission may, in its discretion, wish to schedule an open meeting on the subject before voting.



Victor Stello, Jr.  
Executive Director  
for Operations

Enclosure:  
Federal Register Notice  
of Final Rule



Commissioners' comments or consent should be provided directly to the Office of the Secretary by c.o.b. Thursday, September 15, 1988.

Commission Staff Office comments, if any, should be submitted to the Commissioners NL1 Thursday, September 8, 1988, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional time for analytical review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

This paper is tentatively scheduled for affirmation at an Open Meeting during the Week of September 19, 1988. Please refer to the appropriate Weekly Commission Schedule, when published, for a specific date and time.

DISTRIBUTION:

Commissioners

OGC

OI

OIA

GPA

REGIONAL OFFICES

EDO

ACRS

ACNW

ASLBP

ASLAP

SECY

NUCLEAR REGULATORY COMMISSION

10 CFR Part 50

Emergency Planning and Preparedness Requirements  
for Nuclear Power Plant Fuel Loading and  
Low Power Testing

AGENCY: Nuclear Regulatory Commission

ACTION: Final Rule

SUMMARY: The Nuclear Regulatory Commission is amending its regulations to establish more clearly what emergency planning and preparedness requirements are needed for fuel loading and low power testing of nuclear power plants. The rule itself will now require NRC findings on the licensee's emergency plans for dealing with accidents that could affect persons onsite. The Commission's prior practice of considering certain offsite elements of licensee's plans has been modified and codified in this regard to provide that NRC findings will be required before fuel loading or low power testing on coordination with offsite personnel and agencies so that necessary resources can be applied onsite for mitigating and containing accidents, and so that offsite agencies may be kept informed of plant events. The rule will also change the prior practice, never included in the prior rule itself, of reviewing plans for prompt public notification in the event of an accident. This practice of reviewing an offsite element of licensee emergency plans which has no onsite application is being discontinued as not necessary for public safety. The rule does not change the emergency planning requirements which must be satisfied before full power operation can be authorized. Nor is

the rule intended to overrule Public Service Company of New Hampshire, et al. (Seabrook Station, Units 1 and 2), CLI-87-2, 25 NRC 267 or CLI-87-3, 25 NRC 875 (1987). Also, no new requirements are being imposed by the rule beyond those that have been previously required by rule and by prior NRC practice. The rule makes clear that no offsite elements of the applicants emergency plan, other than those set forth in revised § 50.47(d), need be considered in connection with low power licensing.

EFFECTIVE DATE: [insert date 30 days from publication in Federal Register]

FOR FURTHER INFORMATION CONTACT: Czarle F. Kagan, Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555; Telephone (301) 492-1632, or Michael T. Jamgochian, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555; Telephone (301) 492-3918.

SUPPLEMENTARY INFORMATION:

I. Background

On May 9, 1988, the Commission published in the Federal Register (53 FR 16435) a notice of proposed rulemaking which would establish more clearly what emergency planning and preparedness requirements are needed for fuel loading and low power testing of nuclear power plants. As detailed in the notice of proposed rulemaking, 10 CFR Section 50.47(d) as promulgated in 1982 provided that only a finding as to the adequacy of an applicant's onsite emergency planning and preparedness is required for low power. 47 Fed. Reg. 30232.

an accident. However, the provision in the Statement of Considerations that systems for prompt notice to the public in the event of an accident would also be reviewed before low power focused on protection of persons offsite. The Statement of Considerations for the 1982 rule change gave no clear and consistent rationale for why the particular element dealing with public notification should be included. The foundation for that rulemaking was the Commission's determination, described in more detail below, that the degree of emergency planning and preparedness necessary to provide adequate protection of the public health and safety is significantly less than that required for full power operation in light of the significantly lower risks associated with even low likelihood accidents at that stage. 47 Fed. Reg. 30233 and note 1. Thus the stated rationale for the 1982 rule would seem to undercut the need for any prompt public notification requirement.

The Commission indicated in 1982 that although at low power plant operators typically have less experience and there is a greater potential for undiscovered defects, the risk to public health and safety at low power is significantly lower than at full power as a result of several factors. Those reasons were stated by the Commission as follows: First, the fission product inventory during low power testing is much less than during higher power operation due to the low level of reactor power and short period of operation. Second, at low power there is a significant reduction in the required capacity of systems designed to mitigate the consequences of accidents compared to the required capacities under full power operation. Third, the time available for taking actions to identify accident causes and mitigate accident consequences is much longer than at full power. This means the operators should have sufficient time to prevent a radioactive release from occurring. In the worst

case, the additional time available (at least 10 hours), even for a postulated low likelihood sequence which could eventually result in release of the fission products accumulated at low power into the containment, would allow adequate precautionary actions to be taken to protect the public near the site (47 FR 30233).

The safety basis for the 1982 rule was reviewed as a necessary part of the instant proposed rulemaking, and the Commission reexamined the need at low power to review those aspects of applicants' onsite plans that seem relevant only to offsite protective measures that may be needed if there were an accident with offsite dose effects. 53 FR 16436-7 (footnote omitted). The proposed rule indicated that the Commission saw no need to review those aspects of applicants' plans that did not have a direct relationship to onsite dose effects in light of the significantly less risk to offsite persons presented by fuel loading and low power testing as contrasted with full power operation. On reexamination in light of public comment, the Commission has reaffirmed the safety conclusion that the safety risk to the public from low power testing is significantly less than the risk to the public from full power operation. Accordingly, the rule is being issued in final form substantially as proposed. However, a number of changes have been made in the rule in response to public comments.

## II. Analysis of Public Comments

Nearly 1700 comments were received on the proposed rulemaking. The overwhelming majority were from private citizens, mostly in the New England area. Comments also came from utilities, industry groups, State and local

government agencies and officials, members of Congress, one federal agency and several local and national environmental groups. The comments ran approximately two to one in favor of promulgation of the proposed rule. Of those opposed, approximately 500 were form letters from residents of the area surrounding the Seabrook nuclear power plant. The remaining 60 to 70 comments in opposition were from private citizens, State and local government officials and environmental groups. The comments in favor came primarily from private citizens, with a sprinkling from utilities, nuclear industry organizations, one local government official and one federal agency.

Because of the large volume of comments received, it would be impractical to discuss each individually. The great majority of comments, both for and against the proposed rule, turned on the commenter's opinion on the impact of the rule on licensing the Seabrook facility. Most of the individuals who wrote in support of the rule expressed the opinion that the facility was ready to be licensed, that the power the facility would generate was needed, and that licensing should not be allowed to be held up by political forces. Most commenters in favor of the rule also expressed the opinion that the risks to the public from low power testing were considerably less than those from full power operation, and that prompt emergency notification to the general public should not be necessary at low power.

The significant comments against the rule fall within the scope of fifteen separate major comments. These major comments and the Commission's response to them are set forth below.

Comment 1. The risk assessments upon which the rule is based are based on operation over a short time frame. However, there is no time limit for low power testing.

Response. For many years, Commission policy has been to issue separate "low power" licenses which allow a plant to load fuel and perform testing and operator training at power levels up to 5 percent whenever to do so would expedite the licensing process without prejudicing the rights of any intervening parties. The purpose of the low power test program is to demonstrate that the overall plant performance conforms to the established design criteria, and to confirm the operability of plant systems and design features that could not be completely tested during the preoperational test phase. Tests that are performed during the program are specific to the type of light-water reactor (boiling water reactor versus pressurized water reactor), but typically include determination of in-core flux distribution, moderator temperature coefficients, control rod worths, and adequacy of neutron instrumentation and associated protective functions. Also, during this time operators obtain some valuable additional training manipulating the controls of the reactor at low power levels. In practice, many of these tests and manipulations are performed with the reactor at less than 1% of rated power, and those tests and manipulations which are performed with the reactor at "peak" low power (typically 3% to 4% of rated power) are completed within a day or two. Based on experience with U.S. commercial power plant startup test programs, the period over which a reactor would actually operate at or near 5 percent power during the low power test program is expected to be at most a few weeks, likewise, operation at 5% power beyond these few weeks would not be economically feasible. The safety evaluation supporting this rule assumes that operation under the rule would be consistent with this prior history and practice. To further clarify this point, low power licenses issued under this rule will be for purposes of fuel loading and low power testing and operator training only: steady-state operation at or near 5% for the full license term would not be authorized.

Comment 2. The technical basis for both the current rule and the 1982 rule is flawed in that, at 5% power, substantial inventories of biologically significant fission products will be developed in from eight to forty days. Thus, while the inventory of all radionuclides developed during low power testing is reduced compared to full power operation, the inventory of radionuclides with public health significance still poses a substantial prompt public health hazard. In addition, the inexperience of the operators during low power testing and the newness of the system create a greater potential for undiscovered defects and incidents.

Response. Yes, there are some biologically significant fission products generated in the reactor core during the low power operation contemplated by this rule. But, although during low power testing plant operators typically have less experience and there is a greater potential for undiscovered defects, the risk at low power is still sufficiently low to provide reasonable assurance that public health and safety is protected even in the absence of the requirement for a prompt notification system and other purely offsite elements of emergency plans. This is a result of three factors, which were stated earlier by the Commission and which the Commission reaffirms in this rulemaking as follows: First, the fission product inventory during initial low power testing is much less than during higher power operation due to the low level of reactor power and short period of operation at this power level. The available inventory of fission products that are significant contributors to public health consequences would be reduced by about a factor of 20 for continuous operation at 5% power compared to continuous full power operation. However, as explained above, based on experience with commercial nuclear power



plant startup test programs, operation at or near 5 percent power is only expected for a maximum of a few weeks. This would result in a further reduction in available fission product inventory. Second, at low power there is a significant reduction in the required capacity of systems designed to mitigate the consequences of accidents compared to the required capacities under full power operation. For example, the coolant flow required to dissipate decay heat at 10 hours following a loss of coolant accident in a typical pressurized water reactor would be less than 10 gallons per minute, which is well within the capacity of normal make-up systems. Most of the regulatory requirements for safety systems during reactor power operation, including containment integrity, emergency core cooling, and redundant power supplies, are the same for 5% power operation as they are for 100% power. Third, the time available for taking actions to identify accident causes and mitigate accident consequences is much longer than at full power. This means the operators should have sufficient time to prevent a radioactive release from occurring.

The above safety evaluation makes no assumptions about the time that would be needed to notify the public offsite and to implement an offsite emergency response if one would assume hypothetically that an offsite release would occur: it is based solely on an analysis of the likelihood that an offsite release could occur and of the possible magnitude of that release. However, as an additional, separate consideration, the Commission also believes that, in the worst case, the additional time available (at least 10 hours), even for a postulated low likelihood sequence which could eventually result in release of the fission products accumulated at low power into the containment, would allow notification of both onsite and offsite emergency response

organizations. These organizations would likely have adequate time to implement some offsite response should that be necessary. Without a prompt public notification system in place and an approved and tested offsite emergency plan, there obviously cannot be the same kind of reasonable assurance of offsite protective measures that there would be with a fully reviewed and tested offsite emergency plan should there be an offsite release at low power. However, given the requirements for procedures to notify emergency response organizations and the additional time that will likely be available, it is the Commission's judgment that there will be sufficient time for the emergency response organizations to implement some form of public notification and to carry out some reasonably effective offsite emergency response.

Comment 3. Testing at low power is riskier than full power operation because it involves deliberately defeating safety systems.

Response. While some selected safety systems may be disabled during low power testing, the heat load and fission product inventory are significantly less than at full power. There are a number of methods available to remove this very low heat load generated at low power. In addition, special procedures are developed and followed for these tests, which are closely monitored by plant personnel. Therefore, because of the reduced heat load, small fission product inventory and special attention by plant operators, testing at low power does not place the plant at greater risk and presents a significantly lesser risk than does full power operation.

Comment 4. The Chernobyl accident occurred while the reactor was at low power. Why does the NRC still say that the risk of low power testing is low?

Response. The reactor physics characteristics of U.S. light-water reactors are very different from those of the graphite-moderated RBMK type of reactor at Chernobyl. Positive void (and moderator temperature) coefficients, which played a central role in the accident at Chernobyl, are generally absent in U.S. reactors. Where they are present, they have a limited reactivity insertion potential, which precludes their causing any significant reactivity transient and power level increase. Substantial required shutdown reactivity margins in conjunction with fast automatic insertion of control rods on signals indicative of unsafe conditions provide protection against the occurrence of reactivity excursions, such as that which took place at Chernobyl, in commercial U.S. reactors. U.S. light-water reactors do not have the inherent potential to rapidly elevate their reactor power to levels at which plant risk becomes significant.

Additionally, the Chernobyl reactor operated at full power prior to its accident, therefore, the buildup of fission product inventory was much higher than the buildup of fission product inventory at U.S. reactor operating under a fuel loading or low power testing license.

Comment 5. Low power licensing fails the cost-benefit analysis required by NEPA.

Response. This issue falls outside the scope of the rulemaking which is only designed to address the requirements under the Atomic Energy Act for

emergency planning at fuel loading and low power. The establishment of these safety requirements does not have a significant environmental impact under NEPA. The question of the correct NEPA analysis to be done in support of a low power license for any specific facility is made by case-by-case determination, and is not the subject of this rulemaking.

Comment 6. A low power license should not be issued where it is not certain that a full power license will ever be granted. The Shoreham reactor was irradiated unnecessarily.

Response. This again is an issue that is not the subject of this generic rulemaking. In the past the Commission has addressed this issue in individual adjudicatory opinions, e.g. Long Island Lighting Company (Shoreham Nuclear Power Station), LLI-85-12, 21 NRC 1587 (1985), and does not believe that the issue warrants resolution generically by rulemaking.

Comment 7. The proposed rule states that the safety analysis performed in 1982 is still valid. After performing that analysis, the NRC decided to require that certain offsite aspects of emergency plans be in place prior to low power licensing. The NRC has given no rationale for changing the rule, while admitting that the previous analysis is valid.

Response. One reason for this rule change is to clarify language in the rule itself that can easily be read to suggest that no offsite emergency planning elements need to be reviewed prior to fuel loading or low power testing. The 1982 safety analysis supported the proposition that those offsite aspects of emergency planning which are pertinent to protecting persons onsite need be considered prior to low power. This rule change will incorporate this important safety consideration.

The provision in the 1982 rulemaking which is being reconsidered is the provision in the Statement of Considerations that systems for prompt notification of the public in the event of an accident should be in place and reviewed at low power. However, this change is consistent with the 1982 safety analysis. Plans will still be required for notification of offsite planning and response agencies so that these agencies and licensees may, as appropriate, keep the media and the public informed. But given the relatively low risk to the public from low power operation, a requirement for prompt notification of the public is far in excess of what is reasonably needed. Nothing in the 1982 rulemaking logically supports the contrary.

Comment 8. The NRC has previously stated that review of the licensee's onsite response mechanism will necessarily include aspects of some offsite elements. Why is the NRC changing this position?

Response. See the Response to Concern 7. The NRC is not changing its expert conclusion as to the lower level of risk from low power operation. However, this rulemaking is a more logical result of this expert conclusion than the positions stated in the 1982 Statement of Considerations.

Comment 9. The new rule does not address the risk of a terrorist attack or sabotage at low power.

Response. Prior to receiving a low power license a licensee must fully meet the requirements of 10 CFR Part 73.55. These requirements assure the full implementation of an acceptable security plan around a nuclear power

plant. These are the same security requirements that a licensee must meet prior to receiving a full power license. While the risk from terrorism or sabotage cannot be quantified, it is the Commission's judgment that compliance with § 73.55 will reasonably assure that the risk from terrorism or sabotage at low power is sufficiently low so as not to undercut the conclusion that low power safety risks to the offsite public are relatively low.

Comment 10. The risks of an accident at low power are not confined to those onsite. If an accident were to occur at low power, public panic could ensue.

Response. The Commission responded to a similar comment in promulgating the 1982 rule. See Issue 6, 47 Fed. Reg. at 30234. The Commission is not unmindful that, regardless of the objective lack of danger, members of the public may be made uneasy and could panic unnecessarily if an accident were to occur at low power. It was in response to this comment that the Commission agreed to review, and will continue to review, certain offsite notification elements of emergency plans prior to low power testing. In particular, prior to low power, means to keep state and local response organizations informed in the event of an onsite accident will be reviewed and approved. These organizations, through normal communication mechanisms, have the capability to inform the public, if needed, in order to avert panic. However, the Commission has found that immediate direct notification of the public called for by the language in the 1982 rule preamble is far in excess of what is necessary to keep the public informed.

Comment 11. The change in proposed Section 50.47(b)(6) to modify the requirement for provisions for monitoring offsite consequences from "in use" to "available" will create unacceptable delay in the identification of an actual or potential hazard to the public stemming from a radiological emergency.

Response. The final rule will retain the phrase "in use". The wording change in the proposed rule was not intended to change current NRC staff practice of reviewing licensee onsite plans to assure they meet the intent of 50.47(b)(6) and Planning Standard I of NUREG-0654 prior to issuance of an operating license limited to fuel loading and low power testing. While the safety evaluation which supports the elimination of the prompt public notification requirement for low power suggests that an offsite release is extremely unlikely, the Commission still considers it prudent to have release monitoring equipment in use onsite so that, at the minimum, the licensee is in a position to verify objectively that no release has occurred.

Comment 12. The original rule justified retention of emergency planning for research reactors, but not for commercial reactors, since research reactors were perceived to be located in areas of high population density. This contradicts the Commission's current posture that the relatively lower risks of low power testing justify elimination of offsite safety measures, since it concedes that there is an accident risk at low power serious enough that a research reactor (much smaller than a power reactor) needs a full emergency plan.

Response. The premise for the comment that research reactors with power levels approximating those of commercial nuclear power plants operating at 5% of full power are required to have approved offsite emergency plans is incorrect. Rather than requiring a "full emergency plan" for research reactors, the Commission's regulations (10 CFR Part 50, Appendix E, 10 CFR 50.47(c), 10 CFR 50.54(g) provide that emergency plan requirements will be determined on a case-by-case basis. In making this determination the guidance of NRC Regulatory Guide 2.6 and American National Standards Institute/American Nuclear Society 15.16 is used. In accordance with this guidance, and based on the relatively small risks posed by typical research reactors, (i.e., less than 50 mega watts) emergency planning involving offsite state and local plans and public notification have not been required. The guidance does, however, provide for consideration of more extensive planning, including all or a portion of the requirements listed in Section IV of 10 CFR Part 50 Appendix E for research reactors with power levels greater than 50 mega watts. This graded approach to required emergency planning is consistent with the current rule.

Comment 13. The Atomic Energy Act prohibits authorization of low power testing prior to completion of public hearings on all issues material to full power licensing.



Response. This comment is more properly addressed to Section 50.57(c), which provides for low power licenses and which is not being amended here. That section provides that a hearing is required prior to low power on those contentions "relevant to the activity to be authorized" -- that is, low power testing, as opposed to full power operation.

Comment 14. The proposed rule was designed to allow the Seabrook facility to receive its low power license. The Commission should promulgate a rule to promote the public health and safety and not one designed to license a specific facility. The issue should be addressed in the pending Seabrook adjudication, not in a rulemaking.

Response. In the proposed rule, the Commission stated that its attention was focused on the emergency planning requirements for low power testing because of an Appeal Board decision in the Seabrook operating license proceeding, ALAB-883. And, for the near term, the only reasonably foreseeable effect of the rule change will be on the Seabrook low power application. But this does not make the use of rulemaking inappropriate. As the Commission explained, the rule change was proposed to correct a possible discrepancy between the language of the 1982 rule and the language of the Statement of Considerations which potentially affects all license applicants, not just the applicants for Seabrook. Also, the questions involved in the proposed rule are generic safety questions and the Commission preferred to obtain (and, in fact, did obtain) a broad spectrum of public comment, rather than just the comments of the litigants in the Seabrook proceeding.

The Commission is free to address a generic issue generically, even if the rule change may currently apply only to one facility. See, e.g., Siegel v. Atomic Energy Commission, 400 F.2d 778 (D.C. Cir. 1968). Also see Securities and Exchange Commission v. Chenery, 332 U.S. 194, 202 (1947) (choice of how to proceed lies within the informed discretion of the agency).

Comment 15. Members of the public may need immediate medical attention in the event of an accident at low power. The new rule does not provide that arrangements for medical services will be in place for those offsite.

Response. The purpose for the requirement in 10 CFR 50.47(b)(12) that arrangements for medical services be made was described in the "Summary" section of the Commission's policy statement on medical services (51 FR 32904) dated September 17, 1986, as follows:

"The Nuclear Regulatory Commission ("NRC" or "Commission") believes that 10 CFR 50.47(b)(12) ("planning standard (b)(12)") requires pre-accident arrangements for medical services (beyond the maintenance of a list of treatment facilities) for individuals who might be severely exposed to dangerous levels of offsite radiation following an accident at a nuclear power plant."

However, it is highly unlikely that members of the general public would be exposed to dangerous levels of radiation following an accident at low power. Therefore, the safety premise for the full power requirement that arrangements be made for medical services does not apply to fuel loading or low power testing.

Conclusion

As indicated in the responses to the comments, the Commission has decided to proceed with the proposed rule change with some clarifications and modifications. The rule reconciles a discrepancy between the language of the Statement of Considerations and the language of the Commission's 1982 emergency planning rule change and provides an interpretation of that rule which appears to be fully consistent with the Commission's goals and safety conclusions in 1982. The majority of the public, as expressed in the comments, supports the rule. The comments opposing the rule have given no sound reasons for the Commission to alter its basic course.

Finding of No Significant Environmental Impact: Availability

The Commission has determined that under the National Environmental Policy Act of 1969, as amended, and the Commission's regulations in Subpart A of 10 CFR Part 51, this rule, if adopted, would not be 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 at the NRC Public Document Room, 1717 H Street, NW., Washington, DC 20555.

### Paperwork Reduction Act Statement

This proposed rule does not contain a new or amended information collection requirement subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). Existing requirements were approved by the Office of Management and Budget, approval number 3150-0011.

### Regulatory Flexibility Certification

This proposed rule will not have a significant impact on a substantial number of small entities. The proposed rule will reduce or at least postpone the burden on NRC licensees by reducing the process required before a low power license may be granted. Nuclear power plant licensees do not fall within the definition of small businesses in section 3 of the Small Business Act, 15 U.S.C. 632, the Small Business Size Standards of the Small Business Administration in 13 CFR Part 121, or the Commission's Size Standards published at 50 FR 50241 (Dec. 9, 1985). Therefore, in accordance with the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission hereby certifies that the proposed rule, if promulgated, will not have a significant economic impact on a substantial number of small entities and that, therefore, a regulatory flexibility analysis need not be prepared.

## Backfit Analysis

The NRC has determined that the backfit rule, 10 CFR 50.109, does not apply to this rule, and therefore, that a backfit analysis is not required, because these amendments do not involve any provisions which would impose backfits as defined in 10 CFR 50.109(a)(1).

### List of Subjects in 10 CFR Part 50

Antitrust, Classified information, Fire prevention, Intergovernmental relations, Nuclear power plants and reactors, penalty, Radiation protection, Reactor siting criteria, and Reporting 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 Commission is adopting the following amendments to 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, 963, 954, 955, 956, as amended, sec. 234, 83 Stat. 1244, 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). Sections 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 50.23, 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 50.80-50.81 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2138). 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); §§ 50.10(a), (b), and (c), 50.44, 50.46, 50.48, 50.54, and 50.80(a) are issued under sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b)); §§ 50.10(b) and (c), and 50.43 are issued under sec. 161i, 68 Stat. 949, as amended (42 U.S.C. 2201(i)); and §§ 50.9, 50.55(e), 50.59(b), 50.70, 50.71, 50.72, 50.73, and 50.78 are issued under sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

2. In § 50.47, paragraph (d) is revised to read as follows:

§ 50.47 Emergency plans.

\* \* \* \* \*

(d) Notwithstanding the requirements of paragraphs (a) and (b) of this section, and except as specified by this paragraph, no NRC or FEMA review, findings, or determinations concerning the state of offsite emergency preparedness or the adequacy of and capability to implement State and local or utility offsite emergency plans are required prior to issuance of an operating license authorizing only fuel loading or low power testing and training (up to 5% of the rated power). Insofar as emergency planning and preparedness requirements are concerned, a license authorizing fuel loading and/or low power testing and training may be issued after a finding is made by the NRC that the state of onsite emergency preparedness provides reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. The NRC will base this finding on its assessment of the applicant's onsite emergency plans against the pertinent standards in paragraph (b) of this section and Appendix E. Review of applicant's emergency

plans will include the following standards with offsite aspects:

(1) Arrangements for requesting and effectively using offsite assistance onsite have been made, arrangements to accommodate State and local staff at the licensee's near-site Emergency Operations Facility have been made, and other organizations capable of augmenting the planned onsite response have been identified.

(2) Procedures have been established for licensee communications with State and local response organizations, including initial notification of the declaration of emergency and periodic provision of plant and response status reports.

(3) Provisions exist for prompt communications among principal response organizations to offsite emergency personnel who would be responding onsite.

(4) Adequate emergency facilities and equipment to support the emergency response onsite are provided and maintained.

(5) Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use onsite.

(6) Arrangements are made for medical services for contaminated and injured onsite individuals.

(7) Radiological emergency response training has been made available to those offsite who may be called to assist in an emergency onsite.

Dated at Rockville, MD, this \_\_\_\_ day of September, 1988.

For the Nuclear Regulatory Commission,

\_\_\_\_\_  
Samuel J. Chilk  
Secretary of the Commission