

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

April 7, 1988

TO ALL POWER REACTOR LICENSEES AND APPLICANTS

MODIFIED ENFORCEMENT POLICY RELATING TO 10 CFR 50.49, "ENVIRONMENTAL SUBJECT: QUALIFICATION OF ELECTRICAL EQUIPMENT IMPORTANT TO SAFETY FOR NUCLEAR POWER PLANTS" (GENERIC LETTER 88-07)

Background:

Generic Letters, Bulletins, and Information Notices have been issued to provide guidance regarding the application and enforcement of 10 CFR 50.49, "Environmental Qualification of Electric Equipment Important to Safety for Nuclear Power Plants." Generic Letter 85-15, issued August 6, 1985, and Generic Letter 86-15, issued September 22, 1986, provided information related to the deadlines for compliance with 10 CFR 50.49 and possible civil penalties applicable to licensees who were not in compliance with the rule as of the November 30, 1985 deadline. Upon review, the Commission found that the EQ Enforcement Policy promulgated in Generic Letter 86-15, could result in imposition of civil penalties that did not properly reflect the safety significance of EQ violations with respect to civil penalties imposed in the past. In the interest of continuing a tough but fair enforcement policy, the Commission determined that the EQ Enforcement Policy should be revised. The purpose of this letter is to provide a modification to the NRC's enforcement policy, as approved by the Commission, for environmental qualification (EQ) violations. This letter replaces the guidance provided in Generic Letters 85-15 and 86-15.

Modified EQ Enforcement Policy

The details of the modified EQ enforcement policy are provided in the enclosure. Generally, the changes made to the policy are to: (1) aggregate significant EQ violations together, rather than consider each separate item of unqualified electrical equipment, for assessment of a civil penalty, (2) assess a base civil penalty according to the number of systems or components which are affected by the unqualified equipment in a graded approach by assignment of the aggregate EQ problem into one of three categories, (3) establish a maximum EQ civil penalty of \$750,000 for most cases, (4) maintain a minimum civil penalty of \$50,000 for a significant EQ violation in most cases, and (5) consider mitigation or escalation of the base civil penalty based on the factors of identification and reporting, best efforts to complete EQ within the deadline, corrective actions, and duration of the violation.

This modified policy should not be interpreted as a lessening of the NRC's intention to assure that all plants comply with EQ requirements. The modified policy is intended to give a significant civil penalty to those licensees with significant EQ violations. The NRC's view is that the modified policy more closely reflects the relative safety importance of EQ violations with other enforcement issues.

 $\frac{\text{TD}+\text{R}-5}{\text{INFO}}$ When a potential deficiency has been identified by the NRC or licensee in the TNFO environmental qualification of equipment (i.e., a licensee does not have an LTR8804080088

Generic Letter 88-07

April 7, 1988

adequate basis to establish qualification), the licensee is expected to make a prompt determination of operability (i.e., the system or component is capable of performing its intended design function), take immediate steps to establish a plan with a reasonable schedule to correct the deficiency, and have written justification for continued operation, which will be available for NRC review.

The licensee may be able to make a finding of operability using analysis and partial test data to provide reasonable assurance that the equipment will perform its safety function when called upon. In this connection, it must also be shown that subsequent failure of the equipment, if likely under accident conditions, will not result in significant degradation of any safety function or provide misleading information to the operator.

The following actions are to be taken if a licensee is unable to demonstrate equipment operability:

- a. For inoperable equipment which is in a system covered by plant technical specifications, the licensee shall follow the appropriate action statements. This could require the plant to shut down or remain shut down.
- b. For inoperable equipment not covered by the plant technical specifications, the licensee may continue reactor operation:
 - 1. If the safety function can be accomplished by other designated equipment that is qualified, or
 - 2. If limited administrative controls can be used to ensure the safety function is performed.

The licensee must also evaluate whether the findings are reportable under 10 CFR 50.72 and 50.73, 10 CFR Part 21, the Technical Specifications or any other pertinent reporting requirements, including 10 CFR 50.9(b), particularly if equipment is determined to be inoperable.

This letter does not require any response and therefore does not need approval of the Office of Management and Budget. Comments on burden and duplication may be directed to the Office of Management and Budget, Reports Management Room 3208, New Executive Office Building, Washington, DC 20503. Should you have questions on this letter, the staff contact is Howard Wong, Office of Enforcement. He can be reach on (301) 492-3281.

Frank J. Maraglia

Associate Director for Projects Office of Nuclear Reactor Regulation

Enclosure: As stated

ENCLOSURE

MODIFIED ENFORCEMENT POLICY FOR EQ REQUIREMENTS

This enclosure provides the details of the modified enforcement policy for EQ requirements for those licensees who were not in compliance with 10 CFR 50.49 as of the November 30, 1985 deadline.

I. Scope of the Enforcement Policy for EQ Requirements

5

If violations of the EQ rule identified at plants operating after November 30, 1985 existed before the deadline and the licensee "clearly knew or should have known" of the lack of proper environmental qualification, then enforcement action may be taken as described in Sections III and IV. If the licensee does not meet the "clearly knew or should have known" test, no enforcement action will be taken.

This enforcement policy applies to violations of the EQ rule identified after November 30, 1985 which relate back to action or lack of action before the deadline. Violations which occurred after November 30, 1985 (either as a result of plant modifications or because the plant was licensed after November 30, 1985) will be considered for enforcement action under the normal Enforcement Policy of 10 CFR Part 2, Appendix C. In addition, EQ violations which are identified after the NRC's last first-round inspection, 1/ approximately mid-1988, will also be considered under the normal Enforcement Policy.

II. Application of the "Clearly Knew, or Should Have Known" Test

Licensees who "clearly knew" they had equipment for which qualification could not be established may have committed a deliberate violation of NRC requirements. This situation will be evaluated on a case-by-case basis.

The NRC will examine the circumstances in each case to determine whether the licensee "clearly should have known" that its equipment was not qualified. The factors the NRC will examine include:

- 1. Did the licensee have vendor-supplied documentation that demonstrated that the equipment was qualified?
- 2. Did the licensee perform adequate receiving and/or field verification inspection to determine that the configuration of the installed equipment matched the configuration of the equipment that was qualified by the vendor?
- 3. Did the licensee have prior notice that equipment qualification deficiencies might exist?
- 4. Did other licensees identify similar problems and correct them before the deadline?

^{1/} First-round inspections are special team inspections to review licensees' compliance with 10 CFR 50.49.

In assessing whether the licensee clearly should have known of a deficiency, the information provided to the licensees by the NRC and the industry on specific deficiencies will be taken into consideration. This information, and the timeliness of it being provided to licensees prior to the EQ deadline are relevant factors. If one licensee determined that a specific EQ deficiency existed, it would not be assumed that all licensees should have also come to the same conclusion unless information about the specific deficiency had been widely disseminated within the industry or by the NRC. The staff will carefully consider these criteria when evaluating whether a licensee clearly should have known of a deficiency prior to the deadline.

III. EQ Violations not Sufficiently Significant to Merit a Civil Penalty Under the Modified Policy

Any failure to adequately list and demonstrate qualification of equipment required by 10 CFR 50.49 may constitute a violation of the rule. This does not require, however, that all violations of the rule be considered for escalated enforcement or be assessed a civil penalty. For example, if the qualification file presented to the inspector during an inspection did not demonstrate or support qualification of equipment, the equipment would be considered unqualified 2/ and 10 CFR 50.49 requirements would be violated. However, although not in the qualification file, if sufficient data exists or is developed during the inspection to demonstrate qualification of the equipment or, based on other information available to the inspector, the specific equipment is qualifiable for the application in question, the qualification deficiency is not considered sufficiently significant for assessment of civil penalties. These violations would be considered to be Severity Level IV or Severity Level V violations based on a violation of 10 CFR 50.49 requirements at the time of the inspection.

Programmatic violations or problems that are identified as a result of the EQ inspections that involve several EQ violations which themselves would not be considered sufficiently significant to merit a civil penalty under the modified EQ enforcement policy nonetheless may be aggregated and evaluated for escalated enforcement action (generally Severity Level III) for the failure to satisfy applicable requirements of 10 CFR 50.49 and/or 10 CFR Part 50, Appendix B. The civil penalties for these violations would be assessed under the normal Enforcement Policy of 10 CFR Part 2, Appendix C (Supplement I).

IV. Basis for Determining Civil Penalties

A. Base Civil Penalty

Significant EQ violations, for which the licensee clearly should have known that they had equipment for which qualification had not been established,

^{2/} For purposes of enforcement, "unqualified equipment" means equipment for which there is not adequate documentation to establish that this equipment will perform its intended functions in the relevant environment.

are to be considered together, in the aggregate, and the base civil penalty assessed in a graded approach based on the number of systems or components affected. $\underline{3}/$

The base civil penalty would be determined as described below.

	EQ Violation Category	Base Civil Penalty	
A.	Extensive; EQ violations affecting many systems and many components.	\$300,000	
Β.	Moderate; EQ violations affecting some systems and some components.	\$150,000	
c.	Isolated; EQ violations affecting a limited number of systems and components.	\$ 75,000	

The three EQ violation categories reflect the overall pervasiveness and the general safety significance of significant EQ violations. The NRC considers violations of EQ requirements to be safety significant because the electrical equipment required to be qualified were those which have importance to safety. The violation categories do not include those EQ violations which have been determined to be not sufficiently significant standing alone to be considered for escalated enforcement and which will be normally considered as Severity Level IV or V violations, as described in Section III. As stated in Section III, however, programmatic problems may be the subject of escalated enforcement action under the NRC's normal Enforcement Policy.

The significance of the EQ violations is considered when the NRC evaluates the number of systems affected by the EQ violations and determines the EQ violation category. The NRC will assume, for escalated enforcement cases, that the unqualified equipment could affect operability of the associated system. The NRC will not consider refinements on the operability arguments such as the actual time the equipment is required to be operable, administrative measures or controls available to ensure the safety function is accomplished, the degree to which the operability of a system is affected, or, that through additional analyses or testing, the equipment may be demonstrated to be qualified or qualifiable. This assumption is made for enforcement purposes in order to reduce the resources anticipated to be spent by licensees and the NRC to evaluate in detail whether system operability was in question.

^{3/} The EQ violation categories (A-C) will be used rather than the severity levels in the normal Enforcement Policy of 10 CFR Part 2. Appendix C. The base civil penalty for the violations will be applied consistent with the statutory limits on civil penalties under Section 234 of the Atomic Energy Act.

ł

Because the NRC is considering enforcement action rather than a justification for continued operation and the EQ deficiencies have been corrected in most instances, the NRC will make a conservative judgment as to the overall safety significance of the EQ violations based on the number of safety systems affected. This approach has the benefits of a relatively quick, though conservative, view on the safety consequences of unqualified equipment and will focus on the underlying cause of the EQ violations.

Cases involving deliberate violations or very serious EQ violations (more safety significant than considered in this modified enforcement policy such as widespread breakdowns or clearly inoperable systems) will be evaluated on a case-by-case basis and may be subject to more severe sanctions than those described in this policy.

B. <u>Mitigation/Escalation</u> Factors

Mitigation and escalation of the base civil penalty determined in Section IV.A will be considered in the determination of the civil penalty amount. The NRC will consider the EQ violations in aggregate, not based on individual violations. Adjustment of the base civil penalty will be considered as described below:

	<u>Mitigation/Escalation Factors</u>	Maximum Mitigation Escalation Amount base civil penalty	Maximum Mitigation/ Escalation Amount (from base civil penalty)	
1.	Identification and prompt reporting, if of the EQ violations (including opportu identify and correct the deficiencies).	required, ±5 ities to	± 50%	
2.	Best efforts to complete EQ within the o	leadline. ± 5	0%	
3.	Corrective actions to result in full con (including the time taken to make an ope qualification determination, the quality supporting analysis, and the nature and the licensee's efforts to come into comp	pliance ± 5 rability or of any extent of liance).	0%	
4.	Duration of violation which is significa 100 days.	ntly below - 5	0%	
T				

In order to be fair and equitable to those licensees who took appropriate actions prior to November 30, 1985 or shut down prior to this date to be in compliance, civil penalties generally should not be less than \$50,000 to emphasize that a significant environmental qualification failure is unacceptable.

The NRC will, however, consider full mitigation (no civil penalty) for those EQ violations which satisfy all of the five following criteria: (1) violations which are isolated and affect a limited number of systems and components, (2) violations which are identified by the licensee, (3) violations which are promptly reported to the NRC, if required, (4) violations which are corrected and actions taken will result in full compliance within a reasonable time, and (5) violations for which the licensee has demonstrated best efforts to complete EQ within the deadline.

The intent of full mitigation of the civil penalty for EQ violations which meet all five criteria is to increase the incentive for selfidentification of EQ deficiencies which might not otherwise be found by NRC. The NRC will generally issue only a Notice of Violation for violations which meet all these criteria.

If the licensee is able to convincingly demonstrate at the time of the inspection, or shortly thereafter, that an item is not required to be on the EQ list, then the item would not be considered for enforcement action. The NRC does not intend to consider for enforcement purposes the results of a licensee's after-the-fact testing for mitigation where the licensee clearly should have known that its documentation was not sufficient.

- 5 -

LOT OF RECENTLY ISSUED GENER

j

•				
Gene Lett	eric Ler No.	Subject	Date of Issuance	Issued To
GL	88-06	REMOVAL OF ORGANIZATION CHARTS FROM TECHNICAL SPECIFICATION ADMINISTRATIVE CONTROL REQUIREMENTS	03/22/88	ALL POWER REACTOR LICENSEES AND APPLICANTS
GL	88-05	BORIC ACID CORROSION OF CARBON STEEL REACTOR PRESSURE BOUNDARY COMPONENTS IN PWR PLANTS	03/17/88	ALL LICENSEES OF OPERATING PWRS AND HOLDERS OF CONSTRUCTION PERMITS FOR PWRS
GL	88-04	DISTRIBUTION OF GEMS IRRADIATED IN RESEARCH REACTORS	02/23/88	ALL NON-POWER REACTOR LICENSEES
GL	88-03	RESOLUTION OF GENERIC SAFETY ISSUE 93, "STEAM BINDING OF AUXILIARY FEEDWATER PUMPS"	02/17/88	ALL LICENSEES, APPLICANTS FOR OPERATING LICENSES, AND HOLDERS OF CONSTRUCTION PERMITS FOR PRESSURIZED WATER REACTORS
GL	88-02	"INTEGRATED SEFETY ASSESSMENT PROGRAM II (ISAP II)"	01/20/88	ALL POWER REACTOR LICENSEES
GL	88-01	"NRC POSITION ON IGSCC IN BWR AUSTENITIC STAINLESS STEEL PIPING"	01/25/88	ALL LICENSEES OF OPERATING BOILING WATER REACTORS AND HOLDERS OF CONSTRUCTION PERMITS FOR BWRS
GL	87-16	NUREG-1262, "ANSWERS TO QUESTIONS AT PUBLIC MEETINGS RE IMPLEMENTATION OF 10 CFR55 ON OPERATORS LICENSES	11/12/87	ALL POWER AND NONPOWER REACTOR LICENSEES AND APPLICANTS FOR LICENSES
GL	87-15	POLICY STATEMENT ON DEFERRED PLANTS	11/04/87	ALL HOLDERS OF CONSTRUCTION PERMITS FOR A NUCLEAR POWER PLANT
GL	87-14	REQUEST FOR OPERATOR LICENSE SCHEDULES	08/04/87	ALL POWER REACTOR LICENSEES

April 7. 1988

× ,

DISTRIBUTION: Central Files PDR Murley/Sniezek FJMiraglia TMartin JLieberman HWong DCrutchfield GHo lahan

• • .

8804080088

5/120 SB/4

HJW 0E

HWong 3/35 /88

HJW D:OE fr JLieberman 3/30/88

NRR NRR U GHo lahan 340 /88 DCrutchfield 3/ /88

