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NUCLEAR REGULATORY COMMISSION
10 CFR Parts 19 and 20
RIN 3150-AE80-1

Radiation Protection Requirements; Amended Definitions and Criteria

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) proposes to amend its regulations concerning radiation protection requirements. The proposed rule would: (1) delete the definition of "Controlled area" to make it clear that any area to which access is restricted for the purpose of radiological protection is a restricted area as defined in the regulation, (2) revise the definition of "Occupational dose" to delete reference to the "Restricted area," (3) revise the definition of unrestricted area to be consistent with the deletion of controlled area, (4) revise the provision in 10 CFR Part 19 entitled "Instruction to Workers," so that radiation protection training will be provided to all persons with the potential to be occupationally exposed and (5) restore a provision to 10 CFR Part 20 to provide that whenever licensees are required to report exposures of individual members of the public to the NRC, then those individuals are to receive copies of the report.

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DATE: Comment period expires (60 days following publication in the Federal Register). Comments received after this date will be considered if it is practical to do so, but the Commission is able to assure consideration only for comments received on or before this date.

ADDRESSES: Mail written comments to: Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Service Branch.

Deliver comments to: 11555 Rockville Pike, Rockville, Maryland between 7:45 am and 4:15 pm Federal workdays.

Copies of the regulatory analysis, the environmental assessment and finding of no significant impact, the supporting statement submitted to OMB, and comments received may be examined at: the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC.

FOR FURTHER INFORMATION CONTACT: Alan K. Roecklein, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 492-3740.

SUPPLEMENTARY INFORMATION:

Background

On May 21, 1991, (56 FR 23360) the NRC amended 10 CFR Part 20 to add its revised "Standards for Protection Against Radiation (10 CFR 20.1001 - 20.2402). Compliance became mandatory for all licensees on

January 1, 1994. Extensive discussion regarding interpretation and implementation of the new rules has ensued both within the NRC and Agreement State staffs and with licensees and other interested parties.

The revised standards include a definition for the term "Controlled area." The term is defined to be an area outside of a restricted area, but inside the site boundary access to which can be limited for any reason (10 CFR 20.1003). The term "Restricted area" was retained in the revised standards from the original regulation, 10 CFR Part 20, and is defined as an area, "access to which is limited by the licensees for the purpose of protecting individuals against undue risks from exposure to radiation or radioactive materials . . . (10 CFR 20.1003)." Neither the revised standards themselves, nor the supplemental information provide a basis for deciding whether to designate a given area as a "Restricted area" or a "Controlled area." In discussions with licensees and Agreement States, the absence of such a clear delineation appears to be the cause of considerable uncertainty among a number of licensees regarding how to implement the revised standards in this regard. The NRC believes that this situation can be alleviated by eliminating the term "Controlled area" from the regulations. This change has the effect of returning the regulation to the former situation in which areas are either restricted or unrestricted for purposes of radiation protection. As has always been the case, licensees continue to have the option of controlling access to areas for reasons other than radiation protection.

The definition of "Unrestricted area" in the revised standard acknowledges the existence of controlled areas and currently is defined as an area "access to which is neither limited nor controlled by the licensee"

(10 CFR Part 20.1003). Deletion of the term "Controlled area" permits return to the former situation in which areas are either restricted or unrestricted for radiation protection purposes, and the Commission now proposes to revise the definition of "Unrestricted area" to make this clear.

Under this proposal, licensees would continue to have the option to control access for reasons other than radiation protection. As before, the definitions of "restricted area" and of "unrestricted area" do not preclude the existence of areas in which access is limited for purposes other than protecting individuals against undue risks from exposure to radiation and/or radioactive materials.

"Occupational dose" is defined currently in the revised standards "as the dose received by an individual in a restricted area or in the course of employment in which the individual's assigned duties involve exposure to radiation and/or to radioactive materials" (10 CFR Part 20.1003) Through meetings with licensees to discuss the revised standards, the Commission has become aware that this definition can be interpreted to allow individuals who are members of the public to receive an "occupational dose" and exceed public dose limits if they enter restricted areas. This was not the intention of the Commission in promulgating the revised standards. A fundamental principle present in the regulations is that a member of the public is subject to the limits for a member of the public (§ 20.1301 (a)(1)), irrespective of that individual's location. The Commission is separately considering revisions to Parts 20 and 35, whereby licensees who have been administered radioactive materials to patients and released them in accordance with § 35.75 would be exempt from the provisions of § 20.1301 (a)(1) with regard to the radioactive material in the released

patient. Licensees must be able to ensure that a member of the public, if present in a restricted area, as well as any other area, will not exceed an exposure of 100 mrem/year. The suggestion that permission to expose a member of the public to a dose in excess of 100 mrem in a year, is created by that individual's location in a restricted area, can be removed by a simple modification to the definition of occupational dose, specifically by eliminating reference to dose received in a restricted area. In addition, "radiation and/or radioactive material" should replace "radiation and radioactive material" to correct a technical error in the text of the rule. With these changes, it would become clear that occupational dose is dose received as a result of an individual's employment in which assigned duties involve exposure to radiation and/or radioactive material. These changes would also make it clear that the dose received by a member of the public cannot be permitted to exceed the public dose limit even if the individual is receiving a portion of that dose while in a restricted area. The remainder of the definition of occupational dose would not be modified by this action, and maintains the description of both what is included and what is excluded in occupational dose for purposes of clarity.

The regulation entitled "Instruction to Workers," 10 CFR 19.12, currently requires that all individuals working in or frequenting any portion of a restricted area be instructed in the health protection problems associated with exposure to radiation and in radiation protection procedures needed to minimize exposure. Under this provision, if a worker never enters a restricted area, he or she would require no radiation protection training. On the other hand, members of the public, such as delivery persons who might occasionally enter a restricted area, would be required to be trained even

though the nature of their activities would perhaps not warrant such instruction. The proposed change to § 19.12 would make it clear that anyone in the course of their employment in which the individual's assigned duties involve the potential for exposure to radiation and/or radioactive material would have to be provided appropriate radiation protection training.

Concern about training requirements has been expressed for certain categories of workers and members of the public illustrated by the following cases: Case (1) involves a member of the public who is potentially exposed to some radiation while visiting a facility or making deliveries, and, Case (2), a maintenance worker or contractor who is exposed to radiation while performing repairs or cleaning. In order to decide if training is required, and what type of training is appropriate, certain provisions of the rules must be considered.

First, after January 1, 1994, a member of the public cannot be permitted to receive more than 100 mrem in a year unless specifically approved by the Commission (10 CFR 20.1301).¹ Second, training commensurate with the potential radiological health protection problems present would be required by the proposed 10 CFR 19.12 only for individuals whose assigned duties involve a potential for exposure to radiation and/or radioactive materials. In the first case above, the individual's activities, i.e., visiting a facility or making deliveries, were not assigned by the licensee or a licensee contractor. Under these conditions, the individual is a member of the public, and the

¹As discussed above, the Commission is separately considering revisions to Parts 20 and 35 to address cases whereby licensees have treated patients with radioactive material and released them under the provisions of § 35.75, and thus would not fall under the provision of § 20.1301 (a)(1) with regard to the radioactive material in the released patient.

licensee must ensure that exposures are less than 100 mrem in a year, and further must be as low as is reasonably achievable (ALARA). Doses to these individuals should be controlled by other measures that would be included in an ALARA program, such as shielding, escorting, removing radioactive sources during visits, and controlling stay-times. Therefore, the Commission believes training is not required. However, nothing in the rules prevents providing training to any individuals.

In the second case, the individual's activities, i.e., performing repairs or cleaning, are performed during the course of employment with the licensee or a contractor to the licensee and the individuals' assigned duties do involve the potential for exposure to radiation. Although the individual may not enter a restricted area and, whether this worker's dose exceeds 100 mrem in a year or not, if the worker has the potential to receive some occupational exposure, training "commensurate with potential radiological health protection problems present in the workplace" is required to ensure informed consent and control of exposure. This training does not have to be extensive. The Commission believes that doses received by individual workers at a rate greater than the 1mSv (100 mrem) in a year public dose limit constitute a level of risk which requires training at least to a level which provides information on the risks of exposure and methods for reducing exposure in keeping with the ALARA principle.

Prior to the promulgation of the revised standards, paragraph 20.409(b) of Part 20 provided that whenever a licensee is required to report to the Commission any exposure of an identified individual worker or member of the public to radiation and/or radioactive material, the licensee must also notify

that individual.² Although it was the intent of the Commission that this provision remain in 10 CFR Part 20, the requirement was inadvertently omitted from the revised standards. Accordingly, Section 20.2205 is added to clearly restore to 10 CFR Part 20 the intention that individual workers and individual members of the public are to be notified of exposures in excess of the dose limits that would require notifying the NRC. Under Section 20.2205, the licensee's obligation to notify an individual will be triggered if (and only if) the licensee's required report to NRC identifies that individual by name as having received an exposure to radiation and/or to radioactive material. The licensee's obligation to identify individuals in a required report to the NRC is as provided for in 10 CFR 20.2203.

Agreement States

The proposed amendments would apply to all NRC licensees and Agreement States (Definitions in 10 CFR Part 20 are Division I matters and are thus matters of compatibility). The proposed changes, with the exception of the addition of Section 20.2205 and the revision of the definition of unrestricted area, were discussed in June 1993 with Agreement State representatives and the changes discussed were strongly supported. Agreement States have the opportunity to comment further on all of the proposed changes during the public comment period. The Agreement States cannot be expected to modify their regulations before the January 1, 1994, date. Some States will need as much as 3 years to conform to the changes. In the interim, States may wish to

² See also 10 CFR 19.13(d) (When a licensee is required to report to the Commission any exposure of an individual to radiation or radioactive material, the licensee must also provide the individual a report on their exposure data.)

consider alternative methods to address the issues presented in this rulemaking.

A draft of the proposed amendments, with the exception of the addition of Section 20.2205 and the revision of the definition of unrestricted area, was provided to the Agreement States prior to submitting the amendments for publication in the Federal Register. Several States submitted comments. One State suggested limiting public doses to "licensed" sources of radiation while another observed that keeping this provision general permitted the States to control exposure from Naturally Occurring and Accelerator Produced Radioactive Material (NARM) as well as byproduct material. The proposed rule is general and does not specify licensed sources. This approach is consistent with the rule, as expressed in Section 20.1001 to control doses from all sources of radiation that are under the control of the licensee.

Another State provided a revised definition of "Member of the Public" which would not rely on the definition of "Occupational dose" and would make clear that workers exposed to NARM are not members of the public. The intent here was to minimize the change to the definitions and still accomplish the needed clarifications of these issues. For that reason and because "Occupational dose" is defined as from "licensed or unlicensed" sources, this change is not made in the proposed rule.

Two States argued that the draft language restricting the training requirements in 10 CFR 19.12 to individuals involved "in licensed activities" and "in the licensee's facility" was too restrictive, and might prevent workers such as housekeeping staff and security staff from receiving minimal, but needed training. The language of the training requirement is more inclusive in this proposed rule.

One State proposed retaining in Section 20.2104(a) a requirement to determine prior occupational dose if an individual enters the restricted area. The NRC staff believes that retaining only the words "is likely to receive, in a year, an occupational dose requiring monitoring," is sufficient to trigger a determination of prior dose. The State also suggested wording which would make licensees responsible for accounting for occupational exposure from nonlicensed activities. This is consistent with the Commission's position and the draft is revised accordingly.

Description

The provision in 10 CFR Part 20 for a "Controlled area," its definition and its use in several other sections of Part 20 would be deleted. Licensees would continue to have the option to control access to areas for reasons other than radiation protection.

The proposed rulemaking would revise the definition of "Occupational dose" to delete reference to the "Restricted area" so that the occupational dose limit and its associated radiation protection provisions, such as training and individual monitoring requirements, would apply to an individual who in the course of employment has assigned duties involving exposure to radiation and/or to radioactive material. This change would also indicate that public dose limits cannot be exceeded for members of the public even if they enter a restricted area.

The definition of "Unrestricted area" would be revised to make it clear that for the purposes of radiation protection areas, are either restricted or

unrestricted and that access to unrestricted areas can be controlled for reasons other than radiation protection.

"Instructions to Workers," 10 CFR 19.12, would be revised to make clear that training commensurate with the hazards present must be provided to all individuals who have the potential to be occupationally exposed rather than just to individuals working in or frequenting any portion of a restricted area.

"Reports to individuals of exceeding dose limits," 10 CFR 20.2205, is added to restore to Part 20 the Commission's intent that any identified individual, including members of the public, who receives an exposure in excess of the dose limits for which a report to the NRC is required, will receive notification of that exposure from the licensee.

Impact

The Commission believes that these proposed changes will have some, albeit relatively minor, impacts on licensees. The impacts associated with each of the changes are outlined below.

For the deletion of the definition of controlled area, the Commission believes that there will be little impact on most power reactor licensees. Although some confusion has surfaced associated with the intent of the terms "controlled area" and "occupational dose," these definitions have been discussed extensively with and by industry representatives, and the Commission believes that the proposed rule generally reflects current and planned practices of many reactor licensees. Licensees can continue to designate

areas as controlled areas for purposes other than radiological protection, irrespective of whether the term appears in the rule or not.

Some licensees have already implemented the revised standards, and procedures have been written which would require changes as a result of this proposed rulemaking if these procedures have employed the concept of controlling areas for radiological protection.

For those reactor licensees who have already formally implemented the revised standards or who have a need for the additional flexibility afforded by the use of the concept of controlled area for purposes of radiological protection, the provisions for exemptions from the NRC's regulations provides an avenue of relief. The NRC currently believes that the elimination of the concept of "Controlled area" will have such a small impact on most power reactor licensees that it does not constitute a backfit as envisioned by 10 CFR 50.109. The action removes flexibility but does not directly impose new procedures. However, the NRC welcomes comments on whether this action does in fact constitute a backfit, the degree of burden imposed by the action, particularly for licensees who have already implemented the revised standards, and on whether in the limited matter of "Controlled area," provisions for grandfathering should be provided in the final rule to avoid such burdens.

Revising the definition of "Unrestricted area" further makes clear the NRC's intent that for purposes of radiation protection, areas are either restricted or unrestricted. Some minor modifications to procedures and training may be necessitated by this change.

For the change involving the term occupational exposure, the Commission believes that some minor editorial modifications of procedures and training will be necessary. Occupational exposure was previously defined to include

both presence in a restricted area and activities involving exposure to radiation and/or radioactive materials. Elimination of the reference to restricted areas will not change the scope of applicability of the term occupational dose for most licensees' employees. Furthermore, this change as it relates to doses to members of the public, makes it clear that doses to members of the public must remain within the limits for members of the public, even if they are present within a restricted area. This distinction may result in some minor corrections to procedures and administrative control levels. However, it should be noted that licensees have controlled and continue to control the exposure of these individuals to small fractions of the public dose limit. Thus, there should be no significant change necessary in licensee activities.

The conforming change to 10 CFR Part 19 is minor and will affect only a small number of licensees and will have a negligible impact. For the modification of the training requirements to match the definition of occupational exposure, the Commission believes that licensees will need to make relatively minor modifications to training procedures to reflect the new definition. Training remains "commensurate with potential radiological health protection problems" and, thus, the scope of the training activities is not anticipated to require modification. The Commission also believes that any small incremental increase in burden of additional occupationally exposed individuals requiring training will be offset by the reduction in burden inherent in the fact that members of the public entering a restricted area will no longer be required to be trained in accordance with the provisions of 10 CFR Part 19.

The addition to 10 CFR Part 20 of a requirement to notify individual workers and individual members of the public of exposures in excess of the dose limits is not considered to impose any additional burden on licensees.³ The addition would make clear in 10 CFR Part 20, where such a requirement would normally be expected, that when existing reporting requirements would result in reporting exposure information on an identified individual member of the public to NRC, then the identified individual would receive a report on his or her exposure.

The impact of these proposed rule changes on materials licensees is considered to be minimal. The NRC believes that these changes will provide additional clarity when implementing the revised 10 CFR Part 20 and will not have an adverse impact on the health and safety of workers or the public. Removing the implied option to establish controlled areas for radiation protection purposes, and simplifying the definition and administration of occupational dose will require minimal changes in procedures and in some cases may even involve a net reduction in burden. Licensees continue to have the option to control access to areas for reasons other than radiological protection. Licensees who have already written procedures including provisions for controlled areas for radiation protection purposes would have the option to request exemptions. Materials licensees, particularly those who have already implemented the new regulations, are invited to comment on whether or not the proposed changes impose significant burden.

³ See also 10 CFR 19.13(d) (When a licensee is required to report to the Commission any exposure of an individual to radiation or radioactive material, the licensee must also provide the individual a report on their exposure data.)

Finding of No Significant Environmental Impact: Availability

The NRC has determined under the National Environmental Policy Act of 1969, as amended, and the Commission's regulations in Subpart A of 10 CFR Part 51, that 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 option of establishing access control over an area owned by a licensee for reasons of security, for example, exists whether or not the term "Controlled area" is specifically defined in 10 CFR Part 20. The provision for controlled areas in the rule is not a requirement. Deleting the term "Controlled area" from the rule is not expected to result in a significant change in the number of areas to be controlled or in an increase in exposure to any member of the public. Public access to licensee owned facilities and land is expected to remain unchanged as a result of this amendment. No other environmental impact or benefit is associated with the "Controlled area" provision.

Changing the definition of "Occupational dose" to make it clear that individuals whose assigned duties involve exposure to radiation and radioactivity are subject to radiation protection procedures associated with occupational exposure and that members of the public cannot be permitted to receive doses that exceed public dose limits just by entering a restricted area is considered a benefit with no environmental impact. This change would have no effect on the type or quantity of material released into the environment and, if anything, would make it less likely for members of the public to be exposed to more than public dose limits.

Revising the definition of "Unrestricted area" to make it clear that for purposes of radiation protection, areas are either restricted or unrestricted, has no perceived environmental impact.

Amending the radiation protection training requirements to clarify that they apply to individuals who in the course of employment are potentially exposed to radiation and/or to radioactive material, regardless of whether they may or may not be within a restricted area, will result in no impact on the environment.

Adding Section 20.2205 to Part 20, which would clearly restore the Commission's policy that individual workers and individual members of the public are notified, whenever NRC is notified, that they have been exposed to radiation or radioactive material in excess of the dose limits, will have no impact on the environment.

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, 2120 L Street, NW. (Lower Level), Washington, DC. Single copies of the environmental assessment and finding of no significant impact are available from Alan K. Roecklein, U.S. NRC, 5650 Nicholson Lane, Rockville, MD 20852, (301) 492-3740.

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 numbers 3150-0044, 3150-0014, 3150-0005, and 3150-0006.

Regulatory Analysis

The NRC has prepared a draft regulatory analysis of this proposed regulation. The analysis examines the costs and benefits of the alternatives considered by the NRC. The draft analysis is available for inspection in the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. Single copies of the draft analysis may be obtained from Alan K. Roecklein, U.S. NRC, 5650 Nicholson Lane, Rockville, MD 20852, (301) 492-3740.

The NRC requests public comment on the draft regulatory analysis. Comments on the draft analysis may be submitted to the NRC as indicated under the ADDRESSES heading.

Regulatory Flexibility Certification

Based upon the information available at this stage of the rulemaking proceeding and in accordance with the Regulatory Flexibility Act, 5 U.S.C. 605(b), the NRC certifies that, if promulgated, this rule will not have a significant economic impact upon a substantial number of small entities. The proposed amendments would apply to all NRC and Agreement State licensees. Because these amendments only clarify, restore, and conform existing requirements to the 1991 version of Part 20, they are considered to have no significant economic impact on any large or small entities.

However, the NRC is seeking comments and suggested modifications because of the widely differing conditions under which small licensees operate. Any small entity subject to this proposed regulation which determines that, because of its size, it is likely to bear a disproportionate adverse economic impact should notify the NRC of this in a comment that indicates --

(a) The licensee's size in terms of annual income or revenue, number of employees and, if the licensee is a treatment center, the number of beds and patients treated annually;

(b) How the proposed regulation would result in a significant economic burden upon the licensee as compared to that on a larger licensee;

(c) How the proposed regulations could be modified to take into account the licensee's differing needs or capabilities;

(d) The benefits that would be gained or the detriments that would be avoided by the licensee if the proposed regulation was modified as suggested by the commenter; and

(e) How the regulation, as modified, would still adequately protect the public health and safety.

Backfit Analysis

Because 10 CFR Parts 19 and 20 apply to all NRC licensees, any proposed changes to these parts must be evaluated to determine if these changes constitute backfitting for reactor licensees such that the provisions of 10 CFR 50.109, "Backfitting," apply. The following discussion addresses that evaluation.

The proposed rule consists of five changes: (1) deletion of the definition and use of the term "Controlled area," (2) deletion of the phrase "in a restricted area or" contained in the definition of occupational dose, (3) revising the definition of "Unrestricted area," (4) modification of the training requirement contained in 10 CFR 19.12, and (5) restoring a requirement that individuals members of the public be notified when they are identified in reports to NRC on exposures in excess of the limits.

The deletion of the definition of controlled area is a corrective change. The term was originally added with the 1991 revision of Part 20 to acknowledge the need for licensees to control access to areas for purposes other than radiation protection. The use of the term was not intended to be mandatory. Numerous questions from licensees regarding implementing Controlled areas have arisen. Since the staff believes that the use of a controlled area has no radiation protection function other than potential use in estimating the occupancy time for demonstrating compliance with the 100 mrem/year limit, it is being proposed that the term be deleted from Part 20.

For those reactor licensees who have already formally implemented the revised standards or who have a need for the additional flexibility afforded by the use of the concept of controlled area for purposes of radiological protection, the provisions for exemptions from the NRC's regulations provide an avenue of relief. The NRC currently believes that the elimination of the concept of "Controlled area" will have such a small impact on most power reactor licensees that it does not constitute a backfit as envisioned by 10 CFR 50.109. The action removes flexibility but does not directly impose new procedures. However, the NRC welcomes comments on whether this action

does in fact constitute a backfit, the degree of burden imposed by the action, particularly for licensees who have already implemented the revised 10 CFR 20, and on whether in the limited matter of "Controlled area" provisions for grandfathering should be provided in the final rule to avoid such burdens.

The deletion of the phrase "in a restricted area or," contained in the definition of occupational dose is to ensure that the Commission's intent to apply the dose limits of 10 CFR 20.1301 to members of the public regardless of their physical location, is properly implemented. Currently, only workers are subject to the higher occupational dose limits and just because a member of the public is permitted entry into a restricted area does not mean that he or she should be allowed to receive an occupational dose and exceed the public dose limit. For this reason, the reference to a restricted area is being removed from the definition of occupational dose.

Revising the definition of "Unrestricted area," would make the current staff position clear that for purposes of radiation protection, areas are either restricted or unrestricted. This change is consistent with the former 10 CFR Part 20 and conforms to removing "Controlled area" from the rule.

The change to 10 CFR Part 19.12 will be consistent with the proposed revised definition of occupational exposure. Since occupational dose is to be based upon the individual's activities involving radiation and/or radioactive materials, rather than the location of the work (e.g., restricted area), a conforming change in Part 19 is needed to ensure that workers who receive an occupational dose are appropriately trained regardless of the physical location where the work is performed. This is also needed so that members of the public, such as delivery persons, who occasionally enter a restricted area will not be required to receive occupational training merely because they

entered a restricted area when their potential exposures do not exceed the 1 msv (100 mrem) public dose limit and their activities, therefore, would not subject them to any significant risk.

The NRC staff believes that the impact of the change to 10 CFR Part 19.12 is negligible for 10 CFR Part 50 licensees, given that the expected numbers of additional occupationally exposed individuals requiring training is small relative to the number of workers already receiving training at these facilities. The NRC staff also believes that these licensees have been providing training to these individuals, even though not specifically required by the regulations.

The addition of 10 CFR 20.2205, "Reports to individuals of exceeding dose limits" is considered to be the restoration of a previous requirement. Paragraph 20.409(b) of Part 20 requires licensees to notify an individual worker or member of the public whenever a report to the NRC is required regarding an exposure of the identified individual. This requirement was inadvertently omitted from the revised standards. Although few incidents occur that involved exposure of a member of the public in excess of dose limits, restoring this provision to Part 20 will ensure that licensees are aware of their obligation to notify the individual if, and when, they are required to submit a report to NRC of an occurrence that identifies that individual as having received an exposure.

The Commission believes that these proposed changes to 10 CFR Part 20 will have some, albeit minor, impacts on reactor licensees. Licensees who have already implemented the revised standards, or who have written procedures to do so, will need to revise those procedures to reflect the proposed changes if promulgated. Benefits such as simplifying the use of restricted and

unrestricted area designation, making it clear that only workers can receive occupational dose, tying training requirements to the potential to receive occupational exposure and ensuring that overexposed individuals are notified, are considered by the Commission to far outweigh the impacts. However, these benefits are qualitative in nature, and are expressed in terms of reduced uncertainty in regulatory requirements, clarity of regulatory intent, and consistency of regulatory approach. Thus the NRC believes that the modifications proposed are not backfits. However, the NRC invites comments from affected licensees on whether these proposed changes impose significant burdens and whether or not the actions constitute a backfit.

List of Subjects

10 CFR Part 19

Criminal penalties, Environmental protection, Nuclear materials, Nuclear power plants and reactors, Occupational safety and health, Packaging and containers, Radiation protection, Reporting and recordkeeping requirements, Sex discrimination.

10 CFR Part 20

Byproduct material, Licensed material, Nuclear materials, Nuclear power plants and reactors, Occupational safety and health, Packaging and containers, Penalty, Radiation protection, Reporting and recordkeeping requirements, Source material, Special nuclear material, Waste treatment and disposal.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974,

as amended; and 5 U.S.C. 553; the NRC is proposing to adopt the following amend to 10 CFR Parts 19 and 20.

PART 19 -- NOTICES, INSTRUCTIONS AND REPORTS TO WORKERS:
INSPECTION AND INVESTIGATION

1. The authority citation for Part 19 continues to read as follows:

AUTHORITY: Secs. 53, 63, 81, 103, 104, 161, 186, 68 Stat. 930, 933, 935, 936, 937, 948, 955, as amended, secs. 234, 38 Stat. 444, as amended (42 U.S.C. 2073, 2093, 2111, 2133, 2134, 2201, 2236, 2282); secs. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841). Pub. L. 95-601, secs. 10, 92 Stat. 2951 (41 U.S.C. 5851).

2. Section 19.12 is revised to read as follows:

§ 19.12 Instructions to workers.

(a) All individuals who in the course of employment in which the individuals' assigned duties involve the potential for exposure to radiation and/or radioactive material shall be --

(1) Kept informed of the storage, transfer, or use of radiation and/or radioactive material;

(2) Instructed in the health protection problems associated with exposure to radiation and/or radioactive material, in precautions or procedures to minimize exposure, and in the purposes and functions of protective devices employed;

(3) Instructed in, and required to observe, to the extent within the workers control, the applicable provisions of Commission regulations and

licenses for the protection of personnel from exposures to radiation and/or radioactive material;

(4) Instructed of their responsibility to report promptly to the licensee any condition which may lead to or cause a violation of Commission regulations and licenses or unnecessary exposure to radiation and/or radioactive material;

(5) Instructed in the appropriate response to warnings made in the event of any unusual occurrence or malfunction that may involve exposure to radiation and/or radioactive material; and

(6) Advised as to the radiation exposure reports which workers may request pursuant to § 19.13.

(b) The extent of these instructions must be commensurate with potential radiological health protection problems present in the workplace.

PART 20 -- STANDARDS FOR PROTECTION AGAINST RADIATION

3. The authority citation for Part 20 continues to read as follows:

AUTHORITY: Secs. 53, 63, 65, 81, 103, 104, 161, 182, 186, 68 Stat. 930, 933, 935, 936, 937, 948, 953, 955, as amended, (42 U.S.C. 2073, 2093, 2095, 2111, 2133, 2134, 2201, 2232, 2236, 2282); sec. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Sec. 20.408 also issued under secs. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161).

* * * * *

4. In § 20.1003, delete the definition "Controlled area."

5. In § 20.1003, the definitions of "Member of the public," "Occupational dose," "Public dose," and "Unrestricted area" are revised to read as follows:

§ 20.1003 Definitions

* * * * *

Member of the public means any individual except when that individual is receiving an occupational dose.

* * * * *

Occupational dose means the dose received by an individual in the course of employment in which the individual's assigned duties involve exposure to radiation and/or to radioactive material from licensed and unlicensed sources of radiation, whether in the possession of the licensee or other person. Occupational dose does not include dose received from background radiation, as a patient from medical practices, from voluntary participation in medical research programs, or as a member of the public.

* * * * *

Public dose means the dose received by a member of the public from exposure to radiation and/or radioactive material released by a licensee, or to any other source of radiation under the control of a licensee. It does not include occupational dose or doses received from background radiation, as a patient from medical practices, or from voluntary participation in medical research programs.

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Unrestricted area means any area that is not a restricted area.

* * * * *

6. In § 20.1301 paragraph (b) is revised to read as follows:

§ 20.1301 Dose limits for individual members of the public.

* * * * *

(b) If the licensee permits members of the public to have access to restricted areas, the limits for members of the public continue to apply to those individuals.

* * * * *

7. In § 20.1302 paragraph (a) is revised to read as follows:

§ 20.1302 Compliance with dose limits for individual members of the public.

(a) The licensee shall make or cause to be made, as appropriate, surveys of radiation levels in unrestricted areas and radioactive materials in effluents released to unrestricted areas to demonstrate compliance with the dose limits for individual members of the public in § 20.1301.

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8. Section 20.1801 is revised to read as follows:

§ 20.1801 Security of stored material.

The licensee shall secure from unauthorized removal or access licensed materials that are stored in unrestricted areas.

9. Section 20.1802 is revised to read as follows:

§ 20.1802 Control of material not in storage.

The licensee shall control and maintain constant surveillance of licensed material that is in an unrestricted area and that is not in storage.

10. In § 20.2104 the introductory text of paragraph (a) is revised to read as follows:

§ 20.2104 Determination of prior occupational dose.

(a) For each individual who is likely to receive, in a year, an occupational dose requiring monitoring pursuant to § 20.1502 the licensee shall -

* * * * *

11. Section § 20.2205 is added as follows:

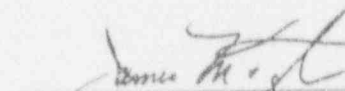
§ 20.2205 Reports to individuals of exceeding dose limits.

When a licensee is required, pursuant to the provisions of §§ 20.2203, 20.2204, or 20.2206, to report to the Commission any exposure of an identified individual worker or member of the public to radiation or radioactive material, the licensee shall also provide to the individual, a written report on his or her exposure data included therein. This report must be transmitted at a time no later than the transmittal to the Commission.

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Dated at Rockville, Maryland, this 19th day of January, 1994.

For the Nuclear Regulatory Commission.



James M. Taylor
Executive Director for Operations.