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**Possible Changes to  
10 CFR 19.13, "Notifications and Reports to Individuals,"  
Definition of Total Effective Dose Equivalent,  
Various Reporting and Labeling Requirements in  
10 CFR Part 20, "Standards for Protection Against Radiation,"  
and Related Changes in  
10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities."**

The Nuclear Regulatory Commission (NRC) staff has released the following draft rule language in response to guidance from the Commission dated August 2, 2001, that directed the staff to interact with the public early in the rulemaking process. The change under consideration would clarify or revise the regulations such that (1) licensees would not be required, unless a specific request was made by a worker, to provide an annual report to a worker of their radiation dose if a worker received less than 2 percent of the limits defined in Part 20 of Title 10 of the Code of Federal Regulations (10 CFR Part 20); (2) licensees for production and utilization facilities governed by 10 CFR Part 50 would not need to label containers in accordance with 10 CFR 20.1904, "Labeling containers," if the containers met conditions such as being clearly identifiable as containing radioactive materials, being accessible only to trained individuals, and being located in an area posted pursuant to 10 CFR 20.1902, "Posting requirements"; and (3) licensees would no longer need to attempt to obtain records of a worker's cumulative radiation dose unless the worker was to be involved in a planned special exposure. In addition, the staff is considering using this opportunity to propose a change to 10 CFR 20.1003, "Definitions," to clarify the definition of total effective dose equivalent (TEDE).

This draft rule language is preliminary and may be incomplete in one or more respects. This draft rule language is being released to inform stakeholders of the NRC staff's consideration of possible changes to 10 CFR Parts 19, 20, and 50, and to invite stakeholders to comment on the draft revisions. The NRC may post updates periodically on the rulemaking Web site that may be of interest to stakeholders.

Possible Change (1)

§19.13 Notifications and reports to individuals

- 19.13(b) Each licensee shall ~~advise each worker annually of the worker's~~ **make available to workers information regarding their** dose as shown in records maintained by the licensee pursuant to the provisions of §20.2106 of 10 CFR part 20. **The licensee shall advise each worker annually of the worker's annual dose if either the worker's cumulative dose in the previous year exceeds 2 percent of the dose limits in §20.1201(a) of 10 CFR part 20 or the worker makes a request for a report of their annual dose.**

The current requirement to report radiation dose to individuals on an annual basis is repeated in three separate regulations (i.e., 10 CFR 19.13(b), 19.13(d), and 20.2205). Prior to 1992, 10 CFR 19.13(b) required licensees to provide each worker annually the worker's occupational dose "[a]t the request of any worker." Thereafter, the Commission amended its regulations (58 FR 23360; May 21, 1991) to conform to 1987 Presidential guidance for Federal agencies on occupational radiation protection (52 FR 2822; January 27, 1987). The NRC staff is proposing to consolidate this requirement in a single revised 10 CFR 19.13(b). The NRC staff believes that the draft language for revised 10 CFR 19.13(b) comports

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with the intent of the Presidential guidance on occupational radiation protection because licensees would continue to be required to make available to all workers information from their dose records, as well as provide any worker with a copy of their annual dose report upon request. The requirements currently in 10 CFR 19.13(d) are very similar to the requirements in 10 CFR 20.2205, "Reports to individuals of exceeding dose limits," and therefore, the staff is proposing to remove 10 CFR 19.13(d). All requirements in 10 CFR 19.13(d) are captured by adding to 10 CFR 20.2205 a requirement for licensees to provide to individuals copies of reports sent to the NRC pursuant to 10 CFR 20.2202, "Notifications of incidents." The requirement currently in 10 CFR 20.2205 for providing individuals copies of reports sent to the NRC pursuant to 10 CFR 20.2206, "Reports of individual monitoring," is removed to reflect the proposed changes in 10 CFR 19.13(b). The following changes are under consideration for 10 CFR 19.13(d) and 20.2205:

§19.13(d) Notifications and reports to individuals.

Paragraph (d) is removed.

§20.2205 Reports to individuals ~~of exceeding dose limits.~~

When a **specific** licensee is required, pursuant to the provisions of §§ **20.2202**, 20.2203 or 20.2204 ~~, or 20.2206~~, to report to the Commission any exposure of an identified occupationally exposed individual, or an identified member of the public, to radiation or radioactive material, the licensee shall also provide ~~a copy of the report submitted to the Commission to~~ the individual **a 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.

When providing comments on the first change being considered, the NRC staff is particularly interested in the following:

- (1) Does the language being considered appropriately balance the intent of the Federal government's guidance and regulations related to occupational exposure in terms of avoiding burdensome requirements for doses that are insignificant while adequately providing individuals with information about their occupational exposures?
- (2) Has the staff suggested appropriate criteria for when licensees are required to provide a report to workers (i.e., is exceeds 2 percent of the dose limits in 10 CFR 20.1201(a) or the worker makes a request for a report of their dose a reasonable threshold)?
- (3) Would the change, if made based on the language being considered, result in cost savings to licensees? If so, please provide an estimate of the savings.
- (4) Should licensees be required to notify workers periodically of their right to request their dose report (e.g., when the worker is issued a personal dosimeter or annually)?
- (5) Does the possible consolidation of required reports to individuals into 10 CFR 20.2205 and the deletion of 10 CFR 19.13(d) clarify the regulations and would there be a significant cost associated with implementing this possible change?

Possible Change (2)

In 10 CFR 20.1904, "Labeling containers," the labeling requirements for containers of licensed material are specified. Several exemptions to those labeling requirements are defined in 10 CFR 20.1905. The staff is considering adding an exemption from 10 CFR 20.1904 to 10 CFR Part 50. This exemption would apply only to Part 50 (production and utilization) licensees. Alternatively, this exemption could be added to 10 CFR 20.1905 as a new item that would be applicable only to Part 50 licensees. The exemption, as it might be incorporated into 10 CFR Part 50, is as follows:

**50.xx Containers holding licensed material.**

**(a) Each holder of a construction permit or operating license for a nuclear power plant issued under this part or combined license for a nuclear power plant issued under Part 52 of this chapter, shall comply with either 10 CFR 20.1904 of this chapter or the requirements in (b) of this section.**

**(b) Each licensee shall comply with the following requirements in lieu of the labeling requirements in 10 CFR 20.1904 for containers holding licensed material that reside within an area of the plant posted pursuant to the requirements 10 CFR 20.1902.**

**(1) Containers are conspicuously marked (such as by providing a system of color coding, labeling, or tagging of containers) commensurate with the radiological hazard;**

**(2) Containers are accessible only to individuals who have sufficient instructions to minimize radiation exposure while handling, or working in the vicinity of, the containers; and**

**(3) Plant procedures ensure that containers are appropriately labeled, pursuant to 10 CFR 20.1904, before being removed from the posted area.**

When providing comments on the second change being considered, the NRC staff is particularly interested in the following:

- (1) Does the language being considered provide adequate controls for radioactive materials stored within facilities licensed under 10 CFR Part 50?
- (2) Would the change, if made based on the language being considered, result in cost savings to Part 50 licensees? If so, please provide an estimate of the savings.
- (3) Are there categories of materials licensees to which this exemption might be applied, where adequate controls for radioactive materials stored within these facilities could be provided by the conditions being considered for the exemption? If so, what would be the cost savings to these licensees?

Possible Change (3)

§20.2104 Determination of prior occupational dose.

The NRC staff is considering a change such that paragraph (a) would read as follows:

20.2104(a) **(1)** For each individual who is likely to receive in a year, an occupational dose

- requiring monitoring pursuant to § 20.1502, the licensee shall—
- ~~(1) Determine the occupational radiation dose received during the current year; and~~
  - ~~(2) Attempt to~~ **For any individual being authorized to receive a planned special exposure, the licensee shall obtain the records of cumulative occupational radiation dose.**

When providing comments on the third change being considered, the NRC staff is particularly interested in the following:

- (1) Would the change, if made based on the language being considered, ensure adequate protection of radiation workers?
- (2) Would the change, if made based on the language being considered, result in cost savings to licensees? If so, please provide an estimate of the savings.

#### Possible Change (4)

#### §20.1003 Definitions.

In 10 CFR 20.1003 and other regulations which contain a definition of TEDE (such as 10 CFR 50.2), the NRC staff is considering revising the definition of TEDE to read as follows:

*Total Effective Dose Equivalent* (TEDE) means the sum of the ~~deep-dose~~ **effective dose** equivalent (for external exposures) and the committed effective dose equivalent (for internal exposures). **When the external exposure is determined by measurement with an external personal monitoring device, the deep dose equivalent shall be used in place of the effective dose equivalent, unless the effective dose equivalent is determined by a dosimetry method approved by the NRC.**

When providing comments on the fourth change being considered, the NRC staff is particularly interested in the following:

- (1) Is the proposed definition of TEDE consistent with the technical basis of the current regulations in 10 CFR Part 20 (e.g., recommendations of the International Commission on Radiological Protections in its Publications 26 and 30)?
- (2) Does the language clarify the existing requirements as explained in Regulatory Issue Summary 2003-04, "Use of the Effective Dose Equivalent in Place of the Deep Dose Equivalent in Dose Assessments," dated February 13, 2003?
- (3) Should the rule address approvals by Agreement States of dosimetry methods for using effective dose equivalent when external exposure is determined by measurement? If so, how should approval by one jurisdiction be considered by other jurisdictions to ensure consistent results and to minimize state-by-state variations in approach for licensees operating in multiple jurisdictions?