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**Pedersen, Roger**

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**Sent:** Thursday, August 14, 2008 3:38 PM  
**To:** John White; Brian Bonser; George Kuzo; Steven Orth; Greg Werner  
**Cc:** Steven Garry; Elaine Keegan; Richard Conatser; Timothy Kobetz  
**Subject:** 08 NEI INFO FORUM.ppt  
**Attachments:** 08 NEI INFO FORUM.ppt

For Your Information. Attached are the slides that I intend to present at the NEI INFO FORUM next week. I only plan to talk about the final RUBI changes to 10 CFR Parts 19 & 20. I may briefly cover the collective dose summary (the "Hinson" memo) but I won't use any slides.

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United States Nuclear Regulatory Commission

*Protecting People and the Environment*

# **REMOVAL OF UNNECESSARY REGULATORY BURDEN**

BY

**ROGER PEDERSEN**

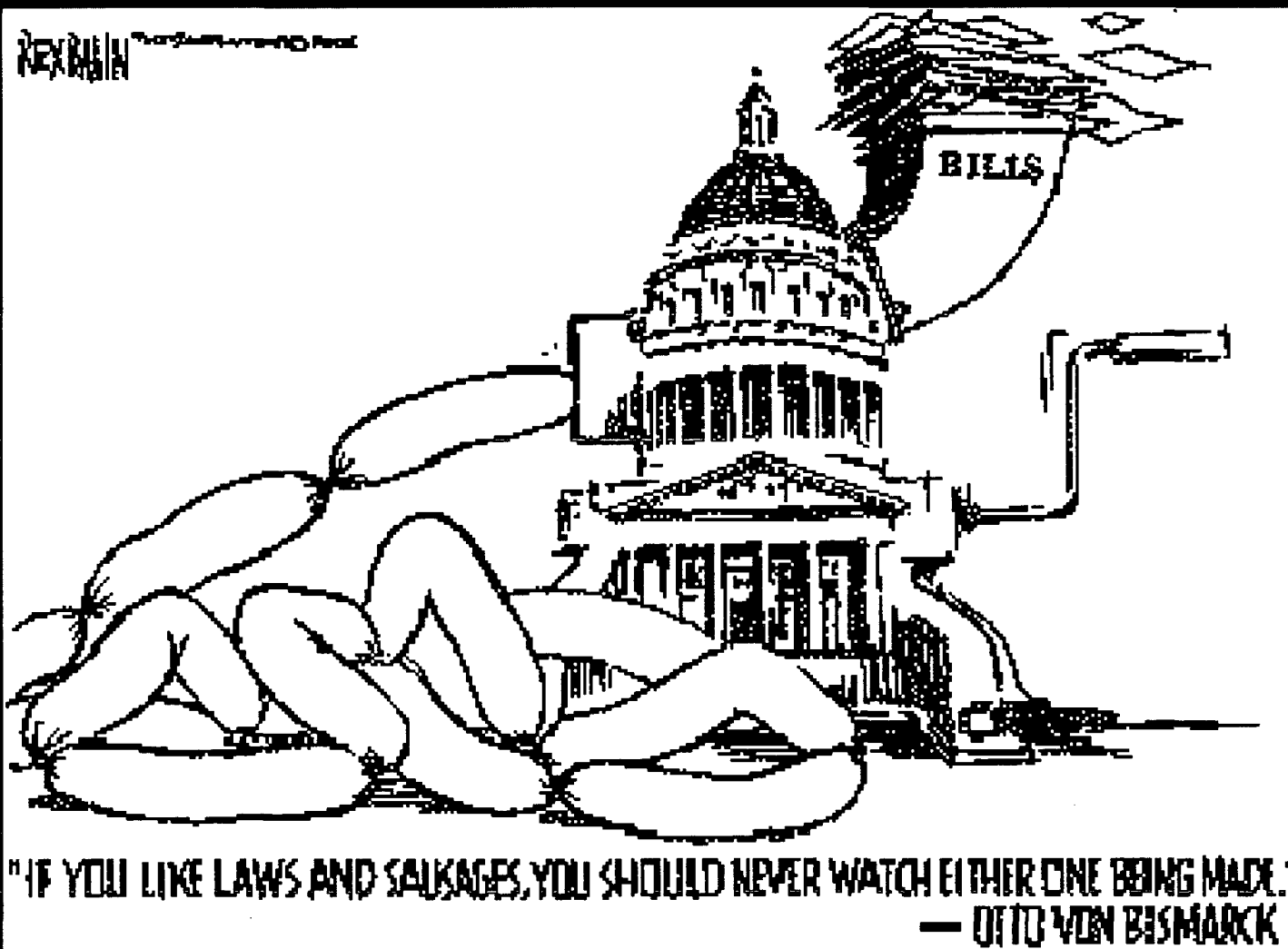
## **FOUR AREAS OF UNNECESSARY BURDEN**

- Definition of TEDE in 10CFR20.1003 and 10CFR50.2
- Reports to individuals in Parts 10CFR19.13 and 10CFR20.2205
- Determination of prior occupational dose in 10CFR20.2104
- Exemption to labeling containers in 10CFR20.1905



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## REVISIONS TO Parts 19, 20, & 50

- Early Public Comment April 29, 2004 (69 FR 23542)
- Final Rule Published Dec. 4, 2007 (72 FR 68058 )
- Effective Feb. 15, 2008 (72 FR 72233)

## TEDE

- *Total Effective Dose Equivalent* (TEDE) means the sum of the effective dose equivalent (for external exposures) and the committed effective dose equivalent (for internal exposures).
- 10CFR20.1201(c)

# TEDE DOSE LIMIT

## 10CFR20.1201

- 10CFR20.1201(c):

When the external exposure is determined by measurement with an external personal monitoring device, the deep-dose equivalent must be used in place of the effective dose equivalent, unless the effective dose equivalent is determined by a dosimetry method approved by the NRC. The assigned deep-dose equivalent must be for the part of the body receiving the highest exposure.

## EDE METHODS

- Approved methods are those methods described in Regulatory Information summaries RIS-2002-06, RIS-2003-04, RIS-2004-01.
- Or approved on a case-by-case basis.
  - HPS ANSI N 13.41.
- Future Reg. Guide?



- **20.1201(C) CONTINUES:**

The assigned shallow-dose equivalent must be the dose averaged over the contiguous 10 square centimeters of skin receiving the highest exposure. The deep-dose equivalent, lens-dose equivalent, and shallow-dose equivalent may be assessed from surveys or other radiation measurements for the purpose of demonstrating compliance with the occupational dose limits, if the individual monitoring device was not in the region of highest potential exposure, or the results of individual monitoring are unavailable.



NRC FORM 5 (1-2009) NS CNS PART 2D		<b>U.S. NUCLEAR REGULATORY COMMISSION</b>  <h2 style="margin: 0;">OCCUPATIONAL DOSE RECORD FOR A MONITORING PERIOD</h2>		EXPIRES: 11/08/2011  <small>Collected under key reference to comply with the mandatory collection record: 25 minutes. This information is used to ensure that doses to individual do not exceed regulatory limits. The information is required to be reported annually report individual occupational exposure to radiation to ensure that the exposure does not exceed regulatory limits. Direct concerns regarding health estimate to the Records and Compliance Branch, Division (T-5 P&amp;I), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail: info@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, MDCB-1022 (2152-0001), Office of Management and Budget, Washington, DC 20503. If a request is made to impose information collection does not sharing is currently with OMB control number, the NRC may not contact agency, and a person is not required to respond to, the information collection.</small>					
1. NAME (LAST, FIRST, MIDDLE INITIAL)		2. IDENTIFICATION NUMBER		3. ID TYPE		4. SEX <input type="checkbox"/> MALE <input type="checkbox"/> FEMALE		5. DATE OF BIRTH (MM/DD/YYYY)	
6. MONITORING PERIOD (MM/DD/YYYY - MM/DD/YYYY)		7. LICENSEE NAME		8. LICENSE NUMBER(S)		9A. <input type="checkbox"/> RECORD <input type="checkbox"/> ESTIMATE		9B. <input type="checkbox"/> ROUTINE <input type="checkbox"/> PRE	
INTAKES				DOSES (in rem)					
10A. RADIONUCLIDE	10B. CLASS	10C. MODE	10D. INTAKE IN µCi						
				DEEP DOSE EQUIVALENT (DDE) 11.					
				LENS (EYE) DOSE EQUIVALENT (LDE) 12.					
				SHALLOW DOSE EQUIVALENT, WHOLE BODY (SDE,WB) 13.					
				SHALLOW DOSE EQUIVALENT, MAX EXTREMITY (SDE,ME) 14.					
				COMMITTED EFFECTIVE DOSE EQUIVALENT (CEDE) 15.					
				COMMITTED DOSE EQUIVALENT, MAXIMALLY EXPOSED ORGAN (CDE) 16.					
				TOTAL EFFECTIVE DOSE EQUIVALENT (ADD BLOCKS 11 AND 15) (TEDE) 17.					
				TOTAL ORGAN DOSE EQUIVALENT MAX ORGAN (ADD BLOCKS 11 AND 15) (TODE) 18.					
				19. COMMENTS					
20. SIGNATURE - LICENSEE				21. DATE PREPARED					

## § 19.13 Notifications and reports to individuals.

- (b) Each licensee shall make dose information available to workers as shown in records maintained by the licensee under the provisions of 10 CFR 20.2106. The licensee shall provide an annual report to each individual monitored under 10 CFR 20.1502 of the dose received in that monitoring year if:
  - (1) The individual's occupational dose exceeds 1 mSv (100 mrem) TEDE or 1 mSv (100 mrem) to any individual organ or tissue; or
  - (2) The individual requests his or her annual dose report.

## **§ 20.2104 Determination of prior occupational dose.**

- (a) for each individual who is likely to receive an annual occupational dose requiring monitoring under § 20.1502, the licensee shall determine the occupational radiation dose received during the current year.

## § 20.1905 Exemptions to labeling requirements.

- (g) Containers holding licensed material (other than sealed sources that are either specifically or generally licensed) at a facility licensed under Parts 50 or 52 of this chapter, not including non-power reactors, that are within an area posted under the requirements in § 20.1902 if the containers are:
  - (1) Conspicuously marked (such as by providing a system of color coding of containers) commensurate with the radiological hazard;
  - (2) Accessible only to individuals who have sufficient instruction to minimize radiation exposure while handling or working in the vicinity of the containers; and
  - (3) Subject to plant procedures to ensure they are appropriately labeled, as specified at § 20.1904 before being removed from the posted area.

## **Containers Requiring Conspicuous Marking**

- Source of dose rates significantly above ambient dose rates.
- Provide shielding for contained source(s).
- Contain loose surface contamination.
- Present potential airborne/intake hazard.



## 2008 10 CFR Part 20

- Has old and new
- Sections
  - § 19.13
  - § 20.1003
  - § 20.1201
  - § 20.1905
  - § 20.2104
  - § 20.2205

