

June 30, 2003

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Comment Number 2585

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Subject: **“Rulemaking on Controlling the Disposition of Solid Materials:  
Scoping Process for Environmental Issues and Notice of Workshop,”  
68 Federal Register No. 40, pages 9595-9602 (February 28, 2003)**

Gentlemen:

In the subject Federal Register Notice, the U.S. Nuclear Regulatory Commission (NRC) solicited comments on the scope of proposed rulemaking for controlling the disposition of potentially contaminated solid materials.

Southern California Edison is pleased to provide comments on the proposed rulemaking. Our comments are divided into three sections. The first section deals with the generic issues regarding unconditional release of solid materials from licensed facilities. The second section deals with the specific alternatives described in the FRN for which the NRC requested additional information. The third section relates to issues raised during workshops for which we believe a response is desirable.

## **GENERIC ISSUES:**

What the nuclear power industry needs is a “bright line” that defines what is radioactive and what is not, for both surface contamination and for volumetric contamination. The need for such a definition was clearly reflected in comments by representatives of states, industry, and professional organizations at the May NRC workshop.

Attributes of such a definition should include:

- A dose-based approach to reflect risk and risk-informed regulation
- A dose limit low enough to ensure protection of public health and safety yet not so low as to be unworkable with common field instruments

- Dose-based consistency between surface contamination and volumetric contamination
- Consistency between the approach and the proposals being adopted by the international community
- Consistency with the License Termination Rule such that material removed from a site where a license was terminated would not be otherwise declared radioactive
- No interference with the detection of orphaned sources at recycle facilities and landfills
- Consistency between all states to avoid difficulties with interstate commerce. This may require verbatim compatibility between the NRC regulations and the regulations adopted by Agreement States.

Existing release programs at nuclear power plants are fully protective of public health and safety. Those infrequent unintended releases that have occurred have not resulted in any significant radiation exposure to any member of the public. Definition of a demarcation level for what is and what isn't radioactive, however, would allow employment of automated instrumentation that would minimize those events. Definition of an upper limit value for what is radioactive could be used to establish "go/no go" setpoints for automated survey instruments. Automation of release programs would help remove the human element that is often responsible for the occasional errors in release survey programs.

Based on the criteria above that we believe are critical to success of this effort, we endorse ANSI N13.12-1999, entitled "Surface and Volume Radioactivity Standards for Clearance" as a workable, risk-based standard for controlling the disposition of solid materials.

### **SPECIFIC ALTERNATIVES:**

Conditional Use: Alternative #3

The conditional use alternative was defined as the release of solid materials that are contaminated with low levels of radioactivity for certain authorized uses that limit public exposure. Examples provided in the FR include industrial use such as contaminated steel being used for bridge girders and factory components. The well-prescribed use would limit public exposure to radiation to very low levels. We suggest that the NRC adopt rules that provide a provision for case-by-case disposition by "conditional use". The case-by-case approach could be similar to the existing regulations for alternative disposal found in 10 CFR 20.2002.

#### Landfill Disposal: Alternative #4

We believe that the disposal of slightly contaminated materials in a RCRA Subtitle C disposal facility is a safe, effective and viable option that should be pursued. We note that EPA has begun studying this option and we encourage the NRC to work with EPA to facilitate promulgation of the appropriate regulations. Such an option has significant benefits:

1. It is a safe method for disposal because RCRA Subtitle C facilities are engineered, monitored and highly regulated. The radiation exposure from slightly contaminated materials to a member of the public would be very small, most likely limited to a very few workers at the disposal facility and well within the limits for public radiation exposure. Any radiation exposure to workers at such a disposal facility would be dwarfed by the exposure to natural background sources. Additionally, existing processes permit naturally occurring radioactive material (NORM) to be shipped to certain Subtitle C facilities. This NORM material likely contributes larger, yet acceptably safe, levels of radiation exposure to disposal site workers.
2. A great deal of commercial low level radioactive waste (LLRW) is comprised of large volumes of slightly contaminated materials such as concrete rubble, ion exchange resin, soil, and trash. With limited access to NRC regulated LLRW disposal facilities (noting the impending closure of the Barnwell facility in 2008 to most states), we should avail ourselves of safe disposal options that leave the bulk of LLRW disposal facilities available for materials contaminated at higher levels, such as Class B and C wastes and the higher levels of Class A waste.
3. The disposal of slightly contaminated materials at RCRA Subtitle C facilities could be evaluated in a generic impact analysis and therefore lends itself to a generic rulemaking. Subtitle C landfill disposal could easily be implemented using a multiple of the criteria adopted for unconditional release. For example, if a dose-based standard of 1 mrem/yr (10  $\mu$ Sv/yr) were adopted along with reasonable guidance to convert contamination levels to radiation dose such as ANSI N13.12, then a simple multiple of the ANSI criteria could be used for the acceptance criteria for Subtitle C landfill disposal. The radiation exposure scenarios can be clearly defined to ensure that no member of the public would exceed existing public dose limits in 10 CFR 20.

## **WORKSHOP ISSUES:**

### Recycle:

We continue to believe the recycle of metals contaminated to very low levels carries minimal risks to public health. As a result, even if generic recycling of contaminated metals is not permitted, the NRC should, as a minimum retain a provision for case-by-case approval of recycle requests.

### Documentation:

At the May workshop, some participants requested that the NRC require documentation of all materials released from licensed facilities and furthermore, that the NRC demand documentation for all materials previously released. This request should be rejected. There is simply no need for a requirement to document every clipboard, truck, shipping carton, lunchbox and person that enters and exits a restricted area or radiologically controlled area. If an item is presented at the exit as uncontaminated and is found to be contaminated, that event should be documented for tracking/trending and corrective action. However, one must recognize that if an item is surveyed or evaluated as non-contaminated to well-defined standards, there is no benefit to the public or to the regulator to document such a release. The decision for a licensee to elect to document successful releases of every item should be based on individual licensee needs, not a regulatory requirement.

### "Recovery:"

Some workshop participants requested that the Commission demand the return or "recovery" of every item that had been released from licensed facilities. This request should be rejected. There is no evidence that any member of the public was placed at significant risk from the release of uncontaminated items from licensed facilities. Furthermore, the concept that the thousands of licensees could even consider recovering every item released over the past 40 or 50 years from restricted areas or from radiologically controlled areas is simply unreasonable.

In conclusion, a definition of what is radioactive and what is not radioactive would provide clear criteria for the control of solid material disposition. Moreover, it would provide an understandable "bright line" for members of the public. This would go a long way to defusing the fear of very low levels of radioactivity that pose no health risk to the public. The ANSI N13.12 standard meets these objectives.

Southern California Edison appreciates the opportunity to comment on the scope of the proposed rulemaking. If you have any questions concerning these comments, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "A. B. Scherer". The signature is fluid and cursive, with a large initial "A" and "B".