



STARS-01005  
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Secretary,  
U. S. Nuclear Regulatory Commission  
ATTEN: Rulemakings and Adjudications Staff  
Washington, DC 20555-0001

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

**STRATEGIC TEAMING AND RESOURCE SHARING (STARS)  
COMMENTS ON PROPOSED RULEMAKING:  
REVISION OF SKIN DOSE LIMIT- 66FR36502**

Docket Numbers: 50-483, 50-482, 50-498, 50-499, 50-275, 50-323, 50-445, 50-446

Gentlemen:

This letter presents comments from the Strategic Teaming and Resource Sharing (STARS)<sup>1</sup> nuclear power plants on the subject rulemaking which was proposed by the U. S. Nuclear Regulatory Commission on July 12, 2001, in the above referenced Federal Register (FR) notice.

The STARS plants support the proposed rulemaking and agree that nuclear power licensees will benefit from the changes when adopted. We recognize that the proposed rule is based on sound scientific research and advice of the Congressionally-chartered National Council on Radiation Protection and Measurement, NRC sponsored research conducted at the Brookhaven National Laboratory, and confirmatory research conducted at Texas A & M under contract with the Electric Power Research Institute.

The FR notice proposes to amend NRC regulations of 10 CFR Part 20 to delete a reference to the words "averaged over an area of 1 square centimeter" from the definition of shallow-dose equivalent (SDE). The purpose of these words was to specify the area over which the dose to the skin was to be measured or calculated for comparison to the regulatory limit. In addition, the proposed rule would change the method of calculating SDEs by specifying that the assigned SDE must be the dose averaged over the 10 square centimeters of skin receiving the highest exposure. A result of this rulemaking is to make the skin dose limit less restrictive when small areas of skin are irradiated and to address skin and extremity doses from all source geometries under a single limit. This change would permit measuring or calculating SDEs from discrete radioactive particles (DRPs) on or off the skin, from very small area

<sup>1</sup> The STARS group consists of five plants operated by TXU Electric, AmerenUE, Wolf Creek Nuclear Operating Corporation, Pacific Gas and Electric Company and STP Nuclear Operating Company. In addition, the Palo Verde Nuclear Generating Station participated in the development of these comments.

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SECY-02

(< 1.0 square centimeters) of skin contamination, and from any other source of SDE by averaging the measured or calculated dose over the most highly exposed, contiguous 10 square centimeters for comparison to the skin dose limit of 50 rem (0.5 Sv).

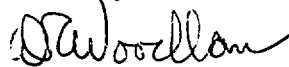
The objective of the rule change is to establish a uniform, risk-informed skin dose limit for all sources of SDE, including DRPs, and small area contamination that: trades a higher risk of occurrence of deterministic effects to the skin for a reduction in the risk of whole-body stochastic effects; allows licensees to reduce whole-body exposures and nonradiological health risks such as heat stress to workers subject to unnecessary DRP monitoring; and provides a common limit for SDE from all external sources of ionizing radiation. The proposed rule also reduces the unnecessary regulatory burden on licensees for reporting skin exposures that have insignificant health implications.

Although the proposed rule may permit more frequent occurrence of observable though transient deterministic effects under some instances of skin exposure and related source geometry, it is expected that the less restrictive limit would permit a reduction in the conservative use of protective clothing, other devices and work practices now commonly implemented to prevent contamination and skin doses. As a result, workers should experience reduced exposure to non-radiological health hazards and be subject to fewer industrial accidents caused by impaired motion. By reducing the overly conservative use of protective equipment and work practices, work should be performed more efficiently. Reduced time in the restricted area is expected along with a concomitant reduction in whole-body dose and stochastic risks.

In summary, STARS supports the proposed rule because it will establish, when adopted, a risk-based approach to the regulation of occupational radiation dose to the skin that enables licensees to enhance worker safety and reduce unnecessary burden, while maintaining the current protection level of public health and safety.

We appreciate the opportunity to provide comments on the proposed rule. Please contact me if there are any questions (254-897-6887 or [dwoodl1@txu.com](mailto:dwoodl1@txu.com)).

Sincerely,



D. R. Woodlan, Chairman  
Integrated Regulatory Affairs Group  
Strategic Teaming and Resource Sharing  
(STARS)

DRW/dw