

NUCLEAR REGULATORY COMMISSION  
Federal Register Vol. 80, No. 120, Tuesday, June 23, 2015  
Proposed Rules  
10 CFR Part 20

[Docket Nos. PRM-20-28, PRM-20-29, and PRM-20-30; NRC-2015-0057]  
Linear No-Threshold Model and Standards for Protection Against Radiation

The U.S. Nuclear Regulatory Commission (NRC) has received three petitions for rulemaking (PRM) requesting that the NRC amend its “Standards for Protection Against Radiation” regulations and change the basis of those regulations from the Linear No-Threshold (LNT) model of radiation protection to the radiation hormesis model. The radiation hormesis model provides that exposure of the human body to low levels of ionizing radiation is beneficial and protects the human body against deleterious effects of high levels of radiation

The petitioners request that the NRC amend part 20 of Title 10 of the Code of Federal Regulations(10 CFR), “Standards for Protection Against Radiation,” based on new science and evidence that contradicts the LNT hypothesis and request that the NRC greatly simplify and change 10 CFR part 20 to take into account the “vast literature demonstrating no effects or protective effects at relatively low doses of radiation.”

One petitioner writes, “the literature showing protective effects supports the concept of hormesis, in which low levels of potentially stressful agents, such as toxins, other chemicals, ionizing radiation, etc., protect against the deleterious effects that high levels of these stressors produce and result in beneficial effects (e.g., lower cancer rates).”

The NRC is examining the issues raised in these petitions to determine whether they should be considered in rulemaking. The NRC is requesting public comments on these petitions for rulemaking.

Submit comments by September 8, 2015.

Comments received after this date will be considered if it is practical to do so, but the NRC is able to assure consideration only for comments received on or before this date.

## ADDRESSES:

You may submit comments by any of the following methods (unless this document describes a different method for submitting comments on a specific subject):

- Federal Rulemaking Web Site: Go to <http://www.regulations.gov> and search for Docket ID NRC-2015-0057. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov).

For technical questions contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- E-mail comments to: [Rulemaking.Comments@nrc.gov](mailto:Rulemaking.Comments@nrc.gov). If you do not receive an automatic e-mail reply confirming receipt, then contact us at 301-415-1677.

- Fax comments to:  
Secretary, U.S. Nuclear Regulatory Commission at 301-415-1101.

- Mail comments to:  
Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Rulemakings and Adjudications Staff.

- Hand deliver comments to:  
11555 Rockville Pike, Rockville, Maryland 20852,  
between 7:30 a.m. and 4:15 p.m. (Eastern Time) Federal workdays;  
telephone: 301-415-1677.

For additional direction on obtaining information and submitting comments, see “Obtaining Information and Submitting Comments” in the SUPPLEMENTARY INFORMATION section of this document.

### FOR FURTHER INFORMATION CONTACT:

Solomon Sahle, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; telephone: 301-415-3781, e-mail: [Solomon.Sahle@nrc.gov](mailto:Solomon.Sahle@nrc.gov)