Rulemaking1CEm Resource

From: RulemakingComments Resource **Sent:** Monday, November 16, 2015 6:14 PM

To: Rulemaking1CEm Resource

Subject: Comment on PRM-20-28, 20-29 & 20-30

Attachments: NRC-2015-0057-DRAFT-0514.pdf

DOCKETED BY USNRC—OFFICE OF THE SECRETARY

SECY-067

PR#: PRM-20-28, PRM-20-29, and PRM-20-30

FRN#: 80FR35870

NRC DOCKET#: NRC-2015-0057 SECY DOCKET DATE: 11/16/15

TITLE: Linear No-Threshold Model and Standards for Protection Against Radiation

COMMENT#: 512

Hearing Identifier: Secy_RuleMaking_comments_Public

Email Number: 1309

Mail Envelope Properties (e0b64efc74da4f018f5d58b4dade3c40)

Subject: Comment on PRM-20-28, 20-29 & 20-30

Sent Date: 11/16/2015 6:14:23 PM **Received Date:** 11/16/2015 6:14:24 PM

From: RulemakingComments Resource

Created By: RulemakingComments.Resource@nrc.gov

Recipients:

"Rulemaking1CEm Resource" <Rulemaking1CEm.Resource@nrc.gov>

Tracking Status: None

Post Office: HQPWMSMRS02.nrc.gov

Files Size Date & Time

MESSAGE 298 11/16/2015 6:14:24 PM

NRC-2015-0057-DRAFT-0514.pdf 73928

Options

Priority:StandardReturn Notification:NoReply Requested:NoSensitivity:Normal

Expiration Date: Recipients Received:

PUBLIC SUBMISSION

As of: 11/16/15 4:24 PM

Received: November 14, 2015

Status: Pending_Post

Tracking No. 1jz-8m9f-qw77

Comments Due: November 19, 2015

Submission Type: Web

Docket: NRC-2015-0057

Linear No-Threshold Model and Standards for Protection Against Radiation

Comment On: NRC-2015-0057-0086

Linear No-Threshold Model and Standards for Protection Against Radiation; Extension of Comment Period

Document: NRC-2015-0057-DRAFT-0514

Comment on FR Doc # 2015-20722

Submitter Information

Name: Vincent Novak

Address: POB 757

Shelter Island, NY, 11964

Email: freshpondroad@optonline.net

General Comment

Docket ID NRC-2015-0057

This comment is in opposition to the proposed NRC rule change of human ionizing radiation exposure levels from the LNT model to the Hormesis model.

My wife, Elizabeth had stage IV breast cancer. She underwent many CT/PET scans and medical radiations treatments. Her cancer mastestized to the brain in 2012. In 2013 she underwent the ten sessions of whole brain radiation therapy, (WBRT). The WBRT was to extend her life another year to two years. Elizabeth was in no pain and otherwise healthy, mentally and physically, but became lethargic, unable to walk or eat a few days after the WBRT and died in hospice less than three months later.

After her death, the American Cancer Society issued a paper warning the public to limit the amount of low level radiation that one receives and that accumulated low level radiation is now considered a carcinogen:

http://www.cancer.org/cancer/cancercauses/radiationexposureandcancer/xraysgammaraysandcancerrisk/x-raysgamma-rays-and-cancer-risk-do-xrays-and-gamma-rays-cause-cancer

The CDC:

http://www.cdc.gov/healthcommunication/toolstemplates/entertainmented/tips/ionizingradiation.html

and the WHO:

http://www.who.int/mediacentre/factsheets/fs371/en/

have also published similar finding and warning. Low Level ionizing radiation is a cancer causing carcinogen. This is no longer theory.

These finding directly contradicts the hormesis ionizing radiation theory and model.

Our home in Shelter Island, NY is about 18 miles from the Dominion Millstone nuclear power plant in Waterford, CT. In trying to quantify just how much accumulated ionizing radiation Elizabeth received, (in addition to that received from medical procedures), I attempted to seek out the amount and type of 40 years of effluent ionizing radiation that has been emitted into the atmosphere and the accumulated in the soil and water in our environment. Millstone has both planned monthly releases and many unplanned releases.

To my surprise, such atmospheric release are not monitored or recorded in a consistent and statistical manner as to be at all useful. Although within the ingestion pathway of Millstone, we have no local monitoring, REP or PAG in or near my community in Suffolk County, NY.

Unlike a bio-organic bacteria that a human with a healthy immune system might build a resistance to (hormesis theory), the physical properties of various radioactive isotopes mostly negatively affects human cells, mutates DNA and inevitably weakens the human immune system, leading to cancer, directly or indirectly.

The quality of the human immune system varies due to age, body mass and other factors. A "one size fits all" hormesis model is then without merit.

If anything, the NRC must demand the NPP's monitor and inventory their radioactive atmospheric waste releases and deposition to a defined degree, just as they are required to monitor their stored solid radioactive waste.

We need to know exactly where radioactive effluents accumulate and how much humans are exposed to above natural background. How much ionizing medical treatment and imaging humans are exposed to must also be taken into account.

As I read the ACS, CDC and WHO papers, to accept a life time of radiation via hormesis theory, as a health benefit, then one must accept the DNA mutations, birth defects and increasing cancer rates as a new normal.

Hormesis modeling, as applied to a life time of long term low level ionizing radiation exposure is, at best, questionable and unknown.

Reason and rational to risk an increase exposure rate using hormesis modeling is also suspect. As NPP facilities are relicensed beyond original decommissioning dates, the contamination level of the facility will only increase beyond current maximum safe thresholds for workers. The only way around this is to abolish such thresholds, (via hormesis rule), or to rebuild the facility with clean materials, newer technology and increased protection standards, or to generate electrical power with other new, renewable, technologies.

Additional supporting document links against the imposition of lowering safety standards and against the proposed Hormesis modeling rule:

http://www.harvardhealthcontent.com/healthcommentaries/66,COL111010

http://www.ncbi.nlm.nih.gov/pubmed/17379086

http://www.xrayrisk.com/about.php

The health and wellbeing of the public must be the primary concern and the NRC must err on the side of safety by retaining and strengthening the current LNT model and not imposing the unproven Hormesis model as rule.

Thank You,

Vincent Novak, POB 757, Shelter I., NY 11964 631-749-4009 freshpondroad@optonline.net