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From: Reese, Steve [Steve.Reese@oregonstate.edu]
Sent: Monday, July 27, 2009 4:47 PM
To: Rulemaking Comments
Cc: Butler, Ralph; jere@purdue.edu
Subject: Comments on proposed rule on enhancement to emergency preparedness regulations
Attachments: NRC OSU Proposed Emergency Preparedness Rulemaking Comment Letter.pdf

NRC Rulemaking and Adjudications Staff,

Please find attached my comments on proposed rule on enhancement to emergency preparedness regulations.

Best regards,

Steve

Steve Reese
Director
Radiation Center
Oregon State University
Corvallis, OR 98771
541-737-2341

DOCKETED
USNRC

July 28, 2009 (9:02am)

OFFICE OF SECRETARY
RULEMAKINGS AND
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Radiation Center
Oregon State University, 100 Radiation Center, Corvallis, Oregon 97331-5903
T 541-737-2341 | F 541-737-0480 | http://ne.oregonstate.edu/facilities/radiation_center

July 27, 2009

Secretary
ATTN: Rulemakings and Adjudications Staff
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Rulemakings and Adjudications Staff,

I wish to respectfully submit comments on the advance notice of proposed rulemaking published in the Federal Register (Vol. 74, No. 94 / May 18, 2009) entitled, *Enhancements to Emergency Preparedness Regulations*. There were three questions on page 23270 pertaining to research and test reactors. Comments are as follows:

3. The NRC is seeking comment on whether it is necessary to add a requirement for non-power reactor licensees to include in their emergency plans detailed analyses demonstrating that on-shift personnel can perform all assigned emergency plan implementation functions in a timely manner without having competing responsibilities that could prevent them from performing their emergency plan functions.

It is difficult to imagine circumstances where on-shift personnel could not perform assigned emergency plan implementation functions for any research or test reactor currently licensed by the NRC that would tangibly result in something adverse to public health and safety. Because of the minimal decay heat and low inventory of radioactive materials, most safety analysis reports predict off-site dose to be below that found in 10 CFR 20.1301(a)(1), let alone 10 CFR 100. Even for facilities greater than 2 MW_t, any actions that protect the public health and safety occur within the control room by the operator within the first few minutes of an event. These events, even in the worst circumstances, are not protracted events taking place over many hours or days and therefore don't lend themselves to vulnerabilities in crisis management due to multitasking. Furthermore, the staffing levels at facilities are such that individuals already must wear "multiple hats." Given that events at research and test reactors have little or no impact on public health and safety, are not protracted, and involve a small staff that already performs multiple functions in an emergency, requiring a detailed analysis of staffing levels at research and test reactors is unwarranted.

4. The NRC is considering whether it is necessary to add the emergency declaration timeliness criteria for non-power reactor licensees. The NRC is seeking comments on whether to issue regulations requirement that non-power reactor licensees meet these criteria.

Non-power reactors do not need to meet a 15 minute reporting criteria. The issue, as stipulated in the Federal Register notice (Page 23262), focuses on timeliness of a declaration and its impact upon protection of public health and safety. As stated in the answer to question 3 above, the minimal decay heat and low inventory of radioactive materials do not warrant such reporting criteria and, again, it is difficult to imagine circumstances where a 15 minute reporting criteria would tangibly improve public health and safety. In recognition of this fact, most, if not all non-power reactors have a 24-hour reporting requirement for the worst non-normal operational scenarios, even those that result in off-site exposures. This 24-hour reporting requirement is also consistent with ANSI/ANS 15.1, *The Development of Technical Specifications for Research Reactors*.

5. The NRC is seeking comments on whether the NRC should issue regulations requiring that non-power reactor licensees include hostile action event EALs in their emergency plans.

Because of the small size and simplicity in operation, existing emergency and security plans at non-power reactors adequately cover the spectrum of scenarios one might reasonably expect to encounter. It would seem that there is a concern that security related events, when mixed with a typical operational event at a nuclear power plant, could result in unanticipated confounding interactions between the two. However, this is not the case at a non-power reactor because their physical size is typically very small. Even the biggest facilities are a fraction of the physical footprint of a nuclear power plant and, because the inventory of material is so low, the Emergency Planning Zone (EPZ) typically only encompasses the reactor building itself. Consequently, non-power reactors typically don't have a need for evacuation plans. Taking these into consideration, it is reasonable to conclude that there should be very little concern about the ability of LLEA to be overwhelmed or multitasked to ineffectiveness. Additionally, unlike a nuclear power reactor, the level of complexity for a non-power reactor is very low. Because of this lack of complexity, it is unlikely, to the point of being incredible, that the result would be to confound existing emergency plans or physical security plans to such an extent that it affects public health and safety.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Steven R. Reese
Director

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Thread-Index: AcoO+1eBhDBP9L4MSjO/5rL251uJeg==
From: "Reese, Steve" <Steve.Reese@oregonstate.edu>
To: <rulemaking.comments@nrc.gov>
CC: "Butler, Ralph" <ButlerRa@missouri.edu>,
<jere@purdue.edu>
Return-Path: Steve.Reese@oregonstate.edu