

WRITTEN FINDINGS
regarding April 2015 Proposed Revisions to
Rules and Regulations for Control of Sources of Ionizing Radiation
pursuant to A.C.A. §25-15-204(e)(4)

The Radiation Control Section offers the following written findings in conjunction with the Financial Impact Statement:

- 1) The potential financial impact regarding a portion of this rule package is due to a U.S. Nuclear Regulatory Commission amendment of its regulations to establish security requirements for the use and transport of Category 1 and Category 2 quantities of radioactive material. As an Agreement State, the State of Arkansas is required to have regulations that are compatible with NRC regulations. The NRC considers the aforementioned quantities of radioactive material to be risk significant and, therefore, to warrant additional protection. Category 1 and Category 2 thresholds are based on the quantities established by the International Atomic Energy Agency (IAEA) in its Code of Conduct on the Safety and Security of Radioactive Sources, which the NRC endorses.

The objective of this rule is to provide reasonable assurance of preventing theft or diversion of Category 1 and Category 2 quantities of radioactive material. The regulations also include security requirements for the transportation of irradiated reactor fuel that weighs 100 grams or less in net weight of irradiated fuel. The rule affects any licensee that possesses an aggregated Category 1 or Category 2 quantity of radioactive material, any licensee that transports these materials using ground transportation, and any licensee that transports small quantities of irradiated reactor fuel.

- 2) Pursuant to Section 274 of the Atomic Energy Act, 1954, the State of Arkansas, as a function of our Agreement State program, must have regulations that satisfy the compatibility and health and safety categories established in the NRC's Office of Nuclear Material Safety and Safeguards (NMSS) Procedure SA-200.
- 3) The NRC has long participated in efforts to ensure radioactive source protection and security. The terrorist attacks of September 11, 2001, heightened concerns about the use of risk-significant radioactive materials in a malevolent act. Such an attack is of particular concern because of the widespread use of radioactive materials in the United States by industrial, medical, and academic institutions. The theft or diversion of risk-significant quantities of radioactive materials could lead to their use in a radiological dispersal device (RDD) or a radiological exposure device (RED). Subsequently, the NRC issued various sets of orders to certain licensees, and, in turn, each Agreement State was required to issue legally binding requirements to impose enhanced security measures, identical to one of the NRC's sets of orders called the Increased Control Orders issued in 2005, for licensees under that State's regulatory jurisdiction. Agreement States also had to issue legally binding requirements consistent with a certain fingerprinting and FBI criminal history records checks order issued by the NRC in 2007.

The security requirements in the proposed rule are similar to the requirements imposed on licensees through the NRC's previously issued orders/Agreement State legally binding requirements. The NRC has determined that it is preferable to regulate through rulemaking rather than order because notice and comment rulemaking is an open and transparent process that facilitates public participation. In developing the final rule, the NRC considered, among other things, the various orders, lessons-learned during implementation, the recommendations from an Independent Review Panel and a Materials Working Group, and stakeholder comments. In NRC's final rule, some of the orders were deleted or revised, or new requirements were issued.

- 4) This rule would impose the minimum requirements that the NRC believes are necessary to adequately protect public health and safety. The rule provides some flexibility in the particular measures that a licensee can choose to employ in order to demonstrate compliance. Licensees have already implemented the bulk of the rule's requirements in response to previous NRC orders/Agreement State legally binding requirements. Some of the new proposed requirements may already be implemented if the licensee had chosen in the past to voluntarily enact the requirement, e.g., the developing of access authorization program or security program procedures.

The total cost to some licensees may be higher or lower than to others. The actual total cost depends on a multitude of factors including, but not limited to: the number of individuals granted unescorted access, the number of procedures that must be developed, the particular security measures that are used to meet the requirement, the extent of training to be given, and the number of Category 1 or Category 2 sources possessed and the location of the sources relative to other sources. Some of the actions required of the licensees may be conducted by lower paid employees, such as clerical staff. Also, over half of the Arkansas licensees affected by this portion of the proposed rule would be considered "out-of-state" licensees and therefore compliance with the NRC's amendment would have to be dually demonstrated. As such, certain costs/financial impact would be somewhat shared between States.

- 5) No alternatives to the proposed rule have been suggested as a result of public comment.
- 6) The State of Arkansas currently has no regulations specifically addressing the physical protection of Category 1 and Category 2 quantities of radioactive material.
- 7) Section 12 of the Rules and Regulations for Control of Sources of Ionizing Radiation regarding the physical protection of Category 1 and Category 2 quantities of radioactive material will be reviewed at least every ten years to determine, based upon the evidence, whether there remains a need for the rule.