

October 9, 2014

The Honorable Dianne Feinstein
Chairman, Subcommittee on Energy
and Water Development
Committee on Appropriations
United States Senate
Washington, DC 20510

Dear Chairman Feinstein:

The Nuclear Regulatory Commission staff recently met with Committee staff to discuss the security provisions contained in the Senate Appropriations Committee's Energy and Water Development Subcommittee's draft appropriations legislation. In response to questions posed during those discussions, the Nuclear Regulatory Commission is providing you with an initial assessment of the potential impacts of the proposed legislation. That assessment is enclosed. The Commission respectfully requests that these impacts be considered in any future deliberations on the matter.

Sincerely,

/RA/

Allison M. Macfarlane

Enclosure: [As stated](#)

cc: Senator Lamar Alexander

Identical letter sent to:

The Honorable Dianne Feinstein
Chairman, Subcommittee on Energy
and Water Development
Committee on Appropriations
United States Senate
Washington, DC 20510
cc: Senator Lamar Alexander

The Honorable Barbara Boxer
Chairman, Committee on Environment
and Public Works
United States Senate
Washington, DC 20510
cc: Senator David Vitter

The Honorable Mike Simpson
Chairman, Subcommittee on Energy
and Water Development
Committee on Appropriations
United States House of Representatives
Washington, DC 20515
cc: Representative Marcy Kaptur

The Honorable Fred Upton
Chairman, Committee on Energy
and Commerce
United States House of Representatives
Washington, DC 20515
cc: Representative Henry A. Waxman

**U.S. Nuclear Regulatory Commission
 Assessment of Section 402 Impacts
 Fiscal Year 2015 Appropriations Act
 Senate Energy and Water Development Subcommittee**

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<p>“General Provisions – Independent Agencies” Starts on page 68 of Calendar No. 000 113TH CONGRESS 2D SESSION S. 0000 [Report No. 113–000]</p>	<p>Comments:</p> <ul style="list-style-type: none"> • None of the three previous federal interagency Task Force Reports on Radioactive Source Security (issued in August 2006, 2010, and 2014), recommended legislative changes for radioactive source security. • Specifically, in the 2006 report, the Task Force states, “The Task Force found no significant gaps that are not already being addressed. The Task Force believes that the combination of direct regulations concerning source security and control, personnel protection regulations, guidance, and the recently issued Orders along with the inspection and enforcement program, provides reasonable assurance that Category 1 and 2 sources in use and storage at NRC and Agreement State-licensed facilities and at DOE facilities are safe and secure. At this time, the Task Force is not recommending any legislative changes that would require Congressional action to implement.” • In 2013, the NRC completed a rulemaking process that included extensive public engagement that resulted in enhanced security requirements for Category 1 and 2 radioactive materials under 10 CFR part 37 (“Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material”). • The security Orders referred to in the 2006 Task Force Report are undergoing a planned rescission because of NRC’s promulgation of Part 37. • 10 CFR Part 37 was promulgated after the completion of GAO Reports to Congress.
<p>Sec.402(a) REDUCING AND PROTECTING VULNERABLE</p>	<p>Comments:</p> <ul style="list-style-type: none"> • Part 37 includes all radioactive material, not just material

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<p>RADIOLOGICAL MATERIAL.—The Nuclear Regulatory Commission (NRC) shall establish mandatory security standards for all equipment located within the United States using High Risk Radiological Material radionuclides identified by the Interagency Task Force on Radiation Source Protection and Security in its 2010 Radiation Source Protection and Security Task Force Report to be enforced at all sites in the United States no later than 5 years from the enactment of this Act.</p>	<p>within “equipment” as referenced in the draft legislation.</p> <ul style="list-style-type: none"> • Referencing the 2010 Task Force report means that any future changes will not be considered, limiting the Task Force’s ability to change the list of radionuclides or quantities based on threat or vulnerability. • Undermines the General Principles of Regulation as expressed in E.O. 13563 which state in part, “Each agency must ...propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs.” <p>Impacts:</p> <ul style="list-style-type: none"> • The number of Agreement State and NRC licensees required to implement the expanded security measures would increase by more than 50 percent (about 1,000 additional licensees, including medical licensees that provide cancer therapy treatments) without a demonstrated, commensurate technical basis or public participation. • The 10 Ci requirement would expand the U.S. definition of risk-significant radioactive material to quantities beyond those that are considered risk-significant by the IAEA Code of Conduct (i.e., lower than Category 2). The current NRC security requirements cover Category 1 and 2 materials. • Under the new provision, certain radioactive material that is currently considered Category 3 or 1/10th of Category 3 by the NRC would be subject to increased security measures. • There would be an immediate impact to Agreement States and Federal agencies because the provision encompasses all equipment in the United States. • NRC jurisdiction would be extended to cover “High Risk Radiological Sources” possessed by DOE. • NRC would have to issue Orders to accommodate the expanded definition of high-risk radioactive materials, which would affect Agreement States, Federal partners, and NRC licensees who would have to implement increased security measures. • Medical costs and the viability of small businesses would be impacted without a public participation process that considers

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	the impacts to small businesses under the Congressional Review Act and the impact of increased collection of information by the NRC under the Paperwork Reduction Act.
(1) The Commission shall adopt and publish new mandatory security standards using the security criteria established by the National Nuclear Security Administration (NNSA) Global Threat Reduction Initiative (GTRI) for all devices located within the United States using High Risk Radiological Material.	<p>Comments:</p> <ul style="list-style-type: none"> • The imposition of criteria developed by NNSA would undermine NRC’s regulatory independence. Regulatory independence is essential to the conduct of our safety and security mission and underpins public confidence that these are our highest priorities. • The NRC would be required to adopt and enforce criteria without allowing the agency, our Agreement State regulatory partners, and the public to engage in the rulemaking process. This negates the NRC’s statutory authority to make an independent assessment of the need for these requirements and to determine whether or not to adopt them (in whole or in part). • Although DOE/NNSA may have a complementary mission to the NRC under the Atomic Energy Act of 1954, as amended, the NRC and Agreement States are the only domestic entities with regulatory authority over civilian radiation sources. • Imposition of the NNSA criteria would create the potential for dual regulation of NRC and Agreement State licensees. • Although DOE/NNSA is not a regulatory body, it would be establishing security criteria for civilian nuclear materials without the benefit of the insights gained through the public notice and comment rulemaking process mandated by the Administrative Procedure Act. • NNSA GTRI security criteria are not publically available and have not been subjected to public or interagency review. • Legislation diminishes the role of the 14 federal agencies who are members of the legislatively-mandated Radioactive Source Security Task Force and who may be impacted by new source security requirements. <p>Impact:</p> <ul style="list-style-type: none"> • Will immediately impact over 2,300 medical, academic and industrial licensees already subject to the requirements of Part 37 and will subject an additional (approx.) 1,000

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	medical, academic, and industrial licensees to new security requirements with no technical basis for an increase in security, and without an opportunity for public notice and comment.
(2) The Commission shall actively enforce NNSA GTRI security standards with inspections that occur at least once every 2 years at every site with High Risk Radiological Material.	Impact: <ul style="list-style-type: none"> The increase in the number of impacted licensees (an additional 1000) necessitating an increased inspection frequency (from 5 or 3 years reduced to 2 years) would require an increase in resources for Agreement States and NRC. In addition, licensees will be assessed increased fees without a demonstrated technical basis for a commensurate increase in security.
(3) The Commission shall work with NNSA GTRI to review the security standards at least every 5 years to determine if any amendments need to be made to those standards.	Comments: <ul style="list-style-type: none"> The Task Force has and will continue to review the security standards every 4 years and issue a report that includes recommendations for changes as appropriate. NRC and other Task Force agencies monitor operating experience and the threat environment on an ongoing basis to determine if changes are needed to security requirements.
(4) NNSA GTRI in collaboration with NRC shall establish and implement a training program designed for Commission and NRC Agreement State inspectors to ensure proper enforcement of the security standards.	Comment: <ul style="list-style-type: none"> NRC already has a robust training program for NRC and Agreement State inspectors and already collaborates with GTRI on security training. Impact: <ul style="list-style-type: none"> Establishment of a separate GTRI program creates the potential for dual regulation and regulatory confusion. Having NNSA GTRI direct NRC's inspector training program would impact our ability to regulate and enforce consistent with other parts of our inspection program.
(5) NNSA GTRI shall continue to implement a training and exercise program designed for operators and local law enforcement to ensure proper response to security events.	No comments.
(6) The term "High Risk Radiological Material" (HRRM) means the 14 radionuclides identified by the Interagency Task Force on Radiation Source Protection and Security in its 2010 Radiation Source Protection and Security Task Force Report (August 11, 2010) with activity levels of 10 Curies or greater. These High Risk Radiological	Comments: <ul style="list-style-type: none"> This requirement is contrary to the US Government's political commitment to the IAEA Code of Conduct, which defines sources requiring security controls. The Code of Conduct has been adopted by numerous countries and has been adopted into laws and regulations of numerous countries. NRC is not aware of a demonstrated technical basis that

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Materials pose a greater threat to the public and the environment and could also pose a potentially more significant security risk.	<p>supports the 10-Ci threshold as a determinant that a radiological source would be a “greater threat,” as referenced in the proposed legislation.</p> <p>Impacts:</p> <ul style="list-style-type: none"> • The 10-Ci threshold would increase the number of affected licensees by approx. 1,000, with no technical basis for commensurate increased security. • The 10-Ci threshold would result in significant financial burdens for the additional licensees who would be assessed additional fees and required to implement increased security measures; the new threshold would also impact medical costs and the viability of small businesses. • These costs would be incurred with no technical basis for claims of commensurate increased security. Additionally, NRC’s fees and NRC and Agreement State resources would increase to accommodate changes. • Linking the definition to the 2010 Task Force report means that any future changes found to be necessary would require legislative action; this would limit the Task Force’s ability to adapt regulation and change the list of radionuclides or quantities based on threat or vulnerability.
(b) IN-DEVICE DELAY MECHANISMS.—The NRC shall require all new devices with High Risk Radiological Material to be assessed by NNSA GTRI for adequate delay against a potential theft or sabotage before these devices can be sold and used in the United States.	<p>Comment:</p> <ul style="list-style-type: none"> • In-device delays are not applicable to all licensed sources and devices (e.g., portable devices, well logging, and radiography) and may be impossible for some present-day technologies, including some devices with applications for life-saving medical procedures. <p>Impacts:</p> <ul style="list-style-type: none"> • This would create overlapping regulatory responsibilities. • This would potentially increase the cost of devices on a dramatic scale.
(1) For new devices with High Risk Radiological Material that NNSA GTRI determines do not have adequate built-in delay, NNSA GTRI shall work with the vendor to develop improved delay into the device.	<ul style="list-style-type: none"> • NNSA GTRI is already working with current vendors.
(2) The NRC shall require any operators procuring new devices with High Risk Radiological Material to	<p>Comments:</p> <ul style="list-style-type: none"> • In-device delays are not applicable to all licensed sources and devices.

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only use those devices with enhanced delay approved by NNSA GTRI or implemented in conjunction with NNSA GTRI.	<ul style="list-style-type: none"> • This would restrict access to new technology. • This would increase costs, which will be passed on to the consumer.
(3) NNSA GTRI and NRC should continue to collaborate on the implementation of retrofitting existing irradiators with In-Device Delay kits.	This is currently being implemented.
<p>(c) During the 5-year period NRC develops and implements new minimum security standards, facilities with High Risk Radiological Material will have the option to receive NNSA GTRI support to implement security enhancements and NNSA GTRI security enhancements should be offered on a cost share arrangement, whereby, NNSA GTRI provides no more than 50 percent of the total costs.</p> <p>After the 5-year period, facilities with High-Risk Radioactive Material will be required to implement and maintain security enhancements at their own cost.</p>	<p>Impact:</p> <ul style="list-style-type: none"> • Significant recurring costs for security technology maintenance would be incurred by licensees, with no technical justification for claiming commensurate increased security.
<p>(d) REPLACEMENT TECHNOLOGIES.—NNSA GTRI shall create a program to explore the use of non-radioactive or very short-lived radioactive replacement technologies for devices that use High Risk Radioactive Materials including but not limited to blood irradiators, research irradiators, gamma knife devices, teletherapy devices, and well logging devices. If a facility already has a device with High Risk Radioactive Material wants to replace it with non-radiological or short-lived radiological devices, NNSA GTRI shall replace devices that use High Risk Radioactive Material with non-radioactive replacement technologies under a</p>	<p>Impact:</p> <ul style="list-style-type: none"> • This may cause a large increase in the number of High Risk Radioactive sources that are unwanted or abandoned with no path for disposal.

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cost sharing arrangement with the private sector where the NNSA GTRI pays up to 50 percent of the cost of replacement.	
(e) LIFECYCLE MANAGEMENT.—The NRC shall require device licensees to provide adequate financial assurances through appropriate mechanisms including bonding and deposits, to ensure that High Risk Radiological Materials sold by the device manufacturer to be used in its equipment will be recovered and properly disposed at the end of the useful life of the material.	<p>Comment:</p> <ul style="list-style-type: none"> • Cost analysis is not always possible because disposal capability is not available for greater than class C (Cs-137) sources.
<p>(f) LICENSING OF RADIOLOGICAL SOURCES.—The NRC shall discontinue licensing for each application of new high-risk radiological sources as soon as is practicable, but in no event later than 15 years after the date of enactment of this Act, unless non-radioactive or very short-lived radioactive replacement technologies are not available.</p> <p>No later than 1 year after enactment of this Act, the NRC shall require all new licensees seeking high-risk radiological sources and current licensees seeking to replace high-risk radiological sources to conduct a feasibility review of non-radioactive or very short-lived radioactive alternatives available on the market and provide a justification for requesting a high-risk radiological source if non-radioactive alternatives are not available</p>	<p>Impacts:</p> <ul style="list-style-type: none"> • NRC would have to put in force an Order or a rule to implement the feasibility review. • Many licensees are small business with limited resources to conduct these reviews. • Some licensees possessing shorter-lived sources (Ir-192) would be required to perform a feasibility study several times per year. For example, radiographers (industrial) and high dose-rate afterloaders (medical) would have to do such a study 4 times per year for each source. Approximately tens of thousands of transactions per year would be required. • Costs for feasibility reviews will be passed on, and may impact the viability of business and medical care.
(g) REPORTING.—Not later than 1 year after enactment of this Act, and annually thereafter for an additional 5 years, the Chairman of the NRC and the Administrator of the National Nuclear Security	<p>Comment:</p> <ul style="list-style-type: none"> • The legislatively-mandated quadrennial Task Force report submitted to the President and Congress already provides in-depth information on source security.

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<p>Administration shall submit a joint report to the Committees on Appropriations of the House of Representatives and the Senate on:</p> <p>(1) Progress made towards finalizing the new NRC security standards;</p> <p>(2) The number of buildings with security upgrades meeting the NNSA GTRI standards;</p> <p>(3) The number of NRC and Agreement State inspectors trained and certified;</p> <p>(4) The number of irradiators in the United States with installed in-device delay mechanisms and the progress made on developing and implementing new in-device delay mechanisms;</p> <p>(5) The number of devices for which replacement technologies have been implemented to replace High Risk Radiological Materials, and the total amount of costs incurred by NNSA GTRI to implement these replacements; and</p> <p>(6) Progress on implementing financial assurances.</p>	
<p>SEC.403. For this fiscal year, and each fiscal year hereafter, each independent agency receiving funding under this Title shall submit to the Committees on Appropriations of the U.S. House of Representatives and United States Senate a Congressional Budget Justification and a detailed annual report.</p>	<p>Comment:</p> <ul style="list-style-type: none"> • This would require an increase in resources needed to provide an annual report in a situation in which the data may not change significantly from year to year.