COMMITTEE ON EDUCATION
AND THE WORKFORCE
U.S. HOUSE OF REPRESENTATIVES
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WASHINGTON, DC 20515–6100

May 8, 2012

The Honorable Howard "Buck" McKeon
Chairman
House Armed Services Committee
U.S. House of Representatives
Washington, DC 20515

The Honorable Adam Smith
Ranking Member
House Armed Services Committee
U.S. House of Representatives
Washington, DC 20515

Re: Worker and Nuclear Safety Protections in the Department of Energy in the FY 2013 National Defense Authorization Act (HR 4310)

Dear Chairman McKeon and Ranking Member Smith:

We are writing to advise you of our concerns that key sections of Title XXXI of the National Defense Authorization Act for FY 2013, as reported by the Strategic Forces Subcommittee, will weaken worker and nuclear safety protections for those employed at and living nearby facilities operated by the National Nuclear Security Administration (NNSA) within the U.S. Department of Energy (DOE). We urge you to delete Section 3115 and Section 3202 from the bill.

Section 3115 of this bill strips the Secretary of Energy of the authority to oversee and enforce regulations concerning health, safety, and security at NNSA facilities by directing the NNSA Administrator to prescribe its own worker and nuclear safety requirements. Worker safety standards would be limited to those issued under Section 6 of the Occupational Safety and Health Act (OSHA), and nuclear facility safety would be based on ensuring that the health and safety of the employees of NNSA and its contractors, as well as the general public, are "as low as practicable and that adequate protection is provided." According to the Defense Nuclear Facilities Safety Board, this new nuclear safety standard provides a lower level of protection than that used by the Nuclear Regulatory Commission for commercial nuclear power plants.[1]

[1] Letter to Hon Loretta Sanchez from Peter Winokur, Chair, Defense Nuclear Facilities Safety Board (May 7, 2012)

Under the bill, worker and public safety oversight would be conducted based on a "performance-based" system of governance rather than a "transactional" basis. This change represents a shift to extensive contractor self-regulation, and all but eliminates the government's role in protecting workers and the public. Such a model is recklessly inappropriate for an industry that uses ultra-hazardous materials and technologies. Experience (Three Mile Island, Bhopal, Fukushima, Upper Big Branch Mine Explosion) shows that high levels of protection are warranted for high hazard activities.

The dramatic policy shift in this bill is predicated on a National Academy of Sciences study committee report which recommended:

> "that the NNSA, Congress, and top management of the Laboratories recognize that safety and security systems at the Laboratories have been strengthened to the point where they no longer need special attention. NNSA and Laboratory management should explore ways by which the administrative, safety, and security costs can be reduced, so that they not impose an excessive burden on essential S&E activities."[2]

In reaching this conclusion, the NAS study committee did not review numerous reports issued by the Government Accountability Office (GAO), DOE's Office of the Inspector General, and the DOE Headquarters independent oversight office (IO). These reports document the safety and security failures at the laboratories, most notably at Los Alamos and Livermore. The failure of the NAS study committee to review these led to a faulty conclusion.

Also challenging the NAS recommendation are facts on the ground, reflected below in a litany of high consequence accidents and examples of mismanaged safety systems at the three national labs (Sandia, Livermore and Los Alamos) operated by NNSA. These examples are hard truths that stand directly at odds with the recommendation from this NAS report.

- **Deficient Explosives Safety Program at Sandia** – In October 2008, there was a serious accident at Sandia involving the premature ignition of a rocket motor mounted on a 10,000 foot "sled track" that seriously burned and injured a worker standing near the rocket motor. A DOE investigation found that "Sandia did not implement essential elements of its explosive safety program. Sandia failed to identify and assess explosive safety hazards, implement proper controls, train workers, and develop adequate work procedures…." Following the accident, the Lab convened an expert review board, which observed that Sandia "faces a continuing risk that employees will be injured or killed," and that Sandia "must take steps <u>now</u> to assure that work is being performed safely."

- **Lithium Fire and Explosion at Sandia --** In August 2011, there was a lithium fire and explosion in the same area of the laboratory as the sled track accident. The explosion

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[2] Managing for High-Quality Science and Engineering at the NNSA National Security Laboratories, National Academies Press, pp. 6, (February 2012)

significantly damaged the large experimental test chamber and displaced the roof and a wall of the facility. A lithium fire occurred at the same facility in 2002.

- **Beryllium Exposure to 27 Workers at Lawrence Livermore --** In November 2010, the DOE fined a contractor at Lawrence Livermore $200,000 for safety violations that resulted in 27 worker over-exposures to beryllium that occurred over a two and half year period beginning in November 2007.[3] Beryllium causes a debilitating lung disease, which has afflicted and killed hundreds of DOE workers. Despite the enforcement order and fine, a federal review in March 2011 concluded that elements of the beryllium program were still not "being effectively implemented for activities with potential for worker exposure."[4]

- **Worker Exposure to Radiation at Los Alamos** – In July 2009, workers were exposed to high levels of beta radiation, receiving dose rates of 16 to 25 rem to their hands. Radiation work planning failed to account for the extremely high beta radiation dose associated with arsenic-74 sources. According to the DOE, the Lab contractor's protective measures "were not adequate to ensure employee occupational exposure limits would not be exceeded. Further, the Lab contractor did not establish effective written authorizations or radiological work permits to monitor or reduce the dose rate or limit worker extremity exposure." The DOE cited the Lab contractor for 4 violations of the Occupational Radiation Protection rules and issued a $165,000 fine.[5]

- **Near Fatality Event at Los Alamos --** In March 2009, a Los Alamos technician received first- and second-degree burns while working on a high voltage fireset, which had the potential to result in a worker fatality. The DOE's investigation determined that LANS did not implement critical provisions of the laboratory's work management process and applicable electrical safety requirements when a high voltage electrical hazard was introduced into an otherwise non-electrical work activity. The DOE assessed the Los Alamos contractor a penalty of $131,250 for four DOE worker safety violations.

- **Pattern of Security Violations at Sandia --** An investigation by the DOE's Office of Health, Safety and Security found "an adverse trend of classified information security incidents at Sandia National Laboratories." The incidents involved employees who failed to follow security procedures in managing classified documents and computer media, or utilizing information technologies to process classified information. Sandia's contractor was assessed a penalty of $123,750 and entered into a settlement agreement to improve security performance.[6] Based on the number of classified information security incidents

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[3] http://www.hss.doe.gov/enforce/docs/consentorders/LLNL_fact_sheet.pdf
[4] http://www.hss.doe.gov/indepoversight/docs/reports/eshevals/2011/2011_LLNL_CBDPP_Effectiveness_Review_Activity_Report_March_14-25_2011(final).pdf
[5] http://www.hss.doe.gov/enforce/docs/eas/LANL_PNOV-NEA-2011-01.pdf
[6] http://www.hss.doe.gov/enforce/docs/settlement_agreements/SSA-2011-01.pdf

that have occurred to date in calendar year 2012, the trend has not improved according to the DOE.

- **Fundamental Worker Safety Program Deficiencies at the Los Alamos --** In June 2008, the DOE issued an enforcement letter to the contractor operating Los Alamos National Labs because of persistent programmatic safety violations and multiple incidents involving worker exposure to hazardous materials. The contractor said it would achieve compliance with the DOE's worker safety and health regulations by September 30, 2010. This was more than four years after the rule was promulgated and more than three years after compliance was mandated by law. Even more troubling, nearly all the requirements had been contractually applicable to Los Alamos since at least 1995.

- **Widespread Nuclear Facility Construction Flaws at NNSA's Device Assembly Facility at the Nevada National Security Site –** The DOE has cited the contractor at the Nevada Test site for deficiencies in the installation and inspection of at least 540 fire seals. These fire seals are located in the walls and fire barriers that are intended to protect the public from radiation exposure by preventing or limiting the release of radioactive material in the event of an accident at this facility which stores and processes special nuclear materials, and which could potentially hold nuclear explosive devices.

- **Toxic Chemical Exposure at Sandia** – On September 1, 2010, a Sandia subcontractor working on a sewer relining project exposed an employee to airborne styrene at a level approximately five times the Short Term Exposure Limit. This overexposure could cause short- and long-term health effects for the unprotected employee.

This partial list of issues makes it plain that the National Labs and their contactors have not yet reached the point where they can manage their own safety and security without federal oversight and enforcement. While performance based oversight might be appropriate for improving efficiency in day-to-day management, it is entirely inappropriate for the oversight of safety facilities handling ultra-hazardous substances. Transactional oversight, which involves the evaluation of contractor activities at the work, task, or facility level by federal officials, is a necessary and sound basis for the protection of workers and the public.

We are especially troubled that this legislation would actually diminish worker safety protections. Under Section 3115 of this bill, the NNSA would not be able to issue standards any more protective than those issued under Section 6 of the Occupational Safety and Health Act. To address the special radiologic, toxic chemical, explosive and beryllium hazards faced daily by workers at nuclear weapons labs, the DOE has promulgated worker health and safety regulations that are more protective than those promulgated by OSHA, as is consistent with the Congressional mandate set forth in Section 234C of the Atomic Energy Act.

For example, DOE rules require contractors to develop health and safety plans tailored to the specific hazards at a site; to provide heightened protections for exposure to beryllium; to use updated chemical exposure standards from 2005 (instead of OSHA's standards which have not been updated since 1970); to use updated industry consensus standards for fire and electrical protection; and to provide special protections for handling high explosives. DOE's rule gives workers the authority to stop work that is unsafe. Instead of protecting workers, this legislation would condemn DOE workers to outdated chemical and beryllium exposure standards, and deny them essential self-help protections.

Finally, Section 3202 significantly weakens the authority of the Defense Nuclear Facilities Safety Board, which provides the *only* truly independent nuclear safety oversight, given that the Nuclear Regulatory Commission lacks licensing authority over the national labs and almost all other DOE facilities.

In conclusion, we urge you to delete Sections 3115 and 3202 during markup.

Sincerely,

GEORGE MILLER
Senior Democratic Member

LYNN WOOLSEY
Ranking Member
Subcommittee on Workforce Protections

Cc: Hon. Michael Turner, Chairman, Subcommittee on Strategic Forces
Hon. Loretta Sanchez, Ranking Member, Subcommittee on Strategic Forces