



New Nuclear Partnership Will Reduce Proliferation Risks

Backed by \$250 million in the Department of Energy’s fiscal year 2007 budget request, the Global Nuclear Energy Partnership (GNEP) was recently announced as a comprehensive strategy to increase U.S. and global energy security, encourage clean development around the world, reduce the risk of nuclear proliferation, and improve the environment.

At the heart of GNEP is the belief that energy development and security goals must go hand-in-hand. GNEP limits the proliferation risks of nuclear energy by focusing on the development of proliferation-resistant nuclear technology, a new fuel service regime, and international safeguards.

Specifically, new proliferation-resistant recycling technologies would be developed under GNEP to recover more energy and

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GATLING DEFENSE: NNSA Administrator Linton F. Brooks meets with Bay Area news media in California to unveil a new security asset at Lawrence Livermore National Laboratory. The Dillon Aero Gatling gun is a state-of-the-art defensive weapon with a fire rate of up to 4,000 rounds per minute. The weapon eventually will become the standard for security operations throughout the DOE/NNSA complex. See pages four and five for more photos of recent NNSA site visits conducted by Brooks.

NNSA Administrator Outlines Focus For 2006 And Beyond

In talks to federal and contractor employees throughout the nuclear weapons complex, NNSA Administrator Linton F. Brooks has outlined several goals and areas of focus for the final three years of the current Administration.

In the spirit of continuous improvement, “of moving us more toward the NNSA of the future,” Brooks said his goals include making NNSA a better, safer and more secure place to work, and transforming the nuclear weapons stockpile to be more responsive and reliable.

Saying it is the “the biggest remaining prerequisite” for moving NNSA forward, Brooks said he wants to make the concept of “employer of choice” a reality for NNSA employees. He wants to see streamlined hiring become a routine reality and he wants a meaningful career development program to be in place. Most importantly, as the NNSA workforce begins to retire, Brooks would like to create an environment for employees that will sustain excellence, encourage innovation and foster dedication.

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New Nuclear Partnership

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reduce waste. To minimize proliferation concerns, the U.S. will work to develop commercial recycling technologies that do not produce separated plutonium.

A fuel service program would be established to enable nations to benefit from nuclear energy without having to develop the full fuel cycle. Under this cradle-to-grave spent fuel-leasing program, a consortium of nations will ensure that countries that agree to forgo their own investments in enrichment and reprocessing technologies will have reliable access to nuclear fuel at a reasonable cost. The spent fuel would then be returned to the supplier countries for safe recycling and possibly disposition.

"GNEP reduces the ability of states to develop a non-peaceful nuclear program under the guise of commercial or non-military infrastructures. Nations that seek clean energy can have access to it; those who want to acquire nuclear technology to make war will be excluded and spotlighted. GNEP will ensure that nuclear material will be secure and that byproducts from the power generation process is managed safely and responsibly," said NNSA Principal Deputy Administrator Jerry Paul.

GNEP will make it more difficult to divert nuclear material without detection. As a part of the global expansion of nuclear energy, GNEP will develop advanced safeguards technology and an international safeguards program. In order for the IAEA to effectively monitor and verify nuclear materials, GNEP will include advanced safeguards into its designs for systems and fuel cycle facilities.

"Without GNEP, there will likely be more uranium enrichment facilities, more separated plutonium around the world, more spent fuel with decaying barriers of protection, and potentially more nations with elements of the nuclear fuel cycle. GNEP will allow the international community to limit proliferation and ensure that civilian nuclear facilities are used for only peaceful purposes," said Paul.

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Jerry Paul, NNSA Principal Deputy Administrator

NNSA Administrator Outlines Focus For 2006

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Solidifying the transformation of the stockpile and the infrastructure is another goal for Brooks. By 2009, he would like to see universal acceptance of a smaller, transformed stockpile built around the Reliable Replacement Warhead concept, buttressed by a responsive infrastructure that has begun to show accomplishments. The goal is for a "responsive infrastructure" to have to a similar acceptance in the intelligence and military communities as Stockpile Stewardship currently enjoys.

By 2009, all three laboratories should be on award term contracts with a maximum term of 20 years with comparable annual

evaluations. Therefore, Brooks would like to work on developing a 21st century-type relationship between NNSA and the weapons laboratories. Although they are ultimately "weapons" laboratories, each lab should be prepared for the continued growth in non-weapons related work, he said.

There will be significant nonproliferation accomplishments for this administration over the next several years, Brooks said. He would like to solidify and build on those successes.

Achievements by 2009 should include completing and sustaining all material security improvements in Russia; ending plutonium production at two of the three production reactors and being on track to ending production at the final reactor by the end of 2010; having a deepened security

cooperation under the Bratislava process and expanding it beyond Rosatom; and having ongoing security dialogues resulting in improved material security with France, Belgium and Japan.

Brooks would like to see NNSA's improved approach to the oversight of both security and nuclear safety to be implemented in the coming years and instill security oversight through the greater use of technology.

He said he wants to revitalize a vision from 2002 for shifting workloads from Site Offices onto contractors. This shift has not been as successful as envisioned, and Brooks would like to take time this year to correct the certification of non-nuclear safety and business processes.

Los Alamos Plutonium Test Facility To Be Replaced

One of the oldest and largest buildings at Los Alamos National Laboratory (LANL), the 550,000-square-foot Chemistry and Metallurgy Research (CMR) facility, will be replaced as a part of NNSA's nuclear facility consolidation effort. New Mexico Senator Pete Domenici, NNSA Deputy Administrator for Defense Programs Thomas D'Agostino, and other dignitaries were on hand recently to break ground for the initial phase of the project.

The CMR, which primarily supports NNSA's Defense Programs activities, was built in 1952 and is used to test and analyze plutonium and other nuclear materials. "The existing lab is long past its prime and it is high time to replace it with a first class facility from science to safety," said Senator Domenici.

Replacing the existing CMR facility will reduce operating and security costs, improve recruitment by providing state-of-the-art infrastructure and workspace, and help to ensure compliance with current environmental, safety and health requirements.

The project will provide the

responsive infrastructure for NNSA and LANL to continue nuclear program mission capabilities including plutonium pit manufacturing and surveillance, milliwatt RTG surveillance, retired stockpile component processing, above-ground sub-critical experiments, special nuclear

material readiness, advanced design/production technologies, dynamic materials properties, material certification in a hostile environment, special nuclear material storage, pit disassembly, arms control and nonproliferation, and advanced nuclear fuels.



OUT WITH THE OLD: The replacement of a 1950s era Los Alamos National Laboratory building used to test and analyze plutonium and other nuclear materials is initiated during a groundbreaking ceremony at Los Alamos. Pictured left to right at the Chemistry and Metallurgy Research Building Replacement Project ceremony are: Joel Leeman, LANL, Weapons Infrastructure Program director; Tim Nelson, LANL, CMRR Project director; Thomas D'Agostino, NNSA, deputy administrator for Defense Programs; Robert Kuckuck, LANL, laboratory director; The Honorable Pete Domenici, U.S. Senate (R-NM); David Beck, LANL, acting associate director for Weapons and Manufacturing Directorate; and Donald Cobb, LANL, acting deputy laboratory director.

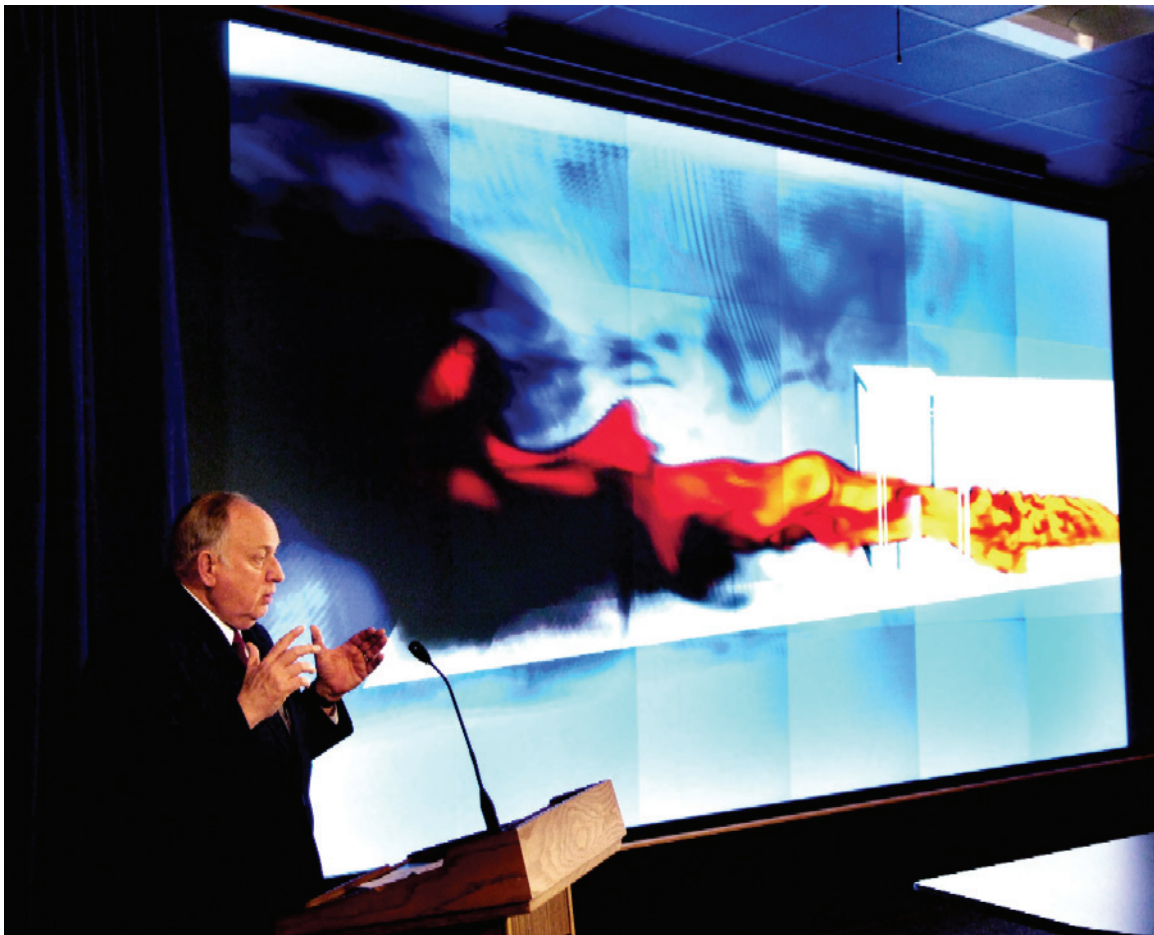
NNSA Agrees To Work With Georgia And Azerbaijan To Counter Nuclear And Radioactive Material Smuggling

As part of the overall U.S. nuclear security effort to counter the proliferation of weapons materials, agreements have been signed with the governments of Georgia and Azerbaijan to install radiation detection and integrated communications equipment at multiple border crossings, airports and seaports throughout the two nations. The work will be carried out by NNSA's Second Line of Defense (SLD) Program.

"Improving security on all fronts, including stopping the smuggling of nuclear and other radioactive material, is a critical part of the Bush administration's efforts in the global war on terrorism. It is through agreements with willing partners, like Georgia and Azerbaijan, that we will be able to keep nuclear weapons beyond the reach of terrorists," said NNSA Principal Deputy Administrator Jerry Paul.

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Brooks Visits Labs And Plants, Talks About The Future



RED STORM: Administrator Brooks talks to Albuquerque, N.M. news media about the accomplishments of the Sandia National Laboratories Red Storm supercomputer. In the background is a simulation created on Red Storm.

Brooks Plans Additional Visits

NNSA Administrator Brooks plans a second phase of site visits in the near future to meet with federal and contractor staffs at the Nevada Test Site, the Y-12 National Security Complex and the Savannah River Site.

“By 2009, we want universal acceptance of a smaller, transformed stockpile built around the Reliable Replacement Warhead concept.

Linton F. Brooks



NOT AN APPLE IPOD:
Administrator Brooks praised Pantex when he spoke during the site's Integrated Plan of the Day (IPOD) meeting. The IPOD lays out the schedule and status for all weapons programs in production, and guides the daily activities required to meet BWXT Pantex's deliverables and NNSA's expectations.

NNSA OF THE FUTURE:
At the Kansas City Plant Brooks met with employees and hosted an informal news conference at which he said the development of the Reliable Replacement Warhead would rely on the manufacturing expertise at the Kansas City Plant.



FINE FELLOWS:
Bob Little of the Los Alamos Material Science organization receives the 2005 Laboratory Fellows' Prize for Leadership from Administrator Brooks. Other recipients were Neil Harrison and Robert Roussel-Dupré of Atmospheric, Climate and Environmental Dynamics, and Rick Luce of the Research Library for Outstanding Research. All four staff members received a plaque and check for \$3,000.



A Soldier's Thanks

Y-12 National Security Complex employee Monty Fritts recently returned from Iraq following a deployment with the Tennessee Army National Guard's 278th Regimental Combat Team. The following are excerpts from a note



NEW FRIENDS: Monty Fritts befriends a young Iraqi girl who works in a brick factory. The soldiers provided the Iraqi children gifts such as soccer balls, stuffed animals and dolls.

Fritts wrote to fellow employees that was posted on the Y-12 Intranet:

“As I consider the events of the last two years, one word comes to mind. Thanks. Thanks to my work family for your endless acts of kindness — your thoughtfulness to my family will always be remembered... The confidence you helped to build really made my tour of duty easier. Again, I thank God for your presence in my life.

“I can without regret say that I have seen the results of tyranny in Iraq. The results of a brutal dictator who oppressed his country beyond most of our understanding were evidenced by small children who seemed to lack any hope. Many of these children clung to whatever ‘support’ system they had been afforded. These children looked optimistically to the U.S. forces for strength... I am further convinced that God grants strength to some for the protection of, or possible liberation of, the small, the weak and the oppressed.

“I am grateful for the opportunity I had in Iraq and for Y12 helping me to realize that opportunity. Many others in the Y12 family put their lives on hold to serve, and I appreciate them. Men like Dwayne Beatty, Kerry Templin and Toby Williams honorably served their nation. To them and others like them, I say thanks.”

D'Agostino To Lead NNSA's Defense Programs

Charged with keeping the U.S. nuclear weapons stockpile safe, secure and reliable, Tom D'Agostino was tapped to be NNSA's deputy administrator for Defense Programs.

“Tom D'Agostino's highly valued experience and leadership will be critical assets as we continue to transform our nuclear weapons stockpile and respond to our national security needs,” said Secretary Bodman, who administered the oath of office.

D'Agostino's main priorities will include reducing the U.S. nuclear weapons stockpile, and transforming our nuclear weapons complex to a more responsive infrastructure.

“It is an honor to have been selected for this position. I look forward to working with the NNSA employees to transform the nation's nuclear weapons stockpile and develop a more modernized, cost-effective, and safe and secure future for the nuclear weapons program,” said D'Agostino.

President Bush nominated D'Agostino on January 27 and the U.S. Senate confirmed him on February 17. He previously served in NNSA's Defense Programs office as the assistant deputy administrator for Program Integration. He has more than 29 years of military service in the United States Navy and is currently a captain in the U.S. Naval Reserves.



SENATE HEARING: At his U.S. Senate confirmation hearing, Tom D'Agostino responds to questions from Senators.

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Got an article for the NNSA Newsletter? Submit it for consideration to astotts@doeal.gov

Contract Competition For Livermore Lab Begins

NNSA has begun the process to put the management and operating contract for Lawrence Livermore National Laboratory (LLNL) up for competition. This is the first time since LLNL's creation in 1952 that the contract to run the lab has been open to competitive bids.

Parties interested in competing for the contract submitted an Expression of Interest describing their capabilities. NNSA is preparing a Request for Proposal (RFP), including the draft contract terms and conditions, that is tentatively scheduled for release during the summer of 2006.

A website, www.doeal.gov/llnl/Competition, has been established for the dissemination of all information related to the competition, including all notices, changes, questions and answers, and the forthcoming RFP. To receive notice whenever the website is updated, please visit the website to subscribe.

Any amendments to the RFP or other pertinent information relating to the acquisition will also be available on the website. Additionally, NNSA will

share draft sections of the RFP for public comment as the sections become available.

Draft versions of the RFP will be shared for public comment as they become available to help streamline the procurement process and initiate industry comments and recommendations.

LLNL is currently operated by the University of California. It is one of the premier applied science research and development institutions in the world. By using science and technology, LLNL is responsible for ensuring that our nations nuclear weapons remain safe, secure and reliable. LLNL also plays a role in our nations security through its work in defense technologies, nonproliferation and homeland security, energy, environment, biosciences and biotechnology, and basic science. LLNL has approximately 8,000 employees and provides work for approximately 600 subcontractor personnel. About one-third of the lab's technical staff members are scientists, engineers and technicians. Its current annual budget is approximately \$1.6 billion.

Los Alamos Lab Begins Transition To New Leadership

June 1 is the date for Los Alamos National Security (LANS) LLC to assume full control of the management and operating contract for Los Alamos National Laboratory in New Mexico. LANS, whose selection was announced in December, is a limited liability corporation made up of Bechtel National, Inc., the University of California, BWX Technologies, Inc., and the Washington Group International, Inc.

Bechtel is the largest project management contractor in the United States. The University of California is the world's largest academic research institution. BWX Technologies and Washington Group International are the top two DOE nuclear facilities contractors and between them manage and operate four of DOE's five safest sites. The team also includes the Advanced Studies Institute at Los Alamos National Laboratory; and a consortium of the University of New Mexico, New Mexico State University, and the New Mexico Institute of Mining and Technology.

"Our team has been preparing for months to assume this tremendous responsibility and provide as smooth a transition as possible for the employees, their families, and the community," said LANS President Michael Anastasio.

Secretary of Energy Samuel Bodman announced the selection to lab and site office employees December 21 via satellite. The contract is for \$512 million over seven years, up to an additional 13 years can be earned through successful performance. "This is a new contract with a new team, marking a new approach to the management of Los Alamos. It is not a continuation of the previous contract," Bodman said at a news conference in Washington.

"This contract marks a new approach to management at Los Alamos, one that will benefit the national security of the United States through superb science," Bodman said. "As this decision benefits the country and the laboratory itself, it will also benefit the greater Los Alamos community and state of New Mexico since it will guarantee the lab will continue its role as an anchor of America's scientific and national defense efforts. I look forward to a new era of invaluable, cutting-edge science at Los Alamos."

"This is a new contract with a new team, marking a new approach to the management of Los Alamos"
DOE Secretary Samuel Bodman



AERIAL VIEW: Site preparation activities for the new Mixed-Oxide (MOX) Fuel Fabrication Facility at the Savannah River Site are progressing and construction is planned to begin in 2006. The facility is part of program to dispose of surplus U.S. weapon-grade plutonium by irradiating it as MOX fuel in commercial reactors so that it cannot be used for weapons. When operations of the facility begin, it is expected to employ approximately 400 people per year.

NNSA Works To Stop Nuclear And Radioactive Material Smuggling

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Second Line of Defense is a worldwide program that uses detection and deterrence to minimize the risk of nuclear proliferation, illegal trafficking and terrorism. It works by installing radiation detection equipment and training personnel at strategic international border locations. Agreements have been signed or are being negotiated with other nations, including countries in the former Soviet Union and Eastern Europe.

Recently, there have also been agreements signed with a number of countries under SLD's Megaports Initiative, which provide similar equipment and training to detect nuclear and radiological materials at key seaports around the world. Megaports partnerships exist with the Netherlands and Greece along with an additional twelve countries in Europe, Asia, the Middle East and the Caribbean. Discussions with other countries are currently underway.

220 Radioactive Sources Removed From Georgia School

NNSA recently removed and secured 68,000 curies of radioactive cobalt-60 from the Neally Nuclear Research Center at the Georgia Institute of Technology campus in downtown Atlanta, Ga.

The 220 sealed sources of cobalt-60 were recovered in three separate loads by the Los Alamos National Laboratory (LANL) for NNSA's Global Threat Reduction Initiative (GTRI) program and sent to the Nevada Test Site for permanent disposal. The material had been used by the school for research in the fields of materials science, genetics, radiation shielding, and biological materials processing, and was housed in a 15-foot deep pool that provided shielding. Lawrence Livermore National Laboratory also provided support for the operation.

NNSA Administrator Linton F. Brooks commended the operation, saying it was important to keep dirty bomb material safe and secure from terrorists. "It is critical to our national security efforts that excess and unwanted radiological sources be disposed of in a responsible manner. Together, NNSA and two of our national laboratories have safely disposed of material from Georgia Tech that could have been used for dirty bombs," he said.

One of NNSA's top priorities is removing and securing materials that pose a safety hazard and national security risk. To date, NNSA has recovered almost 12,000 radiation sources and placed them in safe and secure storage away from the public and environmentally sensitive areas. The effort is managed by the LANL Nuclear Nonproliferation Division.

LANL supports the GTRI program by assisting in the recovery and disposition of excess, unwanted, and/or abandoned radioactive sealed sources and other radioactive material. Sources containing radioactive plutonium, americium, cesium, cobalt and strontium have been recovered from medical, agricultural, research and industrial locations throughout the nation.