DOE This Month

U.S. DEPARTMENT OF ENERGY

JULY 2002

Secretary Abraham visits Brookhaven National Laboratory

Policy reforms will strengthen science, security

DOE, USEC sign uranium enrichment agreement

General Gordon joining National Security Council

DOE This Month

U.S. Department of Energy

Published monthly in Washington, D.C., by the Department of Energy, Office of Public Affairs, for the information of Department employees and affiliates and available to others by paid subscription.

The Secretary of Energy has determined that this periodical is necessary in the transaction of public business as required by law. Use of funds for printing has been approved by the director of the Office of Management and Budget. The content is reprintable without permission and pictures are available for media reproduction upon request.

Spencer Abraham
Secretary of Energy

Jeanne Lopatto
Director, Office of Public Affairs

Bonnie Winsett
Editor

Visual Media Group
Graphic Design

SUBSCRIPTION price for 12 issues is $22 ($27.50 foreign). Send check, or provide VISA or Mastercard number and expiration date, to: Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Credit-card orders can be called in 8 a.m.-4 p.m. ET, 202-512-1800, or faxed to 202-512-2250. Cite "DOE This Month (EINS)."

Circulation Office: 202-586-2050

News Office:
DOE This Month
Office of Public Affairs - PA-40
U.S. Department of Energy
Washington, DC 20585

Internet Mail Address:
doe.thismonth@hq.doe.gov

HQ cc:mail:
THISMONTH,DOE

Deadline for submissions: 15th of every month for the following month.

DOE PA-0025-7
Vol. 25, No. 7

DOE This Month is printed on paper containing at least 50 percent recycled materials.

Inside

On our cover

On June 14, 2002, Secretary of Energy Spencer Abraham visited the Department of Energy's Brookhaven National Laboratory (BNL) in New York. Following a tour of laboratory facilities, Secretary Abraham met with employees where he announced the Department's plans to proceed with a center for nanoscale science research at BNL.

The Brookhaven Center for Functional Nanomaterials is one of five state-of-the-art science research centers the Department is proposing to synthesize, process, and fabricate nanoscale materials. During his tour of Brookhaven Lab, Secretary Abraham discusses the Brookhaven Nanocenter with Peter Paul, BNL Interim Laboratory Director (center), and Richard Osgood, Associate Laboratory Director for Basic Energy Sciences (right).

For more on the Brookhaven Nanocenter, see page 4.

U.S., Morocco create energy training program

On June 3, 2002, U.S. Secretary of Energy Spencer Abraham and Moroccan Energy Minister Mustapha Mansouri signed an International Accreditation for the Renewable Energy Development Center of Morocco. Under the agreement, the Center will expand existing training in renewable energy technologies for Moroccans and other African post-baccalaureate students with the goal of expanding and improving upon Africa's energy research and development programs.

"The Renewable Energy Development Center of Morocco is highly respected in the field of energy research and provides techniques and avenues for improvements to the African energy industry," Secretary Abraham said. "Today's agreement means that it will also continue to provide significant educational experiences and opportunities to the men and women of Saharan and sub-Saharan Africa as well."

On the U.S. side, the Department of Energy's National Renewable Energy Laboratory will expand its existing cooperative efforts with the Moroccan Ministry of Energy to include the new training program. The agreement also outlines opportunities for a major expansion of renewable energy programs in Morocco.

The agreement signing was the first public event associated with the third U.S.-African Energy Ministerial Conference held in Casablanca, Morocco, June 4, 2002. Secretary Abraham was co-host of the "Casablanca Conference" and delivered the keynote speech and remarks at the closing plenary session. His keynote remarks are available at **http://www.energy.gov/HQDocs/speeches/2002/junss/USAfricaEnergyMinisterialMeeting.html**.

Approximately 300 representatives from energy ministries, international organizations, non-governmental organizations, and the private sector were in attendance. The conference provided the U.S. and African nations the opportunity to build upon the achievements of the previous conferences, including a focus on development of the energy sector in African economies and support of accessible, environmentally safe, and affordable energy supplies in Africa. The United States hosted the first U.S.-Africa Energy Ministers Conference in Tucson, Ariz., in 1999; and South Africa hosted the second Ministerial Conference in Durban in 2000.

Following the conference, Secretary Abraham traveled to Algeria, where he met with President Abdelaziz Bouteflika and Energy Minister Chakib Khelil to discuss further developing economic and commercial relations, especially in key energy fields. Secretary Abraham also stopped in London, England, for meetings with British officials on energy matters, nonproliferation, and materials security. ❖

Policy reforms will strengthen science, security

Secretary of Energy Spencer Abraham announced on June 20, 2002, a number of security policy reforms he asked Under Secretaries John Gordon and Robert Card to implement throughout the Department of Energy (DOE) and its laboratory complex. The announcement coincided with the Department's release of a report by the Center for Strategic and International Studies (CSIS) Commission on Science and Security.

The report, commissioned by DOE, follows 18 months of study by a panel chaired by John Hamre, CSIS President and CEO. The study reviewed the intersection of the Department's security, counterintelligence, and science programs to identify areas for improvement.

"Soon after I arrived at the Department of Energy, I met with Dr. Hamre about the work of the Commission and I urged him to reject the notion that science and security are necessarily conflicting goals," Secretary Abraham said. "I believed then, and believe now, that to achieve our mission we need to demonstrate excellence in the performance of both science and security."

As the Commission conducted the review, it also advised DOE of its initial findings. The Department has begun to implement 39 of the 45 Commission recommendations, including those involving integration of safeguards and security management across the Department, better coordination of science and counterintelligence programs and activities, and continued implementation of a new Departmental integrated, multi-year budget process. Other recommendations track with changes or reforms already underway, and a few recommendations will be reviewed in greater detail in the coming weeks.

Changes already in progress include improving cooperation between counterintelligence officers and scientists on Cooperative Research and Development Agreements, revising the Foreign Visits and Assignments Policy, and streamlining policies for sensitive unclassified information. The Department also has been active in the area of new security tools and techniques and cyber security.

"For the last 18 months, we have worked to improve and strengthen security throughout our laboratory system," Secretary Abraham said. "I am pleased that the CSIS report validates the approach we were taking in many areas."

A copy of the report's executive summary is available at **http://www.csis.org**; the full report is available from CSIS at 202-887-0200. A fact sheet summarizing the Commission's recommendations and the Department's actions or planned actions is available at **http://www.energy.gov/HQPress/releases02/junpr/pr02116.htm**. ❖

Nanoscience center planned for Brookhaven

The Department of Energy (DOE) plans to proceed with a center for nanoscale science research at its Brookhaven National Laboratory (BNL) in New York. The announcement was made June 14, 2002, by Secretary of Energy Spencer Abraham at a meeting with laboratory employees following a tour of BNL facilities.

"Nanoscale holds the potential for a veritable second industrial revolution," Secretary Abraham said. "Possible applications range from microscopic chemical factories to electronic devices that first assemble themselves and then repair themselves!"

Nanomaterials—typically on the scale of billionths of a meter or 1,000 times smaller than a human hair—offer different chemical and physical properties than bulk materials and have the potential to form the basis of new technologies. Understanding these properties may allow researchers to design materials tailored to specific needs such as strong, lightweight materials, new lubricants, and more efficient solar energy cells.

Currently, DOE has facilities capable of characterizing and analyzing nanoscale materials. The Brookhaven Center for Functional Nanomaterials is one of five state-of-the-art science research centers the Department is proposing to synthesize, process, and fabricate nanoscale materials. The centers are part of the Department's contribution to the National Nanotechnology Initiative.

The Brookhaven Nanocenter will be a user facility open to researchers outside BNL on a peer-review basis. It will include a laboratory and office building with clean rooms, nanofabrication facilities, and scientific equipment; an expanded electron microscopy facility; ultrafast laser sources; and powerful probes to directly image atomic and molecular structure. The center will focus on six areas:

- examining changes in the electronic response of metal oxides with nanoscale dimensions;
- probing magnetic interactions in nanomaterials;
- studying new ways to form nanocatalysts;
- understanding electronic conduction in molecular wires;
- studying the self-assembly of thin organic films; and
- building new devices and biological assemblies, such as nanoscale electronic devices, ultrathin-film optical devices, and advanced fuel cell catalysts.

DOE's Office of Science will begin preparing the Brookhaven Nanocenter's conceptual design report to request construction funding from Congress. The preliminary cost range for the project is $70-85 million. Engineering design, construction, and commissioning are estimated to take four years and could begin in Fiscal Year 2004. ❖

Agreement ensures future domestic uranium enrichment capacity

On June 17, 2002, the Department of Energy (DOE) and the United States Enrichment Corporation (USEC) signed an agreement to ensure America's domestic uranium enrichment capacity is maintained and that enriched uranium from dismantled nuclear weapons in Russia will be delivered to the U.S. "With this agreement, America accomplishes two very important goals: ensuring our domestic capacity to produce fuel for our commercial nuclear reactors and meeting important nuclear nonproliferation goals by accepting enriched uranium from Russia," Secretary of Energy Spencer Abraham said.

In May, Secretary Abraham and Russian Minister of Atomic Energy Alexander Rumyantsev worked out an agreement to accomplish nonproliferation work in Russia a full two years ahead of schedule. "Our strong cooperation with Russia will help ensure that the important goals of protecting the world from the proliferation of nuclear materials continues," Secretary Abraham said.

The agreement with USEC establishes future development viability and opportunity for the Department's gaseous diffusion plants in Paducah, Ky., and near Portsmouth, Ohio. This includes consideration as candidate sites for new technology enrichment capabilities as USEC must maintain its leased facilities in a manner to allow for their potential future use. "Not only is this agreement a win for national security, but it is also a win for the communities in Ohio and Kentucky that have provided a great service to the nation and a win to secure the future for domestic uranium enrichment," Secretary Abraham said.

Specific points in the agreement include:

- USEC is required to take delivery of Russian weapons-derived uranium.
- USEC will deploy a new advanced technology enrichment plant at Portsmouth (by 2010) or Paducah (by 2011).
- USEC must maintain production of enriched uranium at the Paducah Gaseous Diffusion Plant at a level of 3.5 million separative work units (SWU), which can be reduced only after USEC is within six months of completing deployment of new enrichment technology with a productive capacity of 3.5 million SWU.
- USEC will continue operating the Shipping and Transfer Facility at Portsmouth for an additional 15 months to remove technetium from a portion of the uranium inventory, saving over half the jobs that could have been lost under USEC's corporate downsizing announced earlier. ❖

Under Secretary for Energy, Science and Environment Robert Card receives a briefing on the National Spherical Torus Experiment (NSTX) during a tour of the Department of Energy's Princeton Plasma Physics Laboratory (PPPL) on June 6, 2002. Under Secretary Card was at PPPL for the laboratory's 50th anniversary celebration and reception, which was held in conjunction with "A Celebration of High Temperature Plasma Physics," an anniversary conference honoring 50 years of scientific achievement. From left-right are Rich Hawryluk, Deputy Director, PPPL; Masa Ono, NSTX Project Director; Under Secretary Card; Craig Reed, Executive Director, Secretary of Energy Advisory Board; James Decker, Principal Deputy Director, DOE Office of Science; and Rob Goldston, Director, PPPL. ❖

Awards recognize human resources efforts

The Department of Energy's (DOE) Oak Ridge Operations Office recently hosted the annual DOE Human Resources Forum, held in Nashville, Tenn. Tim Dirks, Director, Office of Human Resources Management, DOE Headquarters, presented several awards recognizing the efforts of the Department's human resources staff and organizations.

Christine A. Phoebe, Assistant Manager for the Office of Management and Administration, Golden Field Office, received this year's Career Achievement in Human Resources (CAHR) Award. Phoebe was recognized for her continuous, ongoing support and leadership of DOE human capital management initiatives.

The annual HEROS Award (recently renamed the Heroic Efforts in Reshaping and Restructuring Organizational Workforce Strategies and Systems in Human Resources) recognizes initiatives that address workforce planning and reshaping, succession planning, skills rebuilding, and/or increased use of flexibilities to recruit, retain, develop, and retrain talent and leadership. The 2002 winners, selected from the human resources community across the DOE complex, are:

- **Ann Capps** and **Marie Tucker**, **Corporate Human Resources Office**, **Western Area Power Administration**, for designing and managing the Western Management Succession Program, a voluntary self-directed three-year developmental program open to current managers, supervisors and team leaders.
- **Julie Harris Betz**, **Human Resources Services**, **Chicago Operations Office**, for creating a new methodology and crediting plan, recently adopted by the Office of Personnel Management (OPM), using OPM's executive core qualifications for a more flexible approach in assessing Senior Executive Service candidates.

Christine Phoebe, Golden Field Office, receives the CAHR Award from Tim Dirks, Director, Office of Human Resources Management, DOE Headquarters.

- **Personnel and Management Analysis Branch**, **Human Resources Division**, **Oak Ridge Operations Office**, for its use of electronic technologies in support of a diverse, well-trained, highly qualified, and motivated workforce.
- **Bonneville Power Administration** for its commitment to human capital management and employee development and for applying innovative and creative solutions to human resources development and planning.

John Rodney Clark, Associate Director, Office of Resources Management, Office of Science, and **Kenneth W. Briggs**, Assistant Manager for Human Resources, Ohio Field Office, were presented the Special Employment Entrepreneur Award. Clark was particularly recognized for his personal leadership in mentoring students and developing proactive funding strategies, and Briggs, for his efforts in the area of disability employment. **Michael H. Kleinrock**, Director of Resource Management, Office of Environmental Management, received the Human Capital Vanguard Award in recognition of his recent work in human capital strategy development and implementation. ❖

Massive Oak Ridge cleanup project more than halfway complete

The cleanup of three former Department of Energy uranium enrichment facilities in Oak Ridge, Tenn., is well on its way toward completion. In August 1997 the Department contracted with BNFL Inc., to decontaminate and decommission three large processing buildings at the former Oak Ridge Gaseous Diffusion Plant. Cleanup and removal of process equipment and millions of pounds of metals have been completed in the K-33 building. With this achievement, the project is about 61 percent complete.

At the peak of its material removal work in K-33, about 900 BNFL workers were clearing out 6,000 square feet of space a day and two million pounds of material a week—equivalent to an eight story steel structure one city-block square. To date, 72,000 tons of material have been cleared from the site. "When we first started on this building, there were 636 massive converters housed on the main floor of this building," said John Christian, BNFL Vice President. "Each of these weighed 36 tons a piece. We've disassembled all 636 to date, at a rate of one and a half per day, working 7-day, 24-hour schedules."

To handle all the giant pieces of materials, BNFL brought in a supercompactor to the site last summer. Powered by 2,200 tons of hydraulic force, the supercompactor processes up to 58 tons of metal per hour. It can take items that are up to 26 feet long, 14 feet wide, and 6 feet high and compact them into material that is less than 10 inches thick in any one dimension, dramatically reducing the volume of scrap metals and other wastes.

The biggest safety issue in work of this magnitude is not from contamination, but from the cutting, lifting, and removal of the heavy equipment. "This is a huge radioactive building decommissioning site, probably the largest in the world," Christian said. "Anytime you're dealing with heavy equipment, there are risks involved and BNFL takes that very seriously. We're proud to have one of the best safety performance records in the industry." BNFL achieved one million work hours without a lost-time accident in May 2000 and is quickly approaching another 500,000 hours. ❖

The BNFL supercompactor, capable of crushing 1.5 million pounds of material per week, is a key component of the decontamination and decommissioning work of the K-33, K-3l, and K-29 Buildings at the Department's Oak Ridge Site.

Secretary issues Hispanic employment policy

In a June 26, 2002, memorandum to Department of Energy (DOE) employees, Secretary of Energy Spencer Abraham stated his policy in furtherance of the objectives of Executive Order 13171, "Hispanic Employment in the Federal Government, " and President Bush's Management Agenda.

"...Our Department should serve as a model of Federal recruitment, retention and development for all individuals, including those of Hispanic heritage," Secretary Abraham said. "...We can and should do whatever we can to make sure that we are not imposing artificial barriers to the recruitment or hiring of Hispanic-heritage Americans and that we are reaching out appropriately in our recruitment and hiring efforts. The Department's ability to attract and retain a highly talented workforce from all backgrounds and walks of life is critical to our ability to successfully carry out the Nation's energy security and defense missions, now and in the future.

"Therefore, I have asked the Directors of the Office of Management, Budget and Evaluation, and the Office of Economic Impact and Diversity to prepare a Departmentwide plan that seeks to identify the reasons Hispanics are not represented in the DOE workforce in proportion to their numbers in the civilian workforce, and that proposes methods of breaking down any artificial barriers to the recruitment and hiring of Hispanic-heritage Americans. I have also asked the cognizant DOE office directors to meet with the Department's management and operating contractors to encourage them to embrace a similar effort for their own workforces.

"I am committed to fostering a diverse and inclusive workforce that allows each and every individual an opportunity to contribute to the Department of Energy's mission, and to fully achieve his or her potential." ❖

Gordon joining National Security Council

General John A. Gordon, USAF (Ret.), Under Secretary for Nuclear Security and Administrator, National Nuclear Security Administration (NNSA), is leaving the Department of Energy to join the National Security Council. General Gordon will replace General Wayne A. Downing, U.S. Army (Ret.), who resigned his position as Deputy Assistant to the President, National Director and Deputy National Security Advisor for Combating Terrorism.

"John Gordon brought leadership and a strong sense of purpose to the National Nuclear Security Administration," Secretary of Energy Spencer Abraham said. "He launched an ambitious effort to revitalize the nuclear weapons complex and its infrastructure after a decade of decline. He has also ensured that the nation's nuclear weapons stockpile is safe and secure, that our nonproliferation programs are effective, and that we are continuing to meet the nuclear propulsion needs of the U.S. Navy.

"We have been able to get our national security programs back on track with a renewed focus and mission as a result of his dedication and hard work. While we are sorry to lose John, the President has made an excellent choice and John leaves the NNSA on firm footing to continue to perform its vital missions." ❖

Record number attends nuclear materials system users meeting

The Annual Nuclear Materials Management and Safeguards System (NMMSS) Users Meeting was held in Atlanta, Ga., May 7-9, 2002. A record high of 140 participants, representing 29 states, registered to attend the meeting.

NMMSS has been the U.S. Government's official computerized accounting system used to track the possession, use, and shipment of nuclear materials, both foreign and domestic, since 1964. The system is jointly funded by the Department of Energy (DOE) and the Nuclear Regulatory Commission (NRC) as that agency licenses private facilities' possession and use of nuclear materials. Paper records were kept prior to 1964, and historic data in the system goes back to 1950. Today, there are 1,130 facilities, both DOE facilities and NRC licensees, that are active in NMMSS reporting.

Interest in this year's meeting was particularly high because NMMSS is in the final stage of its first full-scale upgrade since 1995, when it was moved from a mainframe located at the Department's Oak Ridge Operations Office onto a client server system. The system has been operated for the Government since that time by NAC International, Inc., Norcross, Ga. The current upgrade is a full-scale redesign that includes incorporating forward-thinking capabilities that will position DOE to better manage and track valuable nuclear materials assets.

The upgrade will include a new Foreign Obligations module to better track the import and export of obligated nuclear materials covered under agreements and treaties between the United States and foreign trading partners. Training in the operation of this module was a major feature on the meeting agenda.

The NMMSS is under the direction of David W. Crawford, Director, Office of Plutonium, Uranium, and Special Materials Inventory, Office of Security (SO-62). Questions about the annual users meeting may be directed to Susanne Furr, SO-62, 301-903-5750. ❖

Future Car Congress attracts crowd

More than 800 people from the transportation and related industries attended the 2002 Future Car Congress, June 3-6, 2002, in Arlington, Va. The conference was sponsored by the Department of Energy and the U.S. Council for Automotive Research, and was administered by the Society of Automotive Engineers International and The Engineering Society. The Department's Oak Ridge National Laboratory worked on planning and implementation of the conference.

The four-day conference addressed issues involved in the development of automotive technologies aimed at dramatically reducing the world's transportation energy consumption and minimizing vehicle emissions. Special emphasis was directed at recent developments in fuel-cell technology. The opening session was covered by C-SPAN, which included the keynote address by Under Secretary for Energy, Science, and Environment Robert Card.

A number of fuel cell and electric vehicles were on display and available for test driving during the conference's ride and drive sessions at the Turner-Fairbank Highway Research Center, McLean, Va.

In the photo, Thomas J. Gross, Deputy Assistant Secretary for Transportation Technologies, Office of Energy Efficiency and Renewable Energy, prepares to test drive a fuel cell-powered car. ❖

Savannah River Ecology Lab trains Special Forces

The Department of Energy's Savannah River Site in South Carolina provided a new training ground for instructors from the U.S. Army's Survival, Evasion, Resistance and Escape (SERE) School located at Ft. Bragg, N.C. Six instructors, who train the Green Berets and other Special Forces, spent three days under the tutelage of herpetologist Dr. Whit Gibbons and other scientists from the University of Georgia's Savannah River Ecology Laboratory (SREL) which is located on the Site.

The Army instructors learned about snakes, other reptiles, and amphibians, with the emphasis on snake identification and husbandry. In both classroom presentations and field work, the scientists showed them how to find, and avoid, both venomous and nonvenomous species. Exotic species of reptiles provided by the Riverbanks Zoo in Columbia, S.C., gave the instructors a close-up look at the species that might be encountered in Asia, Africa, or the Middle East. At left, retired Special Forces instructor Gordon L. Smith learns how to "tube" a snake for safe, easier handling. ❖

Oakland honors Asian Pacific Americans

Employees at the Department of Energy's (DOE) Oakland Operations Office in California and other Federal agencies within the Oakland Federal Building joined together in May 2002 to honor the contributions of Asian and Pacific Islanders during Asian Pacific American Heritage Month (APAH). The celebration kicked off on May 1 and continued with activities throughout the month.

The "grand finale" on May 22 featured remarks by agency officials, performances by school groups, and a musical demonstration on the slack key guitar by DOE patent advisor Randy Chang. Former professional tennis player and keynote speaker Maureen "Peanut" Louie-Harper spoke about what it was like to be one of America's first Asian professional tennis players. She was introduced by Rick Quan, popular sports anchor with San Francisco Bay Area's CBS affiliate KPIX-TV 5.

In the photo, Quan (left) and Louie-Harper (right) pose with Lydia Pomposo, Department of Veterans Affairs, and APAH committee chair Eric Camaddo, DOE Oakland. ❖

Department's GIDEP representative receives award

Thomas Rotella, the Department of Energy's (DOE) Government-Industry Data Exchange Program (GIDEP) Representative, has received the 2002 GIDEP Program Manager's Award for Excellence, the highest honor in the program. Rotella is in the Office of Environment, Safety and Health Operations Support, National Nuclear Security Administration (NNSA). The award was presented by Capt. M. B. Newton, USN, GIDEP Program Manager, on May 15, 2002, at the 39th annual GIDEP Workshop in San Diego, Calif.

GIDEP, managed by the U.S. Navy, maintains a government-wide information and parts database and manages an exchange forum for use by the Federal Government, including the Armed Services, and industry participants, including DOE contractors. DOE/NNSA participates in the data exchange and currently assists in managing the program by serving as Chairman of the Government Advisory Group within GIDEP. The Department's Fiscal Year 2001 participant fee was $232,000 and reported "prevention of unplanned expenditures," more than $900,000. ❖

Pantex moves into next phase of site's cleanup efforts

The Environmental Restoration Department at the Department of Energy's (DOE) Pantex Plant is employing a new technology in the next phase of the site's environmental remediation efforts. A soil vapor extraction system, running 24 hours a day, pulls volatile organic compounds (VOCs) such as toluene, trichloroethylene, freon, and acetone out of the ground at a localized area in the northwest portion of the plant. This type of system has been proven to reduce the amount of VOCs in soils in several areas throughout the country.

At right, Dennis Huddleston, Pantex Environmental Restoration Manager (center), explains the new soil vapor extraction system to DOE/National Nuclear Security Administration and BWXT Pantex personnel. "We are excited to bring this program on line," Huddleston said. "We have made significant progress in addressing environmental issues at Pantex, and this technology is one more method for being good stewards of our natural resources." ❖

Nigerian representatives learn about renewable energy

From left-right, Joe Keshi, Consulate-General of Nigeria, his wife Dayo, and Nigerian officials Ernest Okonofua and Ade Ajala visited the Department of Energy's (DOE) Golden Field Office and National Renewable Energy Laboratory (NREL) in Colorado on May 6, 2002, to learn about renewable energy technologies, tour the laboratory, and discuss collaboration opportunities. They were accompanied on the tour by James Bosch, NREL (third from right), and Golden's Christine Carter and Gibson Asuquo.

During the visit, the delegation received a presentation on DOE programs and international work from Golden's James Spaeth and David Blanchfield, Assistant Manager for Project Management at Golden, and a briefing on NREL's international program and activities in Nigeria from Ron Benioff, NREL Group Manager in International Programs. The Consulate-General indicated that he looks forward to opportunities for collaboration between DOE and the Nigerian government. ❖

New process used to sample water at KC Plant

Testing groundwater at the Department of Energy's Kansas City Plant was once an expensive process of pumping gallons of water just to retrieve a small sample for testing. With more than 200 on-site wells, there was opportunity to save both time and money.

Plant officials learned the U.S. Geological Survey was trying a new method to test the amount of chlorinated solvents present in water. In the new method, shown at right, a plastic bag filled with distilled water is placed into each well. As the bag is suspended in the bottom of the well, groundwater slowly diffuses into the bag. After two weeks, the bag is pulled to the surface, a corner is clipped, and a water sample is poured into a vial and tested.

By introducing this new process, the Kansas City Plant reduced the cost of groundwater sampling in 2001 by 54 percent and became the second site in the nation to use the new sampling technique. ❖

COMING Events

September

17-20 Fifth Topical Meeting on Spent Nuclear Fuel and Fissile Materials Management, Charleston, S.C. Organized and hosted by the Savannah River Section of the American Nuclear Society. Session topics include Department of Energy (DOE) spent nuclear fuel characterization; transportation issues; stabilization, treatment and conditioning; interim storage management; geologic disposal; fissile materials storage, conversion, packing and transportation; reactor-based and immobilization-based plutonium disposition; and highly enriched uranium storage and disposition. Additional conference and registration information is available at **http://ans.snffmm.org**.

October

16-18 The Americas Nuclear Energy Symposium 2002, Miami, Fla. Cosponsored by the Department of Energy's Office of Nuclear Energy, Science and Technology, and the American Nuclear Society. Coordinated by the Hemispheric Center for Environmental Technology. The symposium provides a forum for a hemispheric discussion and exchange focused on issues related to the future of nuclear energy in the Americas. Additional conference and registration information is available at **http://www.ne.doe.gov** or **http://www.anes2002.org**.

17-18 Northwest Symposium on Systems Biology, Richland, Wash. The symposium, to be held at the Department of Energy's (DOE) Pacific Northwest National Laboratory (PNNL), focuses on the four research areas of the DOE Genomes to Life Program: molecular machines, gene regulatory networks, complex microbial systems, and computational methods. Distinguished scientists will present their most recent work. For more information, contact Wendy Owen, PNNL, 509-376-3317, or visit **http://www.pnl.gov/northwestsymposium**. ❖

Research DIGEST

A small, portable detector for finding concealed nuclear weapons and materials has been developed by the Department of Energy's **Argonne National Laboratory**. When fully developed, the device could assist international inspectors charged with preventing smuggling and unauthorized use of nuclear weapons and materials. The heart of the Argonne device is a small wafer of gallium arsenide (GaAs), a semiconducting material similar to silicon. When coated with boron or lithium, GaAs can detect neutrons, such as those emitted by the fissile materials that fuel nuclear weapons. The working portion of the wafer is about the diameter of a collar button, but thinner. Patents are pending on several detectors and their components. (Catherine Foster, 630-252-5580)

❖

Researchers at the Department of Energy's **Ames Laboratory** have found a way to combine organic materials in solid state without the use of solvents. The discovery uses high-energy ball-milling, a well-known process for producing and modifying metal alloys. Materials to be processed are placed in a hardened steel vial along with steel balls. The vial is vigorously shaken and mechanical energy transferred into the system alters the crystallinity of the solids and provides mass transfer, eventually combining the materials into new compounds. A provisional patent application has been filed for the process. (Kerry Gibson, 515-294-1405)

❖

The Department of Energy's **Pacific Northwest National Laboratory** (PNNL) has ordered a $24.5 million Hewlett-Packard Linux-based supercomputer that will allow researchers to apply computational science to answer fundamental questions such as how radioactive waste can be processed and stored and how proteins interact and behave in order to model a living cell. The new supercomputer will have an expected total peak performance of more than 8.3 teraflops. Scheduled to be fully operational in early 2003, the massively parallel computer is expected to be more than 30 times faster, have 50 times more disk space, and hold 10 times as much memory as PNNL's current supercomputer, one of the world's most powerful when installed in 1997. (Stacy Maloof, 509-372-6313)

❖

Researchers at the Department of Energy's **Lawrence Berkeley National Laboratory** have discovered the mechanism by which an extremely rare protein mutation shields people from cardiovascular disease. The discovery could lead to more potent drug therapies that both target cholesterol deposition and prevent future accumulation. The mutation enables the protein to curb oxidation, a harmful process in which molecules with unpaired electrons, also called free radicals, scavenge electrons from healthy tissue. In the heart disease atherosclerosis, free radicals grab electrons from lipids that line artery walls, sparking an inflammatory response that paves the way for cholesterol deposition. The mutated protein, however, boasts an antioxidant in the form of a sulfur-based residue that mops up unpaired electrons and prevents them from triggering arterial inflammation. (Dan Krotz, 510-486-4019)

❖

A powerful tool for the analysis of advanced and conventional vehicles just got better with the release of ADVISOR 2002. ADVISOR (ADvanced Vehicle SimulatOR) was created by the Center for Transportation Technologies and Systems at the Department of Energy's **National Renewable Energy Laboratory**. It is a flexible modeling tool that rapidly assesses the performance and fuel economy of conventional, electric, hybrid, and fuel cell vehicles and simulates a vehicle's response under different driving conditions. The tool runs in the MATLAB/Simulink software environment. ADVISOR 2002 was improved with links to other software applications and data from industry partnerships. Additional information is available at **http://www.ctts.nrel.gov/analysis/**. (Sarah Barba, 303-275-3023) ❖

Sandia miniaturizing unique back support

A unique cushion designed to relieve the lower back pains of office workers, motorists, and truck drivers—as well as quadriplegics and other people immobilized by reason of occupation or health—is under development at the Department of Energy's Sandia National Laboratories. The patented process resembles assisted power steering in a car. Sixteen preformed inflatable bladders aid muscles in the back intended by nature to support the spine. There is no direct contact between chair back and spine.

Electronic work at Sandia is intended to improve reliability of the prototype device, which was built by Los Angeles, Calif., medical company Numotech. A second goal is to shrink its pumps, batteries, and circuits from an auxiliary box currently a foot square and four inches deep to one-third that size. "We want to integrate the electronics to make them flush with the chair back for office workers," says Sandia project lead Mark Vaughn.

Mark Vaughn, Sandia National Laboratories, displays the prototype

The device "should significantly reduce the amount of drugs needed for pain management," says Robert Felton, President, Numotech. The back cushion is expected to be on the market in little more than a year and should be available at a price range of $500-$700, he says. Numotech will market the final product.

The system under development aligns the spine in a more comfortable way than the semi-rigid molding in the method commonly used now. The bladders can be inflated and deflated in groupings to achieve levels of support to meet individual needs. The apparatus adjusts forward and back from the action of a single large bladder. A concave depression, achieved by side bladders, holds the back straight regardless of side movements of the vehicle or chair. A series of rocker switches adjusts inner contours to aid the back configuration.

The device will be manufactured by Spektr-Conversion in Russia. Numotech cooperates with the Department of Energy through the Russian Transition Initiative program. The project provides work for competent scientists who otherwise might be hired by unfriendly countries to make nuclear weapons. Spektr-Conversion consists of former workers from Russian nuclear laboratory Chelyabinsk-70. ❖

UNSUNG Heroes

Helping build a new life

Thanks to Cincinnati Habitat for Humanity, an organization dedicated to helping low-income families buy decent affordable housing, and the support of the Department of Energy (DOE) and Fluor Fernald, Gladys Hill and her three granddaughters, two of whom are visually impaired, recently moved into their new home near downtown Cincinnati, Ohio. The Hill home was the sixth house in six years that DOE and Fluor Fernald helped build for the Westfed Coalition of Cincinnati Habitat for Humanity, a collective effort of churches, businesses, and individuals.

To help make Hill's dream come true, DOE and Fluor Fernald provided financial support, in-kind services, and volunteer employees who spent over 600 hours serving on the steering committee and performing various construction jobs. In the photo, Wally Quaider, DOE-Fernald Deputy Director for Operations Assurance Services, snaps a chalk line before trimming the front porch boards on Hill's new home.

"As walls go up, volunteers see the benefit of every dollar and every hour invested," said DOE-Fernald Site Director Steve McCracken. "You can feel the excitement of the families." ❖

New cleanup strategies help bring down Rocky Flats Building 886

Engineers at the Department of Energy's (DOE) Rocky Flats Environmental Technology Site used innovative strategies to quickly and safely transform the Site's Building 886, a former nuclear criticality laboratory, into a pile of rubble. The strategies supported an accelerated schedule and reduced cost for the project.

Tearing down the four- and five-foot-thick walls of the criticality experimentation laboratory with traditional mechanical demolition methods was determined to be costly, time consuming, and of more risk to workers. The Site instead opted to hire Controlled Demolitions Incorporated to use its "explosive harmonic delamination" method for the building demolition.

The delamination process involves drilling holes in the concrete, some more than 20 feet through concrete and rebar; placing relatively small amounts of explosive materials in the holes; and setting off the explosives in a timed pattern to shake the concrete structure. The sequence of explosions causes intense vibrations that separate the portland cement matrix in the concrete from the gravel aggregate and rebar. The structure remains standing, but is substantially weakened, allowing efficient removal by an excavator.

Workers clear away the remains of Rocky Flats Building 886.

Building 886 was covered in black engineered fabric to prevent release of dust into the environment. A test shot went smoothly and the following delamination shots achieved the desired results. The cement came away from the metal rebar more completely than anticipated, minimizing the time and effort required to bring down the building and thus supporting an accelerated schedule and reduced cost for the project. "The method was so successful, it is almost certain to be applied to other thick concrete structures on the Site in the future," said Steve Tower, DOE project lead.

Another innovative strategy involved small amounts of plutonium contamination detected on the joists that held up the roof in room 103 of Building 886. Traditionally, workers would decontaminate, dismantle, and size reduce the joists and deck of the roof and package them for disposal. To lessen worker exposure and reduce costs, a reciprocating saw was used to cut through the decking and joists in 27-foot-long and six-foot-wide sections that encompassed two joists. The sections were then placed in cargo containers and shipped to the Department's Nevada Test Site as low-level waste. "The process was hugely successful and was achieved with very low worker exposure and no detectable release to the environment," said Tower. ❖

Grants to help communities near DOE facilities

Block grants of $300,000 each have been awarded by the Department of Energy (DOE) to three community organizations to help minimize future economic impacts of workforce restructuring on communities near DOE facilities. "Working with community reuse organizations around the country, the Department has retained, expanded, or created over 25,000 jobs for workers affected by restructuring efforts at DOE sites," Secretary of Energy Spencer Abraham said.

The Paducah Area Community Reuse Organization is comprised of regional community representatives from western Kentucky and southern Illinois. The grant money will provide technical assistance and funding opportunities for small businesses; provide loans, technical support services, and financial counseling; invest funds to create a regional industrial park to attract businesses and jobs to the area; and provide training, resume writing, and job placement assistance to affected employees of the Paducah Gaseous Diffusion Plant.

The Tri-City Industrial Development Council's goal is to assist affected communities impacted by the ultimate closure of the Hanford facility in Washington. The Council's Asset Reinvestment Program helps recruit, expand, or create new businesses within the area by making available to industry certain physical assets of DOE's Hanford Site as part of the business recruitment or expansion project.

The Eastern Idaho Community Reuse Organization operates several programs. These include economic development initiatives, advocacy for the region's emerging information technology industry, and support of entrepreneurial efforts, particularly for businesses operated or created by former Idaho National Engineering and Environmental Laboratory employees.

The Department's Office of Worker and Community Transition administers the grants. More information about the grants and ongoing work with communities near DOE facilities is available at **http://www.wct.doe.gov**. ❖

Accelerated cleanup pacts reached for sites

Following a series of meetings among the Department of Energy (DOE), the Environmental Protection Agency, and officials from the states of Tennessee, Idaho, Nevada, and New Mexico, Letters of Intent have been signed to enter into agreements to accelerate cleanup of DOE sites in those states. The agreements are under the Department's new Environmental Management Accelerated Cleanup Program, whose goal is to work with states and regulators to streamline operations and clearly target and reduce the greatest health and environmental cleanup risks at the Department's former nuclear sites.

The first agreement under this program covered the Hanford Site in Washington State. Sites covered under the latest agreements are:

- **Oak Ridge Site** – parties will work to complete cleanup by 2016, with high-risk cleanup by 2008; Department will set aside additional $105 million under the Cleanup Reform Account in Fiscal Year 2003.
- **Idaho National Engineering and Environmental Laboratory** – complete cleanup by 2020, additional $110 million.
- **Nevada Test Site** – complete cleanup by 2010, additional $33 million.
- New Mexico facilities: **Sandia National Laboratories** – complete cleanup by 2006, additional $8 million; **Los Alamos National Laboratory** – complete cleanup by 2015, additional $54 million; **Waste Isolation Pilot Plant** – additional $14 million for operations.

The agreements reached to date bring the total to $759 million dedicated out of the $800 million accelerated cleanup account. Secretary Abraham has made a formal request to the Office of Management and Budget (OMB) that additional money will be necessary to fund future accelerated cleanup projects, as outlined under the Department's Environmental Management Top-to-Bottom Review and the FY 2003 budget request approved by OMB.

Additional details on the individual agreements are available at **http://www.energy.gov/HQPress/releases02/maypr/maypr.htm**. Click on the press release specific to the agreement of interest. ❖

Lead recycling reduces hazardous inventories

The saying "getting the lead out" has gained new meaning at the Department of Energy's (DOE) Idaho National Engineering and Environmental Laboratory (INEEL). The laboratory has sent nearly 80 tons of lead to Idaho State University in Pocatello, Idaho, and both parties are happy about it. INEEL was able to reduce its inventory of a common hazardous substance and the university gained free material to provide shielding for its accelerator operations.

"Lead is toxic so we don't want to have it around if it isn't needed," said Jeff Mousseau, manager of INEEL's Waste Generator Services group. "Rather than just disposing of this valuable metal,we look for ways it can be used where it's really needed. By doing that, we prevent the need to mine, smelt, and handle even more lead."

In recent years INEEL has shipped off site about 625,000 pounds of lead. Of that amount, only about 17,000 pounds, or 2.7 percent, became waste. The rest was used in a variety of ways, including lead shielding needed by other DOE sites and, most recently, at the university's Accelerator Center research facilities.

INEEL provides the lead at no cost. "The university uses it to make its accelerator facilities safer," Mousseau said. "And by doing so, they can get more use out of very valuable laboratory research space. Everyone wins." ❖

Simulated waste tank will speed Hanford cleanup

The newly completed Hanford Cold Test Facility at the Department of Energy's Hanford Site in Washington is expected to play a key role in the effort to clean up millions of gallons of highly radioactive and hazardous waste stored in 177 large underground tanks within a few miles of the Columbia River. Equipment needed to retrieve tank waste and send it to a planned treatment plant will be demonstrated and developed at the facility.

"This facility will increase our confidence when cleanup equipment and work moves into the field," said Joe Cruz, retrieval engineer for the Department's Office of River Protection. "It will reduce the possibility of issues arising when we use the equipment for the first time in a real Hanford tank."

The centerpiece of the facility is a large simulated waste tank for demonstrations of tank cleanup equipment. The 75-foot diameter, open-top, steel tank is the same width as a real one million gallon Hanford tank. A superstructure spans the tank, with platforms at 35 feet and 55 feet, simulating the heights of single-shell and double-shell waste tanks.

The Cold Test Facility covers nearly 10 acres near Hanford's existing HAMMER training site. The facility, capable of staging up to 600,000 gallons of environmentally friendly simulated waste, is expected to be ready for equipment development and testing this summer. ❖

People IN ENERGY

The University of California Board of Regents has named **Michael R. Anastasio** as the ninth Director of the Department of Energy's Lawrence Livermore National Laboratory (LLNL), effective July 1. He will succeed **Bruce Tarter**, who announced his plans to leave the laboratory earlier this year.

Anastasio began his career at LLNL in 1980 as a physicist in B-Division, working his way up to leader of that division. He then served as Associate Director for Defense and Nuclear Technologies until his appointment last year to his current position as Deputy Director for Strategic Operations at LLNL. Anastasio earned a bachelor's degree in physics from Johns Hopkins University and a master's degree and Ph.D. in theoretical nuclear physics from the State University of New York at Stony Brook.

Mina Bissell of the Life Sciences Division at the Department of Energy's Lawrence Berkeley National Laboratory (LBNL) has been elected a Fellow of the American Academy of Arts and Sciences in the medical sciences section in biology. Also at LBNL, **Carlos Bustamante**, Physical Biosciences Division; **Charles Harris**, Chemistry Division; and **Saul Perlmutter**, Physics Division, have been named Fellows of the National Academy of Sciences.

Greg Rudy, Manager of the Department of Energy's Savannah River Operations Office, is being reassigned to become Associate Administrator for Facilities and Operations in the Department's National Nuclear Security Administration (NNSA), Washington, D.C. **Ralph Erickson**, who has served in that position for the past year, will be the new Manager of NNSA's Los Alamos Site Office. Both appointees reported to their new positions in June 2002.

Deborah Johnson is the new Director of Internal Audit for the Department of Energy's Brookhaven National Laboratory (BNL), replacing **Frank Federmann**, who retired. Johnson reports to the laboratory director and will be responsible for directing financial, operational, and compliance audits for BNL.

Johnson joined BNL as a senior auditor in 1987, became Deputy Chief Internal Auditor in 1990, and was named Deputy Director of Internal Audit in 1998, a position she held until her new appointment.

A second phase of management reassignments will take place in the Department of Energy's Environmental Management (EM) program. **Charles Hansen**, Deputy Manager of the Savannah River Operations Office, will become Acting Manager of the office, succeeding **Greg Rudy**. **Barbara Mazurowski**, Manager, Rocky Flats Field Office, will become Associate Deputy Assistant Secretary at EM Headquarters, Washington, D.C. **Eugene Schmitt**, Acting Deputy Assistant Secretary for Policy, Planning, and Budget in EM will become Manager, Rocky Flats Field Office. **Roger Butler**, former Director, Budget Division, U.S. Department of Agriculture, will become Deputy Assistant Secretary for Policy, Planning and Budget.

Technology Review, Massachusetts Institute of Technology's magazine of innovation annually chooses 100 Top Young Innovators under the age of 35 whose innovative work in business and technology has a profound impact on today's world. Three Department of Energy laboratory employees made the list: **Daniel Branagan**, engineer/scientist, Materials Department, Idaho National Engineering and Environmental Laboratory; **Matt Keyser**, engineer, Center for Transportation Technologies and Systems, National Renewable Energy Laboratory; and **Steve Tuecke**, software architect, Mathematics and Computer Science Division, Argonne National Laboratory.

Anthony Cugini, the Ultra-Clean Fuels Focus Area Leader in the Office of Science and Technology at the Department of Energy's National Energy Technology Laboratory, is the recipient of the Outstanding Service Award from the American Chemical Society (ACS), Division of Fuel Chemistry, for his contribution to the division over the past three years. Cugini has been treasurer of the ACS division and served as its Chair from 1999-2001. ❖

Brian A. Harkins, a Facility Representative at the Department of Energy's (DOE) Office of River Protection, Richland, Wash., is the 2001 DOE Facility Representative of the Year. The award was presented at the 2002 Facility Representatives Workshop held in Las Vegas, Nev., May 29-31, 2002. Harkins was recognized for his superior leadership and thorough knowledge of operations and safety standards while a Facility Representative at the Hanford Tank Farm facilities. He was selected from 15 nominees out of over 200 Facility Representatives across the DOE complex.

In the photo, l-r, are nominees Carlos Alvarado, Amarillo Site Office; Joe Houghton, Los Alamos Site Office; Joe Christ, Rocky Flats Field Office; Steve Goff, Savannah River Operations Office; Peter Kelley, Brookhaven Area Office; award winner Brian Harkins; Mat Irwin, Richland Operations Office; Steve Smith, Oakland Operations Office; Jeff Irwin, Kirtland Site Office; John Shine, Ohio Field Office; Dary Newbry, Idaho Operations Office; and Teresa Robbins, Y-12 Area Office. ❖

Milestones

YEARS OF SERVICE

July 2002

Headquarters

Economic Impact & Diversity - Myrna K. Turturro (25 years). **EIA** - Roger A. Diedrich (30), Kenneth M. McClevey (25). **Energy Efficiency & Renewable Energy** - Sapaleto J. Seymour (40), James R. Powell (30), Ronald L. Shaw (30), Teresa D. Carroll (25). **Envir. Management** - Richard J. Blaney (35), Mary S. Pearl (35), John M. Lankford (30). **Envir., Safety & Health** - Frieda A. Jackson (35).

FERC - Bernadette P. Holsey (35), Regina M. Saizan (35), William H. Allerton (30), Alan Greenbaum (30), Kenneth P. Niehaus (30), Charles D. Wagner (30), Timm L. Abendroth (25), Charles T. Brown (25), Jerrold W. Gotzmer (25), Kasha Helget (25), Camille M. Lucas (25), John M. Okrak (25), Eugene R. Snyder (25). **Fossil Energy** - William H. Freeman (35), Thomas J. Grahame (25), Rick D. Wilson (25).

General Counsel - John D. Bullington (30), Edward H. Pulliam (25). **Inspector General** - Douglas E. Gillam (25), Bernadette C. Sanders (25). **Management, Budget & Evaluation** - Virginia L. Bitler (35), Robert E. Dawson, Jr. (35), Patricia E. Wyatt (35), James M. Cayce (30), Linda L. Simpson (30), James T. Campbell (25), Robert S. Keener (25), Kevin M. Smith (25).

NNSA - Carmen G. Burdette (40), Cheryl A. Pyles (40), William J. Desmond, Jr. (35), Timothy D. Pflaum (35), Roland L. Frenck (30), Arthur G. Wolman (25). **Radioactive Waste** - Jerri J. Adams (35). **Science** - James M. Reitzel (35), Douglas G. Laverne (25), Richard Yockman (25). **Security** - Cathy L. Moon (25).

Field

Albuquerque - Mark L. Matthews (30). **Albuquerque/NNSA** - Donald G. White (35), Steven L. Deforest (30), Richard L. Devine (30), David C. Hampton (30), Kiutus Tecumseh (30), Andrew H. McCaddin (25), John E. Tribou (25), Andrew J. Zawadzki (25). **Chicago** - Nancy A. Chieco (40). **Idaho** - Robert D. Jones (25). **NETL** - Randall E. Queen (35), Ronald J. Demicheli (30).

Nevada/NNSA - Linda K. Hiltbrand (30), Michael A. Marelli (25), Nicolette Plese (25), Allen J. Roberts (25). **Oak Ridge** - James A. Reafsnyder (35), Brenda H. Duncan (30), Harold J. Monroe III (30), J. Peter Johnson (25). **Oakland/NNSA** - June F. Wallach (35), Leland G. Elster (30), Jaime R. San Mateo (25), Jay B. Tomlin (25).

Richland - David W. Templeton (35), Robert R. Tibbatts (35), Melvin J. Wicks (35), Virgene A. Deutsch (25). **Rocky Flats** - Barbara A. Mazurowski (30). **Savannah River** - Freddie B. Richardson (30), Patricia L. Sears (30). **Savannah River/NNSA** - Peter W. Kozak (25). **Strategic Petroleum Reserve** - Warren H. Poarch (35), Eugene J. Curole (25).

Bonneville Power - Robert R. Eddy (40), Norman D. Campbell (35), Lawrence K. Purchase (35), Steven J. Tanner (35), Larry E. Townsend (35), Dennis L. Amonsen (30), Ernest J. Eichhorn (30), Robert W. Jackson (30), Katherine M. Baker (25), Earl A. Brown (25), Vickie R. Deane (25), Joyce E. Economus (25), Barton N. Evans (25), May Hing (25), Rollie E. Harmon (25), Anthony R. Jacobs (25), Dennis E. Metcalf (25), Christopher C. Perillo (25), Janet Shannon (25), Nicole M. Stauffer (25), David A. Tate (25), Oscar D. Tijerina (25).

Southwestern Power - Gary C. Hayter (30). **Western Area Power** - Adeline A. Egersett (40), Arlie W. Gordon (35), Keith G. Lamb (35), Larry J. Brown (30), Lyle L. Chenoweth (30), John G. Delgado (30), Terry L. Harmel (25).

RETIREMENTS

May 2002

Headquarters

General Counsel - Virginia B. Caress (18 years). **Inspector General** - Linda L. Duvall (32). **NNSA** - William A. Harmes (41). **Radioactive Waste** - Lake H. Barrett (27).

Field

Bonneville Power - Jerry R. Dusenberry (20). **Richland** - Robert M. Rosselli (35). **Rocky Flats** - Henry F. Dalton (12).

June 2002

Headquarters

EIA - Michael J. Griffey (36). **Envir., Safety & Health** - Robert K. Christopher (26). **FERC** - James Haimes (28). **Inspector General** - Michael J. Shannon (30). **Nuclear Energy** - Larry S. Dewey (28).

Field

Albuquerque/NNSA - Samuel S. Rogers (28). **Bonneville Power** - Michael T.M. Behen (15), Edward S. Chittester (36), Jerry J. Liebrecht (34), Michael D. Matthews (30), Daniel A. Michael (33), Larry M. Ringer (40), Daniel L. Winchester (32). **Golden** - Dennis D. Maez (36). **Oak Ridge** - Martin H.D. McBride (20). **Western Area Power** - John R. Miller (36). ❖

NEW Publications

North America—The Energy Picture, the first report of the North American Energy Working Group, was released June 10, 2002, by U.S. Secretary of Energy Spencer Abraham, Canadian Natural Resources Minister Herb Dhaliwal, and Mexican Energy Secretary Ernesto Martens. The document presents energy information for the three countries, including an economic overview; energy data; supply and demand trends; energy projections; and descriptions of infrastructure, laws, and regulations. The report is available at **http://www.eia.doe.gov/emeu/northamerica/index.htm**. ❖

July 2002

AROUND DOE

Wildfire recovery study planned for INEEL desert

The 890 square miles of desert that make up the Department of Energy's (DOE) Idaho National Engineering and Environmental Laboratory (INEEL) will be used to study how sagebrush steppe lands in the western United States recover from wildfires. Thousands of acres of sagebrush and grass have burned in range fires at INEEL over the past decade. Because the laboratory has restricted access and much of the land is unused and undisturbed, researchers see it as the best sagebrush steppe for ecological and environmental study in the West.

The Wild Lands Fire Recovery Research Project is being funded by DOE, the Department of the Interior's Bureau of Land Management, and the Nature Conservancy. The project has three goals: 1) to find out how quickly vegetation regrows in areas with good ecological conditions; 2) to look at vegetation regrowth in areas where sagebrush was seeded from the air; and 3) to determine how soon after a fire sagebrush steppe land used for grazing can be reopened for livestock to graze.

The information gained from the fire recovery study will help DOE, other Federal agencies, and state agencies better protect the remaining valuable sagebrush steppe lands in the West.

Mound workers achieve 7,000,000 safe work hours

Employees at the Department of Energy's (DOE) Mound facility in Miamisburg, Ohio, recently achieved 7,000,000 safe work hours without a lost day from work. The workforce at the facility includes employees of DOE, BWXT of Ohio, Inc. (BWXTO), and various subcontractors. "The Mound team continues to emphasize safety of the workers and members of the surrounding community as its number one value," Richard Provencher, DOE Director of the Miamisburg Project, said.

The safety milestone was reached because of the workers' aggressive approach to safety and the "Target Zero Safety" and "Integrated Safety Management (ISM) Program." The Target Zero Safety Program is BWXTO's vision for an injury-free workplace. The ISM Program systematically integrates safety into all levels of management and work practices to strengthen worker protection and the environment.

Department receives a return on an investment

The Department of Energy (DOE) recently received $11.5 million from Dakota Gasification Company (DGC) as a return on its investment for developing synthetic fuels at a North Dakota plant constructed in the early 1980's. DGC owns and operates the Great Plains Synfuels Plant near Beulah.

In 1988, Basin Electric, the parent company of DGC, was selected by the Department as the successful bidder to operate the coal gasification plant. Under the agreement, future profits were to be shared to help recover the total of loans guaranteed by DOE for the original developers to build the plant because it was deemed new technology at the time. The company also agreed to not take advantage of available tax credits to help reduce taxpayer burden.

In 1990, DGC returned $11.1 million to the Department as part of the profit-sharing formula, which is based on the price of natural gas and other economic indicators. The $11.5 million payment is an initial payment based on estimates for the year 2001. When final calculations for 2001 are complete, the total payment to DOE is anticipated to be close to $13 million.

"This seems appropriate in light of DOE's initial investment in the plant some 20 years ago," said DGC President Ron Harper. ❖

United States
Department of Energy (PA-40)
Washington, DC 20585

Official Business