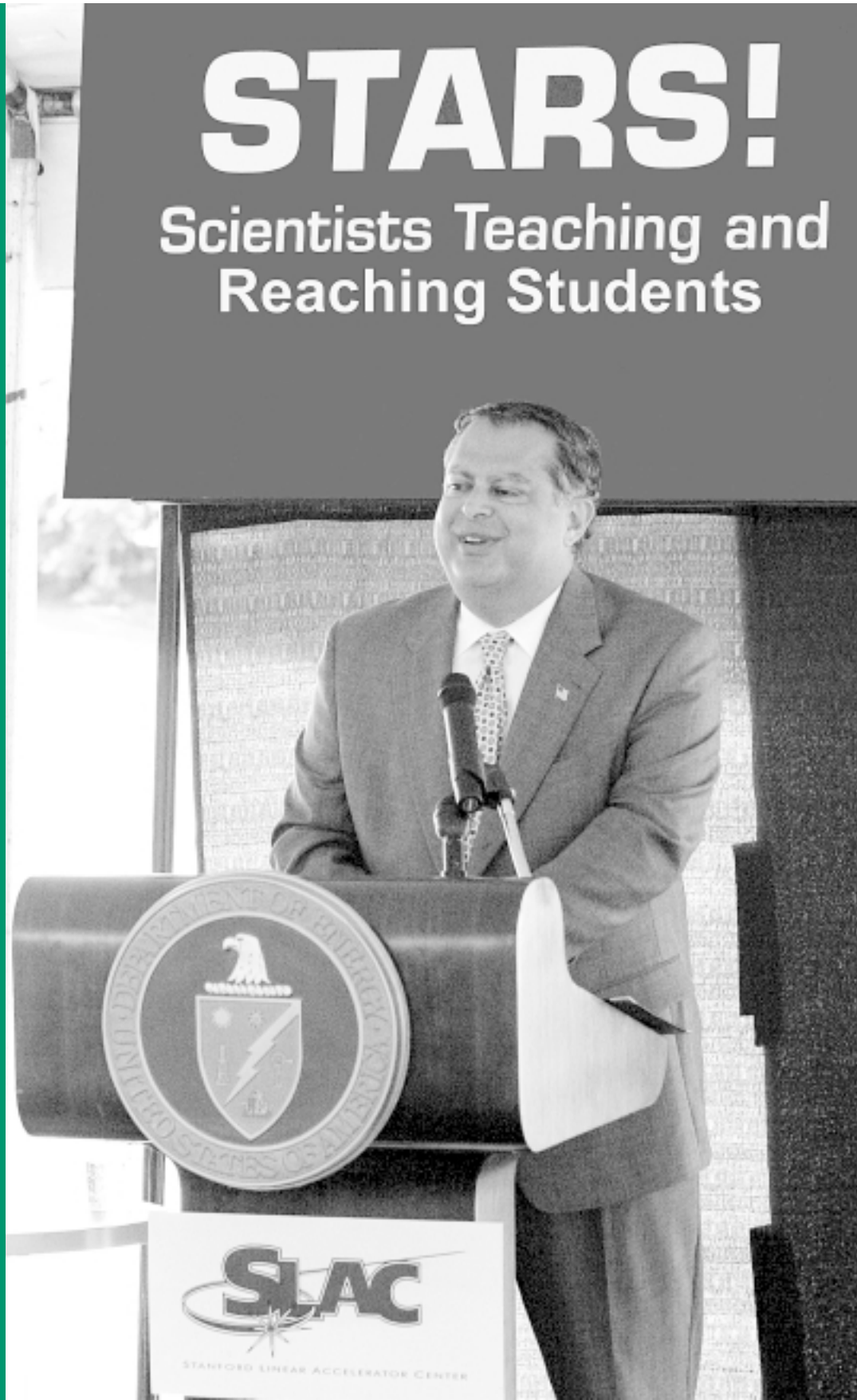


President Bush
visits DOE's
Oak Ridge site

Secretary
Abraham
launches STARS!
initiative

Rocky Flats
Building 771
demolition begins



U.S. Department of Energy



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On our cover

Secretary of Energy Spencer Abraham visited the Department of Energy's (DOE) Stanford Linear Accelerator Center (SLAC) in Palo Alto, Calif., on July 8. Secretary Abraham toured the facility and received briefings on SLAC research; addressed a crowd of about 800 employees, visiting scientists, and students; and unveiled STARS!, a new DOE and national laboratory science education initiative. "It is critical that we leverage the resources of this Department—and of all our national labs—to help create a new generation of scientists who will achieve the scientific breakthroughs and technological advances so essential to our future security and prosperity," Secretary Abraham said.

Secretary Abraham also visited other DOE laboratories while in California—Lawrence Berkeley National Laboratory on July 7 and Sandia National Laboratories, California and Lawrence Livermore National Laboratory on July 8.

For more on the STARS! initiative and laboratory visits, see pages 4 and 5. ❖

President lauds Oak Ridge role in Libya project

President George W. Bush visited the Department of Energy's (DOE) Oak Ridge National Laboratory (ORNL) on July 12 and addressed a packed audience of employees and guests in ORNL's Wigner Auditorium. His 35-minute talk immediately followed a tour of materials and equipment from Libya's former nuclear program, which are stored at DOE's Oak Ridge complex. Secretary of Energy Spencer Abraham and National Security Advisor Condoleezza Rice joined President Bush on the inspection tour of the Libyan material.

"I'm glad to have the opportunity to thank each one of you for the vital work you do here. And please pass the word to your fellow employees, many of whom were waving, I want you to know, as we drove in, for which I'm thankful," President Bush said. "The nation counts on your great expertise and your professionalism in producing, protecting, and maintaining material that is critical to our security. America is safer because of your service at Oak Ridge."

The President's remarks focused on a number of actions and measures taken by the Administration since the attacks on Sept. 11, 2001. One of those actions underscored his visit to Oak Ridge—the removal of materials from Libya's former nuclear weapons

program to the United States (*DOE This Month*, March 2004).

"These materials are sobering evidence of a great danger," President Bush said. "We're determined to challenge new threats, not ignore them, or simply wait for future tragedy."

The eventual delivery of the materials to Oak Ridge from Libya, through a process the President called "quiet diplomacy," was coordinated through DOE's nuclear nonproliferation program following cooperation between the Libyan government and the United States, Britain, Germany, and Italy. President Bush described how the seizure of a shipload of materials bound for Libya in late 2003 led to negotiations resulting in the Libyan government's renunciation of its nuclear program and the turning over of materials it had assembled to the nonproliferation team. "By choosing

that course, the Libyan government is serving the interests of its own people and adding to the security of all nations," President Bush said.

DOE played an important role in the U.S. effort to verify and assist Libya in dismantling its

nuclear program. The first mission to Libya occurred in January 2004, when a U.S. Government team that included DOE personnel removed the most proliferation-sensitive nuclear information, materials, and equipment, most of which were transported to DOE's Y-12 National Security Complex, a National Nuclear Security Administration facility in Oak Ridge. The Libyan equipment included centrifuge components, cascade components, nuclear weapons documents, and cylinders of uranium hexafluoride.

Personnel from ORNL's Nuclear Science and Technology Division and National Security Directorate led and participated in the recovery of materials from Libya. The ORNL personnel have extensive materials production expertise and experience.

In late February and early March 2004, a DOE team supported the packaging and loading of equipment that remained in Libya. That equipment was shipped to the United States in March.

A parallel mission removed roughly 17 kilograms of Russian-origin highly enriched uranium (HEU) in the form of unirradiated reactor fuel elements from the Tajura Research Reactor in Tripoli. The HEU was repatriated to Russia, where it will be downblended for use in civilian nuclear power plants. ❖



President George W. Bush looks over nuclear materials and equipment collected from Libya with Jon Kreykes, ORNL National Security Advanced Technologies group.



Secretary of Energy Spencer Abraham and National Security Advisor Condoleezza Rice accompanied President Bush on his tour of Libya's former nuclear materials and equipment.

DOE, labs launch science education initiative

On July 8, Secretary of Energy Spencer Abraham visited the Department of Energy's (DOE) Stanford Linear Accelerator Center (SLAC) in Palo Alto, Calif. Secretary Abraham saw a sampling of SLAC research, spoke to a crowd of about 800 employees and visiting scientists from around the world, and unveiled a new DOE and national laboratory science education initiative.

"It is critical that we leverage the resources of this Department—and of all our national labs—to help create a new generation of scientists who will achieve the scientific breakthroughs and technological advances so essential to our future security and prosperity," Secretary Abraham said. "That is why I am announcing today a series of changes in the way the Department of Energy will address the growing and serious problem of science and math literacy in this nation."

Secretary Abraham outlined a seven-step program named STARS!, which stands for Scientists Teaching and Reaching Students. The program is designed to enhance the training of America's mathematics and science teachers; increase student interest in math and science, especially in the critical middle school years; and draw attention to DOE scientists and researchers and thereby encourage young people and prospective teachers to pursue careers in math and science. The initiative includes the following steps:

- Starting a pilot DOE Laboratory Science Teacher Professional Development Program this summer at seven DOE national laboratories where K-12 teachers and community college faculty instructors will experience hands-on science with mentor scientists and engineers for four to eight weeks per year over a three-year period;
- Upgrading and expanding the scope of Argonne National Laboratory's successful "Ask A Scientist" website, including putting a



At right, Persis Drell, Director of Research, Stanford Linear Accelerator Center (SLAC), demonstrates SLAC's world record high speed data transfer system to Secretary Abraham.

direct link on DOE's home page, improving software, adding services, and promoting the site nationwide;

- Organizing and hosting this fall the first of an expected yearly "What's Next?" conference to bring together scientists and corporate innovators to demonstrate breakthrough technologies and science;
- Sponsoring Career Day programs where DOE national laboratories send scientists to local schools for hands-on science classes and career opportunity discussions, host open houses highlighting scientists and research, and support local science fairs and student projects;
- Planning and hosting Science Appreciation Days at DOE national laboratories for local students and teachers;
- Introducing teachers, students, and others to DOE's scientific leaders, including Nobel Laureates, and drawing attention to their achievements to inspire science as a career; and

- Creating an Office of DOE Science Education that will be responsible for coordinating and implementing the STARS! initiative.

Secretary Abraham also announced that he is creating a special Secretary of Energy Advisory Board to assess additional ways DOE can help improve science education in America. The chair of the task force will be named soon. The task force is to report its findings and recommendations to Secretary Abraham by the end of this year.

The text of Secretary Abraham's remarks and more information about the science education initiative and the DOE national laboratories' science education offerings are available at <http://www.science.doe.gov>. Teachers and students may request more information about the science education initiative by sending an e-mail to science.education@science.doe.gov. ❖



The Summer Science Expedition class, Weibel Elementary School, Fremont, Calif., joined the large crowd gathered for Secretary Abraham's remarks before taking SLAC's educational and very popular school tour.

Yucca Mountain documents made available for licensing proceeding

The Department of Energy (DOE) on June 30, 2004, certified to the Nuclear Regulatory Commission (NRC) the public availability through the Internet of approximately 1.2 million documents totaling some 5.6 million pages regarding the Yucca Mountain high-level nuclear waste repository. The certification is in anticipation of DOE submitting a license application for Yucca Mountain to the NRC by December 2004. Following the submission, NRC will conduct a full and public adjudicatory process on the license application, for which Federal law contemplates a three- to four-year time period.

DOE previously released a substantial number of Yucca Mountain scientific documents, including the science and engineering report, the site suitability evaluation, and final environmental impact statement. Many of the 1.2 million documents served as background material for those reports. The documents represent the scientific studies, evaluations,

and opinions of more than 20 years of scientific study of Yucca Mountain.

All information must be considered in context and as part of the entire set of documents for any user to draw substantive conclusions about the scientific information in the license application. Selective use of individual documents or portions of documents outside the context provided by other relevant documents is likely to result in inappropriate, faulty, or misleading conclusions.

The documents are available at <http://www.ocrwm.doe.gov> and will be available through NRC's Licensing Support Network (LSN) at <http://www.lsnnet.gov>. DOE will be providing additional documents to the LSN as an ongoing activity. Other participants in the licensing proceeding also are required to submit documents to the LSN.

In other Yucca Mountain news, on July 9, the U.S. Court of Appeals reached multiple decisions regarding the project. Secretary of Energy

Spencer Abraham issued the following statement:

"I am pleased with today's decisions handed down by the Court. The Court dismissed all challenges to the site selection of Yucca Mountain. Our scientific basis for the Yucca Mountain Project is sound. The project will protect the public health and safety.

"The Court rejected the State of Nevada's challenge to the constitutionality of the resolution approving Yucca Mountain and dismissed the state's petition attacking the actions of the Administration that led to the passage of that resolution by Congress.

"While the Court did not question the scientific validity of the Environmental Protection Agency's (EPA) standards, it did vacate one aspect of the standard, the 10,000 year compliance period. Therefore, DOE will be working with the EPA and Congress to determine appropriate steps to address this issue." ❖



Secretary of Energy Spencer Abraham visited four DOE laboratories in California on July 7-8. The afternoon of July 7, the Secretary toured Lawrence Berkeley National Laboratory. Following his July 8 morning visit to the Stanford Linear Accelerator Center and announcement of the STARS! science education initiative (see article, page 4), Secretary Abraham toured the Combustion Research Facility at Sandia National Laboratories, California and visited Lawrence Livermore National Laboratory (LLNL). At LLNL, Secretary Abraham cut the ribbon to officially open LLNL's new Terascale Simulation Facility, received briefings and demonstrations on

LLNL research, toured the National Ignition Facility (NIF), and presented special awards to NIF experiment teams.

In the photograph, l-r, Michael Anastasio, Director, LLNL, and Dona Crawford, Associate Director for Computation, LLNL, watch as Secretary Abraham signs the first rack that will become part of the BlueGene/L and Purple supercomputers. BlueGene/L will be the world's fastest supercomputer, capable of processing 360 trillion operations per second, when fully operational at LLNL by June 2005. ❖

Nuclear, radiological materials removed from Iraq

The Department of Energy (DOE) and the Department of Defense (DOD) recently completed a joint operation to secure and remove from Iraq nuclear and radiological materials that could potentially be used in a radiological dispersal device or diverted to support a nuclear weapons program. Twenty experts from DOE's national laboratory complex packaged 1.77 metric tons of low-enriched uranium and roughly 1,000 highly radioactive sources from the former Iraq nuclear research facility. DOD airlifted the material to the United States on June 23, 2004, and provided security, coordination, ground transportation, and funding for the mission.

"This operation was a major achievement for the Bush Administration's goal to keep

potentially dangerous nuclear materials out of the hands of terrorists," Secretary of Energy Spencer Abraham said. "It also puts this material out of reach for countries that may seek to develop their own nuclear weapons."

The low-enriched uranium will be stored temporarily at a secure DOE facility. The radiological sources initially will be brought to a DOE laboratory for further characterization and disposition.

DOE also repackaged less sensitive materials that will remain in Iraq. Radiological sources that continue to serve useful medical, agricultural, or industrial purposes were not removed.

The United States, consistent with its authorities and relevant United Nations Security Council Resolutions, took possession of and removed the

materials to ensure the safety and security of the Iraqi people. The International Atomic Energy Agency was advised in advance of the U.S. intentions to remove the nuclear materials. Iraqi officials were briefed about the removal of the materials and sources prior to evacuation.

The nuclear research complex, now under the responsibility of the Iraq Ministry of Science and Technology, was once a central institution for Iraq's nuclear weapons program before being dismantled in the early 1990's following the first Gulf War. The complex also was the consolidation point for highly radioactive sources collected by DOD with assistance by employees of the Ministry of Science and Technology within Iraq over the last year. ❖

K Basin sludge retrieval underway at Hanford

Crews at the Department of Energy's (DOE) Hanford Site in Washington have finished moving the last canister of spent nuclear fuel out of the K East Reactor Basin, one of two such basins located about 400 yards from the Columbia River. The K East fuel was moved to the nearby K West Basin where it was washed and loaded into large canisters. The canisters were backfilled with inert helium gas and taken to Hanford's Canister Storage Building for future shipment offsite to a national geologic repository.

Prior to the start of cleanup, the two water-filled basins held about 2,100 metric tons of spent nuclear fuel, plus sludge-like contaminants and sand/debris particles on the basin floors. The approximately 50 cubic meters of radioactive sludge is contained almost entirely in the K East Basin, where the fuel canisters were open and some of their contents



Workers connect hoses to ports in the top of Large Diameter Containers that will hold sludge from the North Loadout Pit in the K East Basin until it can be grouted later this year.

degraded, causing silt-like sludge particles to be formed or stirred up during the process of removing the fuel for dry storage away from the river.

"Our progress on fuel removal has cleared the way for us to focus on sludge as the other major risk reduction priority in the river corridor," Keith Klein, Manager, DOE Richland Operations said. "This material has a

high curie count and is difficult to handle. DOE did not grant approval for the work to proceed until we were confident the right approach and processes had been developed and tested thoroughly."

"We have embarked upon a solid plan that protects workers and will get the job done," Ron Gallagher, President and Chief Executive Officer, Fluor Hanford, said. "We're determined to continue making progress on removing both the spent fuel and the sludge from these facilities as we ready the K Basins for deactivation and demolition."

Fluor Hanford workers are now transferring the K East sludge to the K West Basin for handling. There, the sludge will be consolidated in containers to simplify treatment, which may include grouting it as remote-handled transuranic waste. DOE has committed to having the K East Basin emptied of sludge by Jan. 31, 2006, and complete all sludge containerization by June 30, 2006. ❖

Working Capital Fund displays services

Several hundred Department of Energy (DOE) Headquarters employees saw demonstrations of different products and services offered by DOE's Working Capital Fund at two Expos on June 16, 2004, at the Forrestal Building, Washington, D.C., and on June 23, at the Germantown complex. The theme of the Expos was "Work Smarter."

At DOE Headquarters, if your lights come on when you flip the switch, if your phone works, and if you use a walk-up copier, you are a customer of the Working Capital Fund. The Fund is managed by the Office of Management, Budget and Evaluation (ME). Fund services featured at the Expos included Office Supplies, Printing and Graphics, Mail Services; Telephones, Information Technology, Payroll Processing, Procurement Management, Corporate Training Services, Copying Management Support including Document Imaging, CHRIS, Project Management

Career Development Program, and Building Occupancy. Other service providers at the Expos included Conferencing, Distribution, and EXCITE services offered by the Office of the Chief Information Officer.

Visitor reaction to the Expos was very favorable. Many customers learned new ways to use Fund services to further DOE mission goals and expedite delivery of desired goods and services. Each service provider presentation included a handout with product and service descriptions and contact phone numbers and e-mail addresses for the respective business line manager and key employees.

When compared with comparable pre-Fund services, the Working Capital Fund, through good business



Customers and service providers discuss Working Capital Fund products at the DOE Headquarters Germantown Building Expo.

management and the cost effective decision-making of program customers, has saved the Department \$120 million in 1996 dollars over the last eight years. Additional information is available on the Fund's new home page, <http://www.wcf.doe.gov>. ❖

Employees recognized for volunteer service

On June 15, 2004, 109 Department of Energy (DOE) Headquarters employees were recognized for giving 25 hours or more in volunteer service during the past year. A total of 205 DOE employees nationwide will receive award certificates.

Secretary of Energy Spencer Abraham launched the Secretary of Energy Community Service Awards Program in April 2002. The program, an extension of the President's Volunteer Service Awards Program, encourages employee involvement in communities and participation in volunteer activities. The awards program is coordinated by DOE's Office of Economic Impact and Diversity (ED).

"This is the second year we are giving these awards, and I am very pleased to be making these presentations again," Secretary Abraham said. "I think it is very important that we honor those who have devoted so much of their spare time to giving something back...to helping their



neighbors, and making their communities a better place."

Volunteer Service Award Plaques were presented to three organizations with the highest volunteer participation rate. The plaques were accepted by senior officials of the organizations. Pictured, l-r, are Theresa Alvillar-Speake, Director, ED; Greg Friedman, Inspector General; Jeff Stier, Vice President for National Relations, Bonneville Power Administration; George Breznay,

Director, Office of Hearings and Appeals; and Secretary Abraham.

"I know that many of you in this room have been involved in volunteer work that you have been doing for years. Your efforts bring credit to the Energy Department, and make our nation a better place. I appreciate all that you do, and I hope your example will inspire others in the Department to follow your lead."

Employees honored at the Headquarters ceremony volunteered as tutors, mentors, counselors, and coaches. Also, many of the employees read to children at Amidon Elementary School—DOE's adopted school in Washington, D.C.

More information on the DOE awards program is available at <http://diversity.doe.gov/>. For information on the President's volunteer service program, visit the USA Freedom Corps website at <http://www.usafreedomcorps.gov>. ❖

PPPL Open House draws a crowd of 2,000



About 2,000 visitors, ranging from tots to seniors, attended the Open House at the Department of Energy's Princeton Plasma Physics Laboratory (PPPL) on June 12, 2004, for a chance to tour a fusion machine and play with plasma. "We had a great time showing our Laboratory to our neighbors, entertaining children with our science, and explaining fusion energy," PPPL Director Rob Goldston said.

Open House guests talked to PPPL researchers about fusion and the Laboratory's progress while taking self-guided tours of the National Spherical Torus Experiment (NSTX), smaller experimental areas, and the test cell where a new experimental facility, the National Compact Stellarator Experiment, will be built. At left, PPPL's Lane Roquemore talks to visitors touring the NSTX test cell.

The event also featured activities ranging from cryogenics shows to tours of the Hall Thruster, a plasma-based propulsion system for space vehicles. Another popular feature was the "Lighting a Star on Earth" lecture by Goldston. ❖

LLNL receives national operations security honor

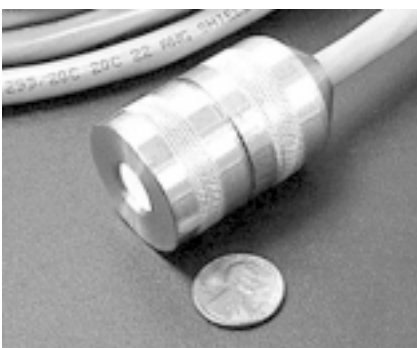


The Operations Security (OPSEC) program at the Department of Energy's (DOE) Lawrence Livermore National Laboratory (LLNL) has earned a third place National Operations Security Award in the organization category. The award was presented at the National OPSEC Conference and Exhibition held June 7-11, 2004, in Baltimore, Md. There were 81 nominees for awards from within the national operations security community, including from DOE, Department of Defense, National Security Agency, Federal Bureau of Investigation, General Services Administration, and Central Intelligence Agency.

The annual conference and awards program, sponsored by the Inter-agency OPSEC Support Staff group, provides recognition, training, and networking opportunities for government security professionals. Displays from government departments and agencies feature resources to assist security professionals in developing security awareness.

At left, John Walsh, OPSEC Manager, Livermore Site Office, DOE/National Nuclear Security Administration, presents a certificate of appreciation to Pam Poco, OPSEC Program Manager, LLNL, for a successful operations security program. ❖

Nevada Test Site helps bridge technological gap



Sophisticated monitoring systems using advanced sensors are becoming critical components in a wide range of technology-driven fields. Negotiating these sensors between initial concept and applied use is often difficult.

The Advanced Monitoring Systems Initiative (AMSI), part of the Environmental Management Program at the Department of Energy's (DOE) Nevada Site Office, is helping bridge this gap by providing scientists an extensive test and evaluation infrastructure already in place at the Nevada Test Site (NTS) for performing and verifying their research. The AMSI program provides a means for rapid prototyping, systems integration, and field testing to customers like universities, national laboratories, DOE contractors, and the private sector.

Advanced sensors, like the one pictured at left, come in a wide variety of sizes—from six-foot cylinders to millimeters in length. Sensors being tested at NTS are used to monitor various environmental conditions such as temperature, Ph levels, and contaminants—both radiological and chemical. Systems also can be set up to perform remote data retrieval. ❖

Lorence named Facility Representative of the Year

Joanne D. Lorence, a Facility Representative at the Department of Energy's (DOE) Los Alamos Site Office, was named the 2003 DOE Facility Representative of the Year at the annual Facility Representatives Workshop held in Las Vegas, Nev., May 18-20, 2004. Lorence, one of over 190 Facility Representatives across the DOE complex, was recognized for her superior leadership and thorough knowledge of operations and safety standards while a Facility Representative at Los Alamos National Laboratory's Radiochemistry Facility and Health Research Laboratory.

Pictured, seated, l-r, are award nominee Michelle Durham, Y-12 Site Office; Lorence; and nominee Christopher White, Miamisburg Closure Project. Standing, l-r, are nominees Jerry Houghton, Savannah River Operations Office; Kevin Gray, Sandia Site Office; Peter Kelley, Brookhaven Site Office; Michael Goriup, Idaho Operations Office; Earl Burkholder, Pantex Site Office; Gerry Higgins, Richland Operations Office; Henry Rio, Livermore Site Office; Thomas Denny, Nevada Site Office; Glyn Trenchard, Office of River Protection; and Carl Pilj, Oak Ridge Operations Office. Not pictured is nominee Peter Washburn, Argonne Site Office – East. ❖



Special Emphasis Program celebrates diversity

The Department of Energy's (DOE) Second Quarter Special Emphasis Program was held June 23, 2004, at DOE Headquarters, Washington, D.C. The event, sponsored by the Office of Economic Impact and Diversity, recognized the Holocaust Remembrance, National Gay Pride Month, and National Asian Pacific American Heritage Month.

"Today's multicultural event reinforces the true value of diversity and recognizes my belief that although we all may have differences in culture and values, we are bound together as Americans," Secretary of Energy Spencer Abraham told DOE employees. The Secretary challenged employees to make an individual commitment to promote tolerance, unity, respect, and opportunity for all.

The Honorable Jack Kemp, founder and co-director of Empower America and former Secretary of Housing and Urban Development, was the keynote speaker. Kemp spoke about his organization's mission, the ramifications of racism, and his firm belief that we should treat others as we wish to be treated. At left, Secretary Abraham presents DOE's Special Act Award to Kemp in recognition of his efforts. ❖



BNL Upton Reserve developers earn EPA award

The U.S. Environmental Protection Agency Region 2 recently presented an "Environmental Quality" award to the developers of the Upton Ecological and Research Reserve, a 530-acre conservation area located at the Department of Energy's (DOE) Brookhaven National Laboratory (BNL). In the photograph, l-r, are awardees Jeremy Feinberg, visiting wildlife biologist, U.S. Fish and Wildlife Service (USFWS); Frank Crescenzo, Deputy Manager, DOE Brookhaven Site Office; Timothy Green, Natural Resource Manager, BNL; and Jane M. Kenny, Administrator, EPA Region 2. Awardee Peter Kelly, visiting wildlife biologist, USFWS, was unavailable for the photograph.

The award recognized the "outstanding management" of the reserve and efforts that "were instrumental in transitioning the forethought of the DOE into a significant habitat reserve that is dedicated to protecting the quality of the Central Long Island Pine Barrens ecosystem." DOE established Upton Reserve in 2001 and has provided much of the funding for its management, research, and educational activities. ❖



DNA sequenced for oak, soybean pathogens

The DNA sequence of two related plant pathogens has been uncovered by the Department of Energy's (DOE) Joint Genome Institute (JGI), in collaboration with the Virginia Bioinformatics Institute. One pathogen causes "Sudden Oak Death" and the other is responsible for a devastating soybean disease. DOE, the Department of Agriculture, and the National Science Foundation provided nearly \$4 million to support the research.

Sudden Oak Death was first reported in 1995 and now has

been detected in 125 nurseries across the nation. Infected oak trees exhibit bleeding cankers on their trunks and often succumb to the disease or to secondary infections as they are weakened by the disease pathogen *Phytophthora ramorum*.

The second pathogen *Phytophthora sojae* attacks primarily soybeans. *P. sojae* infestation, known as Phytophthora root rot of soybean, a post-emergence disease of the field,



Joint Genome Institute (JGI) researcher Damon Tighe (left) shows off a capillary array from a DNA sequencer during a tour of the JGI Production Sequencing Facility following the plant pathogen sequence announcement.

caused more than \$1 billion in damage to crops last year.

"The ability to use large-scale multi-agency collaborations to rapidly characterize such economically important microorganisms is the cornerstone of the resource that we have established at the Joint Genome Institute," Raymond Orbach, Director, DOE Office of Science, said. "For both these pathogens, the genome sequence information will enable the identifica-

tion of cellular processes that can be targeted for novel detection systems and for safe and effective means of chemical or biological control."

The Joint Genome Institute was established in 1997 as part of the Human Genome Project by combining the DNA sequencing resources from DOE's Lawrence Berkeley, Lawrence Livermore, and Los Alamos National Laboratories. JGI has since extended the scope of its sequencing to whole-genome projects devoted to microbes and microbial communities, model system vertebrates, aquatic organisms, and plants. Funding for the JGI is primarily from the Office of Biological and Environmental Research in DOE's Office of Science.

Phytophthora ramorum, with a genome size of some 65 million nucleic acid bases, or letters of the genetic code, was iteratively sequenced by JGI seven times to assure the quality of the data. *Phytophthora sojae*, at approximately 95 megabases, was sequenced nine times over. The sequences of these organisms can be found at <http://genome.jgi-psf.org/ramorum/> and <http://genome.jgi-psf.org/sojae/>. ❖

Energy programs hold Synergy II Workshop

The Department of Energy's (DOE) Offices of Fossil Energy (FE), Nuclear Energy, Science and Technology (NE), and Energy Efficiency and Renewable Energy (EE) held their second Integrated Safety Management Synergy Workshop (Synergy II), May 25-27, 2004, in New Orleans, La. FE's Strategic Petroleum Reserve Project Office (SPR) hosted the forum.

A follow-up to DOE's January Executive Safety Summit, the workshop focused on major Departmental environment, safety and health (ES&H) initiatives to improve performance and cost effectiveness. Attendees

included senior managers from FE, NE, EE, the Office of Environment, Safety and Health (EH), and the Office of Environmental Management (EM) Headquarters programs and DOE laboratories/field sites, including the National Energy Technology Laboratory, Albany Research Center, Rocky Mountain Oil Field Testing Center, Idaho National Engineering and Environmental Laboratory, Argonne National Laboratory, and National Renewable Energy Laboratory.

The workshop provided an opportunity for the energy programs to exchange information, lessons learned,

and practical approaches concerning common ES&H issues, including achieving DOE ES&H performance goals, implementing Environmental Management Systems, and effectively using incident reporting information to prevent future incidents. A highlight of the workshop was a site visit to SPR's Bayou Choctaw site, a recent recipient of the OSHA Voluntary Protection Program "Super Star" award for outstanding safety performance. Additional information on the workshop, including presentations, is available at <http://esh.fe.doe.gov>; click on "Meetings and Workshops." ❖

Research DIGEST

A new type of polymer electrolyte membrane (PEM) is being developed by researchers at the Department of Energy's **Sandia National Laboratories**. The Sandia Polymer Electrolyte Alternative (SPEA) could help fulfill the need for new, uninterrupted autonomous power sources for sensors, communications, microelectronics, healthcare applications, and transportation. Recently, the research team headed by Sandia's Chris Cornelius demonstrated that the new SPEA could operate as high as 140 degrees C and produce a peak power of 1.1 watts per square centimeter at 2 amps per square centimeter at 80 degrees C. Under identical operating conditions, the SPEA material can deliver higher power outputs with methanol and hydrogen than Nafion, which is recognized as the state-of-the-art PEM material for fuel cells. The researchers will continue their study to understand the material's capabilities and limitations in order to potentially improve the physical properties of the SPEA material. (Chris Burroughs, 505-844-0948)

Researchers at the Department of Energy's **Lawrence Berkeley National Laboratory** are developing a way to use positron emission tomography (PET) scans to track the effectiveness of a gene therapy that promises to help severe Parkinson's disease patients control their symptoms without dangerous side effects. Their work, which focuses on refining the use of a PET-detectable chemical called a tracer, could allow scientists to evaluate how well the therapy jumpstarts the brain's ability to produce dopamine, a neurotransmitter that diminishes in Parkinson's patients. The researchers recently administered the tracer to healthy people and used PET to watch it accumulate in a dopamine-producing region of the brain that grows quiet as Parkinson's progresses. Pinpointing the brain's dopamine-production centers could give researchers a quick, accurate way to gauge the gene therapy's success once clinical trials begin. Ultimately, the tracer could speed development of treatment of advanced cases. (Dan Krotz, 510-486-4019)

Scientists have long thought that individual enzymes have specific, single jobs dependent on their molecular shape. According to this premise, enzymes could only evolve to perform new functions by accumulating several shape-changing mutations, which can take thousands of generations. Now, scientists at the Department of Energy's **Brookhaven National Laboratory** (BNL) have discovered another factor that can change several plant enzymes' functions instantaneously: their location within the cell. Depending on where these enzymes end up, they produce slightly different products. A paper by BNL biochemist John Shanklin describing the first example of such location-dependent enzyme function is in the July 13, 2004, issue of the *Proceedings of the National Academy of Sciences*. Multifunctional enzymes may offer scientists new ways to tailor plant products to meet specific needs, such as growing crop plants that make different, perhaps healthier oils. (Karen McNulty Walsh, 631-344-8350) ❖

DOE seeks proposals for INCITE program

Proposals are being accepted by the Department of Energy's (DOE) Office of Science (SC) to support innovative, large-scale computational science projects. Now in its second year, the Innovative and Novel Computational Impact on Theory and Experiment (INCITE) program will award a total of 5.5 million supercomputer processor hours and 100 trillion bytes of data storage space at the National Energy Research Scientific Computing (NERSC) Center at DOE's Lawrence Berkeley National Laboratory. The NERSC Center is SC's flagship for unclassified supercomputing.

The INCITE program seeks computationally intensive, large-scale

research projects and specifically encourages proposals from universities, other research institutions, and industry. Industry is specifically solicited to propose challenging problems that may be solved using high performance computing research. There is no requirement of current DOE sponsorship.

Proposals will be accepted only electronically, following instructions in the Call for Proposals at <http://www.nersc.gov/about/incitecall.php>. Proposals will be accepted until midnight PDT, Sept. 8, 2004. Awards are expected to be announced by Nov. 8, 2004. ❖

COMING Events

August

28-Sept. 3 World Renewable Energy Congress VIII (WREC VIII) and Energy Technology Expo and Conference (ETEC), Denver, Colo. Cosponsored by the Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy and others; hosted by DOE's National Renewable Energy Laboratory. WREC VIII, held every two years, will provide a forum for energy suppliers and consumers, governments, industry, academia, and financial institutions from around the world to discuss the development of energy sources that are secure, sustainable, accessible, and economically viable. ETEC will offer international representation of all renewable energy technologies and showcase the diversity of technology solutions. Additional information is available at <http://www.nrel.gov/wrec>. ❖

Beethoven hair experiment reenacted for film

A camera crew visited the Advanced Photon Source (APS) at the Department of Energy's Argonne National Laboratory (ANL) in May 2004 to film the reenactment of a highly publicized experiment from 2000 when researchers using the APS confirmed that composer Ludwig van Beethoven's years of chronic illness were due to lead poisoning. This toxin also may have contributed to the 19th century composer's death.

The crew, from Rhombus Media in Toronto, is producing a "docudrama" for the Canadian Broadcasting Company and for PBS. The APS was shut down for routine maintenance, so the filmmakers were able to access not only the Experiment Hall floor, but also the accelerator tunnels where the X-ray beam is produced. No air date has been set for the program as the producers are still filming at other sites.

"The Advanced Photon Source is one of the most remarkable machines in the world, and I hope our program will do it justice," said Larry Weinstein, director of the film. "As a non-scientist, I am just amazed at things that scientists can accomplish."

In the experiment, the researchers



From the left, researchers Bill Walsh and Ken Kemner reenact an experiment examining Beethoven's hair for the film crew.

found extraordinarily high levels of lead in strands of Beethoven's hair, according to Bill Walsh, chief scientist for the Health Research Institute in Naperville, Ill., a former ANL scientist, and principal investigator on the project. The team performed nondestructive X-ray beam experiments at one of the X-ray beamlines operated by X-ray Operations and

that averaged about 60 parts per million (ppm) were found in the six Beethoven hairs. According to Walsh, average Americans today have 0.6 ppm of lead in their hair.

The source of the composer's lead poisoning is unknown. It could have been from drinking mineral water at spas, from dishes or wine stored in lead-lined flasks, or from lead crystal. ❖

Research of Argonne's Experimental Facilities Division. ANL researchers included Ken Kemner, Francesco De Carlo, and Derrick Mancini.

The experiments involved side-by-side testing of six Beethoven hairs, a standard hair of known lead concentration, and a thin film of standard "lead glass" with a known lead composition. Elevated lead levels

INEEL tests spent fuel can inspection system

Researchers at the Department of Energy's Idaho National Engineering and Environmental Laboratory (INEEL) have successfully operated a new, ultrasonic inspection system for cans of spent fuel. The Multi-Axis Ultrasonic/Video Data Acquisition System (MaDAS) examines spent nuclear fuel cans stored under water to see if water has seeped into cans or if any cans have significant corrosion.

The system uses ultrasonic search heads to examine spent fuel storage cans and to detect and characterize corrosion on the cans. Three video cameras let operators see the cans as they are inspected. An operator at a nearby station remotely controls the inspections and data collection system.

The first use of the system outside the test laboratory was on 36 cans of

Fermi driver fuel from the Enrico Fermi Power Plant, Laguna Beach, Mich. The examination showed 35 cans were dry inside and one indeterminate can that needed further analysis. INEEL is scheduled to begin moving 214 cans of Fermi fuel to dry storage in January 2005.

In the test, MaDAS was submerged in the water storage basin holding the spent fuel cans. While kept under water, the cans were placed one at a time into the middle of the MaDAS and onto a small turntable. As a can slowly rotated on the turntable, transducers inspected the inside of the can for water. The transducer emits sound pulses that penetrate the can and returns the sound to sensors in the search head. A can without water inside gives a return signal different from a can with water in it.

The search head, which has a range of motion, is positioned close to the surface of the can. Software directs the search head to track closely to the can surface. This allows a complete inspection of the can even if it has a curve or protrusion or sits at an angle. A second transducer uses sound pulses to profile any corrosion, cracks, or pits. The sensor pulses could look at the wall of a can a few thousandths of an inch at a time to show the depth of any deterioration on the surface, the interior wall, or in between.

MaDAS will support INEEL as it moves spent fuel from underwater storage to dry storage, as required by the 1995 Idaho Settlement Agreement. Personnel must be assured there is no water in the cans when transferred. ❖

Demolition of Rocky Flats Building 771 begins

Demolition of Building 771 at the Department of Energy's Rocky Flats Environmental Technology Site began on July 15. Once dubbed by the national media as "the most dangerous building in America," Building 771 is the first plutonium process building of its size and complexity to be demolished in the United States.

"This represents a historic milestone in closing Rocky Flats and the most significant cleanup accomplishment to date in the DOE complex," Secretary of Energy Spencer Abraham said. "The demolition of one of the most contaminated buildings in the country, once thought impossible, demonstrates the nation's commitment to accelerated cleanup and closure of Rocky Flats."

The demolition of Building 771 is the culmination of a comprehensive nine-year cleanup process that

included safely draining and stabilizing 15,000 liters of plutonium solutions and removing 240 contaminated gloveboxes, 251 tanks, more than 11 miles of aging piping, and 40,000 liters of contaminated sludges. Cleanup of Rocky Flats once was expected to take 65 years and cost in excess of \$36 billion.

"Under the Energy Department's accelerated cleanup plan, all the weapons-usable material at Rocky Flats is gone—12 years ahead of the original schedule," Secretary Abraham said. "And as a bonus, the cleanup will be under budget at a cost of \$7 billion—a savings to the taxpayers of \$29 billion. The nation owes its thanks to the people who have done and will continue to do the hard and complex work of the cleanup: the 4,000 Rocky Flats employees who took the agreements hammered out

by elected officials, by regulators and by other vitally interested stakeholders, and successfully undertook the largest and most complex cleanup project ever before attempted anywhere in the world."

Building 771 is one of four original manufacturing buildings at Rocky Flats and the second of the site's five major plutonium-contaminated facilities to be demolished. Demolition is expected to be completed in September 2004.

The Building 771 demolition marks the beginning of a period of numerous demolition activities that will occur over the next 18 months. The remaining 450 facilities and structures at Rocky Flats will be decommissioned and demolished and environmental remediation completed, keeping Rocky Flats on schedule to safely close in 2006. ❖

U.S. ITER office to be located at Princeton Lab

The U.S. project office for ITER, a major international fusion experiment, will be located at the Department of Energy's (DOE) Princeton Plasma Physics Laboratory (PPPL). In partnership with DOE's Oak Ridge National Laboratory (ORNL), PPPL will be responsible for overseeing the U.S. ITER Project Office and providing it with the requisite staffing and facilities.

"Throughout its history, Princeton Plasma Physics Laboratory has earned a reputation for the highest-quality science and top-flight management," Secretary of Energy Spencer Abraham said. "That is why I am pleased to announce that, after careful review, we have selected the Princeton Plasma Physics Laboratory/Oak Ridge National Laboratory partnership to run the U.S. ITER Project Office. I am confident that our partners in the ITER negotiations will recognize our choice of PPPL/ORNL to manage the U.S. participation in ITER for what it is: the clearest possible indication that

our nation takes ITER—and our role in ITER—very seriously."

The U.S. ITER Project Office will be responsible for project management of U.S. activities to support construction of this international research facility. These activities will include securing technical assistance from the U.S. fusion community, procuring and shipping U.S. hardware contributions, arranging for U.S. personnel to work abroad at the ITER site, representing the U.S. with the international ITER organization on construction and preparation for ITER operations, and coordinating and integrating the U.S. fusion community's ITER project activities with the international ITER project.

The PPPL/ORNL proposal was one of three submitted by DOE national laboratories to lead the Project Office. The other proposals were from Lawrence Livermore National Laboratory and Idaho National Engineering and Environmental Laboratory. ❖

NEW ON THE Internet

LANL contract process

On June 28, 2004, the Department of Energy's (DOE) National Nuclear Security Administration began the process to compete the management and operating contract for DOE's Los Alamos National Laboratory by seeking an Expression Of Interest from parties interested in competing for the contract. A Request for Proposal (RFP), including draft contract terms and conditions, tentatively is scheduled for release in late fall 2004. A website, <http://www.doeal.gov/LANLContractRecompete/Default.htm>, has been established for dissemination of all information related to the competition. The website will be the principal solicitation distribution medium for notices, changes, questions and answers, and the forthcoming RFP. A subscription feature on the website will enable interested parties to receive notice whenever the website is updated. ❖

People IN ENERGY

The University of California Board of Regents has appointed Nobel Laureate

Steven Chu as the sixth Director of the Department of Energy's Lawrence Berkeley National Laboratory, effective Aug. 1, 2004. He will succeed

Charles V. Shank who earlier this year announced his intention to step down to return to the UC Berkeley

campus to continue teaching and research. Chu currently is the Theodore and Francis Geballe Professor of Physics and Applied Physics at Stanford University, where he has been on the faculty since 1987. He is the co-winner of the 1997 Nobel Prize in Physics "for development of methods to cool and trap atoms with laser light."



Andrew Bieniawski, Executive Director of the Department of Energy's (DOE) Moscow Office, has returned to DOE Headquarters, Washington, D.C., to serve as Acting Administrator in charge of the Global Threat Reduction Initiative (*DOE This Month*, June 2004). For his three years of outstanding service, U.S. Ambassador to Russia Alexander Vershbow presented the Department of State's Superior Honor Award to Bieniawski. He also received numerous words of praise from Federal Agency for Atomic Energy (FAAE) International Department Director Vladimir Kuchinov and FAEE Director Aleksandr Rumyantsev. **Christine Buzzard** has been named Acting Director of the DOE Moscow Office.

Fred Begay, a member of the Tribal Relations Team in the Government Relations Office at the Department of Energy's Los Alamos National Laboratory (LANL), recently was elected to the New York Academy of Sciences. Begay began his career at LANL in 1971 as a nuclear physicist where he participated in numerous controlled thermonuclear fusion programs. He currently works on science and technology outreach programs for the Navajo government. Begay has held university physics research and teaching appointments, received numerous awards, and has had several films produced about his life.



Elmer Wilhite, a chemist with the Department of Energy's Savannah River National Laboratory is the recipient of the Savannah River Site's Donald A. Orth Award of Merit. The award, which recognizes exceptional achievements in technical excellence and professional leadership, was presented to Wilhite for his 30 years of contributions in the area of environmental and low-level waste management. His contributions span fundamental environmental science, low-level waste process improvements, and the development of the Site's Saltstone facility and E Area vaults.

Jeanne D'Ascoli has been named Manager of the Community Relations Office at the Department of Energy's Brookhaven National Laboratory (BNL). The office implements the laboratory's many community involvement activities and sponsors numerous outreach programs, including the year-round tour program, the Speakers' Bureau, and Volunteers in Partnership program. D'Ascoli, a principal in developing the model for BNL's Community Advisory Council, has served as the laboratory's liaison to the group since its beginning more than five years ago.



Richard H. Truly, Director of the Department of Energy's National Renewable Energy Laboratory (NREL), plans to retire in November 2004 after more than seven years of heading the laboratory. Truly also serves as Executive Vice President of Midwest Research Institute (MRI), which operates NREL for the Department. With his planned retirement from both positions, MRI will begin a national search for a new laboratory director.

Gary L. Smith and **Denis Strachan**, researchers at the Department of Energy's Pacific Northwest National Laboratory, have been elected Fellows of the American Ceramic Society, one of the society's most distinguished honors. Smith also has been appointed Chair of the ASTM International Committee C26 on Nuclear Fuel Cycle, an influential committee that develops standards important to work done on the nuclear fuel cycle. He also is the recipient of the Harlan J. Anderson Award for his contributions toward the successful operation of the C26 Committee.

Five scientists from the Department of Energy's Argonne National Laboratory have received the 2004 Distinguished Performance Award from the University of Chicago Board of Governors for Argonne in recognition of their outstanding scientific or technical achievements. The award winners are: **Lawrence Harding**, Chemistry Division; **Romesh Kumar**, Chemical Engineering Division; **James Proudfoot**, High Energy Physics Division; and **Wolfgang Sturhahn** and **Thomas S. Toellner**, Experimental Facilities Division. ❖

NEW Publications

Office of Inspector General (IG) reports: **Internal Controls Over Methamphetamine Precursor Chemicals at the Y-12 National Security Complex and the Oak Ridge National Laboratory** (DOE/IG-0650); **Management of the Department's Personnel Security and Access Control Information Systems** (DOE/IG-0651); **Management of the Federal Energy Regulatory Commission's Information Technology Program** (DOE/IG-0652); **Management of Oak Ridge Radio Transition Projects** (DOE/IG-0653); **Management Controls Over the Licensing Support Network for the Yucca Mountain Repository** (OAS-M-04-04). The reports are available from the U.S. Department of Energy, IG Reports Request Line, 202-586-2744, or at <http://www.ig.doe.gov>.

Department of Energy (DOE) 2003 Environment, Safety and Health (ES&H) Annual Report, prepared by the Office of Environment, Safety and Health, presents an assessment of overall ES&H performance at DOE sites. The assessment shows that steady improvement continues in performance and also identifies areas requiring increased management attention and improvement. The report is available at <http://www.eh.doe.gov/paa/annualreports/>. Questions may be directed to Frank Russo, Deputy Assistant Secretary for Corporate Performance Assessment (EH-3), 301-903-8008, or frank.russo@hq.doe.gov. ❖

Milestones

YEARS OF SERVICE

July 2004

Headquarters

Economic Impact & Diversity

Carrington L. Buddoo (25 years). **EIA** – John P. Galliker (35), Eva M. Fleming (30). **Energy Assurance** – David M. Soboroff (30). **Energy Efficiency & Renewable Energy** – Lew W. Pratsch (35), Richard H. Moore (30), Douglas L. Faulkner (25). **Environment, Safety & Health** – Patrick F. Finn (30). **Environmental Management** – Mark W. Frei (30), Jo Ann Lakin (30), Sharon L. White (30), Barbara J. Heffernan (25), Thomas P. Longo (25), Claude E. Magnuson (25).

FERC – Terrill A. Marshall (40), Martha V. Jones (35), Daniel J. Mahoney (30), Kirk F. Randall (30), Gloria T. Smith (30), Barbara D. Bourque (25), Frank Calcagno, Jr. (25), David R. Dickey (25), Alice M. Fernandez (25), Charlotte A. Handley (25), Tony V. Ingram (25), Michael R. Monahan (25), James A. Pederson (25), John D. White (25), Jeff C. Wright (25), Mary A. Wright (25). **Fossil Energy** – Theodore B. Simpson (30), Susan K. Gregersen (25). **General Counsel** – Mary A. Masterson (35).

Inspector General – Stephen L. Stronczer (35). **Legacy Management** – Jack W. Blanchard (30). **Management, Budget & Evaluation** – Travis C. Hulsey (35), Michael L. Plummer (35), Stephanie S. Diamond (30), Helen O. Sherman (30), Lawrence H. Towne (30), Jacqueline R. Battle (25), Michael B. Fraser (25), Phillip L. Liverpool (25). **NNSA** – Patricia M. Faith (30), Michael A. Gillespie (30), David C. Hashbarger (30), Dana K. Krupa (30), H. W. Pate (30), Cheryl K. P. Pryor (30), Kim D. Smith (30), Michael E. Huckels (25), Dwayne L. Smith (25).

Nuclear Energy – Cynthia L. Johnson (35), Debra K. Roberts (35), Andrew R. Griffith (25). **Policy & International** – Keena M. Hillary (25). **Radioactive Waste** – Carol L. Hanlon (30), Steven E. Gomberg (25). **Science** – Arlene M. Deblanc (30), Deborah A. Greenawalt (30), Peter W. Lunn (30), John G. Yates (30), William L. Webster (25). **Security & Safety Performance Assurance** – Ann E. Smallwood (40), Mary E. Maxwell (35), Colleen J. Feldmeyer (30), James C. Raysinger (30).

Field

Albany Research Center – George J. Dooley III (25). **Albuquerque** – George J. Rael (25). **Chicago** – Jerry W. Faul (35). **Los Alamos Site/NNSA** – Dean W. Decker (25). **NETL** – Richard G. Lett (35), J. Rodney Diehl (30), Lisa M. Nestor (30), Madonna L. Tamilya (30), Robert P. Warzinski (30), Curt M. White (30). **Nevada Site/NNSA** – David M. Ross (30). **NNSA Service Center** – James A. Jordan (35), Rosemary F. Gourley (30), Constance L. Soden (30), Connie F. Papponi (30), Sandra M. Chavez (25), Rosemary V. Herrera (25), James J. Rose (25).

Oak Ridge – Walker K. Love (40), Lester K. Price (40), Michael R. Jugan (30), Edwin M. Marshall (30), James D. Baxter, Jr. (25), Debra R. Beets (25), Lawrence M. Sparks (25). **Pittsburgh Naval Reactors/NNSA** – Ronald J. Argenta (25). **Richland** – Philip E. Lamont (30), Alan E. Hopko (25), Randy W. Small (25), Robert C. Sorensen (25). **Sandia Site/NNSA** – Tom X. Goss (35).

Savannah River – Jay D. Bilyeu (35), Donna A. Brown (30), Richard L. Ford (30), John M. Melvin (30), John R. Phillips (30), Clyde W. Terrell (30), Margaret A. Wright (30), Rebecca K. Alexander (25), Douglas E. Hintze (25). **Schenectady Naval Reactors/NNSA** – William R. Chaput, Jr. (25). **Strategic Petroleum Reserve** – Judith B. Bouquet (25). **Y-12 Site/NNSA** – Harry E. Peters II (35). **Western Area Power** – Randolph S. Fernandez (35), Marguerite M. Fontaine (35), Dwight D. Kelln (35), Robert M. Porter (35), Rollie G. Ortiz (30), Peggy J. Plate (25), Richard A. Sutton (25).

Bonneville Power – David L. Anderson (35), Laurens C. Driessen (35), Donald D. Gerig (35), Richard J. Hall (35), Leon Kempner, Jr. (35), Patricia A. Smithy (35), John P. Baldrige (30), Patricia E. Blanco (30), Dale C. Davis (30), Terence G. Esvelt (30), Brenda S. Kent (30), Thomas C. McKinney (30), Elva L. Molyneux (30), Jerry L. Reding (30), William R. Roberts (30), Neal G. Sherry (30), Michael L. Tochtrop (30), Mark N. Adams (25), Iris J. Bennett (25), Gary O. Beck (25), Lorna M. Blue (25), Wesley A. Hutchison (25), Carol L. Jacobson (25), William C. Maslen (25), Haig Revitch (25), Sandra M. Simpson (25), Patricia R. Smith (25), Richard C. Stroh (25), Kristi J. Van Leuven (25).

RETIREMENTS

May 2004

Headquarters

Chief Information Officer – John Manouelian (41 years). **General Counsel** – Gustav Goldberger (26). **Management, Budget & Evaluation** – Van T. Jones (32). **Radioactive Waste** – James M. Replogle (17).

Field

Bonneville Power – Joseph H. Hunziker (31), Loren D. Ridling (27). **Golden** – Thomas R. Reynolds (15). **Idaho** – Neil S. Burrell (16). **Livermore Site/NNSA** – Aristidis G. Krasopoulos (20). **Western Area Power** – Joseph T. Luna (25). **Y-12 Site/NNSA** – P. Gary Humphrey (20).

June 2004

Headquarters

Counterintelligence – Daniel J. Bruno (21). **Environmental Management** – Dorothy T. Hawkins (34). **Inspector General** – Timothy H. Wilson (31). **Management, Budget & Evaluation** – Laura J. Copeland (41), Charles T. Ingram (31), James G. Powers (25), James W. Rand (36), Stephen M. Smith (32). **NNSA** – Ben A. Best (33), Michael F. O'Connell (31), Alan C. Smith (35). **Security & Safety Performance Assurance** – Leo D. Sullivan (30). **Science** – Sam E. Berk (30), Carolann S. Koplak (22).

Field

Albany Research Center – Terry R. Stoelting (26). **Bonneville Power** – John R. Cowger (35), Allen T. Reay (35), Judy A. Uhrich (20). **Carlsbad** – David D. Emery (16). **NNSA Service Center** – Joseph L. Murphy (25), Billye S. Neilson (22). **Western Area Power** – Terry W. Hopkins (35), Dale H. Stregge (30), Theodore L. Kellner (19), Stephen E. Kerr (35), Catherine J. Smart (31).

Idaho – Dixie L. Evans (15), Marshall C. Garr (36), Rosemary Haines (26), Warren R. Hallum (37), Sandra M. Hart (38), Carol A. Hathaway (25), Herman J.J. Heier (29), Charles Noble (16), Rebecca L. Rich (26), Sandor Silverman (20), Terry W. Smith (26), Jeanne L. Thompson (24), Robert G. Trimberger (13), Kara L. Twitchell (35), Roger L. Twitchell (31), James E. Werner (25). ❖

Secretary calls for U.S. refining capacity study

On June 22, 2004, Secretary of Energy Spencer Abraham called on the National Petroleum Council (NPC) to conduct a study of refining capacity in the United States. Secretary Abraham made the request during his speech to the NPC at their 113th meeting, emphasizing that increasing demand in the United States was outpacing projected refining capacity. "The American people need to know how we are going to address these challenges," the Secretary said.

As part of the study, the NPC is to determine the nation's future demand for refinery products, the domestic capacity to meet future needs, the barriers to meeting future demand, and the capital factors that will drive supply growth. The Council also will examine how worldwide capacity will impact access to products by the U.S.

"I think we would all agree that the answers to those questions are needed sooner rather than later," Secretary Abraham said. "If there is one thing the market needs, it's accurate, timely, up-to-date information. And that's why I'm requesting that you complete these studies by September 30. It is my hope this information can be put to use by the end of the year in a way that will help bring greater long-term stability to petroleum markets and a greater degree of certainty to American consumers."

July 2004

AROUND DOE

Name changes official for EERE regional offices

The six regional offices under the jurisdiction of the Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE) have been renamed. The new office names are Central Regional Office (formerly Denver Regional Office); Mid-Atlantic Regional Office (formerly Philadelphia); Midwest Regional Office (formerly Chicago); Northeast Regional Office (formerly Boston); Southeast Regional Office (formerly Atlanta); and Western Regional Office (formerly Seattle). The name changes, effective June 17, 2004, will be reflected on all DOE communications and publications.

The EERE regional offices help implement energy-efficient and renewable energy strategies at the state and local level. The offices work with states and communities to promote EERE programs, identify and engage community and state partners, and integrate EERE programs with public and private sector activities.

DOE scientists to sample skies over Pennsylvania

Scientists from the Department of Energy's (DOE) Argonne (ANL), Brookhaven (BNL), and Pacific Northwest National Laboratories (PNNL) will take to the skies over western Pennsylvania from July 20 to Aug. 15, 2004, to sample the air for aerosol pollutants. The research is part of the International Consortium for Atmospheric Research on Transport and Transformation experiment, a large, multi-agency climate study.

The scientists, funded and coordinated by the Office of Biological and Environmental Research within DOE's Office of Science, will focus on evaluating the effects of aerosol pollutants on Earth's radiation balance and climate forcing for a portion of the study known as the NorthEast Aerosol eXperiment. "One main goal is to understand how pollutants from the northeastern U.S. affect climate and air quality as they spread over the North Atlantic Ocean," Peter Daum, lead researcher for the Brookhaven/DOE team, said.

The aircraft, a G-1 Gulfstream operated by PNNL, will carry research-grade instruments developed at both BNL and PNNL. Additional ground-based instruments deployed by ANL and PNNL scientists will provide complementary data. All measurement data from DOE will be made fully and freely available to both the scientific community and the public. ❖

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

Official Business