

Volume 21, Number 6 November/December 2006

Special Section: LLRW Overview & Highlights

Commercial LLRW Management and Disposal Highlights, Activities and Status Updates

As a special supplement to this last newsletter of 2006, below please find an overview of highlights and activities and a status update on newsworthy items concerning low-level radioactive waste management and disposal and related issues. Please note that the list is not intended to be overly comprehensive or detailed, but rather is meant to serve as a useful reference tool to provide a snapshot of highlights from around the country.

Most, if not all, of the below-identified items have been covered in prior newsletters that can be used as a resource for obtaining additional information. In addition, where available, a web site address or other contact information is provided.

An abbreviated four-page version of this document is available to members and subscribers upon request and may be disseminated only upon approval by the LLW Forum's Executive Director.

States and Compacts

Atlantic Compact/South Carolina

 Under current legislation, only in-region waste may be disposed at Barnwell beginning July 1, 2008.

- This means that generators in 36 states will potentially have no disposal access for Class B & C waste after June 30, 2008.
- ◆ According to Chem-Nuclear, annual Class B and C waste generation is steady at about 20,000 to 22,000 cubic feet/year, of which about 14,000 to 16,000 cubic feet/year comes from the 36 states that are in danger of losing Class B and C disposal access. Of this amount, 1,500 cubic feet/year or less is considered medical and non-utility waste.
- Barnwell volume commitments are near the allowed limits, which are 40,000 cubic feet in FY 06/07 and 35,000 cubic feet in FY 07/08.
- Chem-Nuclear has initiated a volume incentive hold program to try to free up space by guaranteeing regional generators that postpone (Continued on page 6)

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As part of that mission, the LLW Forum publishes a newsletter, news flashes, and other publications on topics of interest and pertinent developments and activities in the states and compacts, federal agencies, the courts and waste management companies. These publications are available to members and to those who pay a subscription fee.

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Low-Level Radioactive Waste Forum, Inc.

LLW Notes

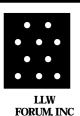
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Key to Abbreviations		
U.S. Department of Energy	DOE	
U.S. Department of Transportation	DOT	
U.S. Environmental Protection Agency	EPA	
U.S. Government Accountability Office		
U.S. Nuclear Regulatory Commission	NRC	
Naturally-occurring and accelerator-produced		
radioactive material	NARM	
Naturally-occurring radioactive material	NORM	
Code of Federal Regulations		

Low-Level Radioactive Waste Forum, Inc.

Low-Level Radioactive Waste Forum, Inc.

LLW Forum to Host Next Meeting in San Diego

The Low-Level Radioactive Waste Forum will hold its next meeting on March 19 – 20 at the Bahia Hotel in San Diego, California. The Southwestern Low-Level Radioactive Waste Compact Commission is sponsoring the one and one-half day meeting.

Registration

The meeting is free for members of the LLW Forum, Inc. Non-member registration is \$500.00, payable to the "LLW Forum, Inc." Advance registration is required. Interested parties are encouraged to register early to ensure space availability. To obtain a registration form, go to the LLW Forum's web site at www.llwforum.org and click on the "Registration Form" link on the home page or call Todd D. Lovinger, the LLW Forum's Executive Director, at (202) 265-7990.

Hotel Reservations

A block of 50 rooms has been reserved for Sunday, March 18, and Monday, March 19 for meeting attendees at the special rate of \$129.00 plus tax per night for single or double occupancy. A limited number of rooms are available at this special room rate three days prior to and after the meeting. It is highly suggested that reservations be made early in order to ensure availability. Reservations must be made by February 15 to obtain the special rate. To make reservations, please call (800) 576-4229 and ask for a room in the "LLW FORUM" block.

Transportation

The Bahia Hotel is located approximately 10 minutes from San Diego International Airport. For information on location, ground transportation and directions, go to www.bahiahotel.com.

Future Meeting Locations and Dates

The fall 2007 meeting will be held in Illinois at the Oak Brook Hills Marriott on October 1-2, 2007. The State of Illinois and Central Midwest Interstate Low-Level Radioactive Waste Compact region are sponsoring the meeting.

The Northwest Compact/State of Washington has tentatively agreed to host the first meeting in April 2008. The Appalachian Compact has agreed to host the fall 2008 meeting in Annapolis, Maryland.

The LLW Forum is currently seeking sponsors and/or hosts for the 2009 meetings. Interested parties should contact Todd D. Lovinger, the organization's Executive Director, at (202) 265-7990.

2007 LLW Forum Invoices Due

Invoices for memberships in and subscriptions to the Low-Level Radioactive Waste Forum, Inc. for 2007 were mailed out in October 2006. We kindly ask that everyone process the invoices and send in payment at their earliest convenience, but no later than January 15, 2007, in order to avoid a disruption of services.

Payments are only accepted via check or wire transfer/direct deposit. The payment remittance address is listed at the bottom of the invoice.

For additional information, please contact Todd D. Lovinger, the LLW Forum's Executive Director, at (202) 265-7990.

Low-Level Radioactive Waste Forum, Inc. continued

TMMC and California Join LLW Forum

The Low-Level Radioactive Waste Forum, Inc. (LLW Forum) is pleased to welcome Toxco Material Management Center (TMMC) and the State of California as its newest members. TMMC—a premier recycling, reuse, and disposal facility for radiologically contaminated materials joined the LLW Forum as a non-federal associate member in November 2006. The California Department of Health Services, which is responsible for low-level radioactive waste management and disposal activities in the state, joined the LLW Forum as a state member in December 2006.

With the addition of TMMC and California, the LLW Forum now counts amongst its members and supporters all nine operating regional low-level radioactive waste disposal compacts, 12 individual states, five federal agencies, seven treatment and/or disposal facility operators, and various other individual companies, organizations and associations.

Toxco Material Management Center According to the company's web site, "Toxco's recycling concept for materials and equipment previously used in a radioactive environment is to identify and separate contaminated materials from noncontaminated materials." TMMC identifies as its focus "the reuse of non-contaminated materials in other applications within the nuclear industry." The screening process used by TMMC is aimed at minimizing disposal volumes and costs, including decommissioning costs. "Toxco has reused and recycled millions of pounds of contaminated lead, non-ferrous metal, steel, and equipment for the DOE, commercial facilities, and educational nuclear facilities," states the site.

David Eaker, TMMC's Vice President for Metals. attended and participated in the September 2006 LLW Forum meeting and special workshop titled "Crafting Solutions for Current and Post-2008 Problematic Waste Streams" in Marco Island, Florida. Mr. Eaker can be reached at (865) 482-5532 or at deaker@toxcommc.com. Additional information about TMMC can be found at www.toxcommc.com.

California Department of Health Services The primary role of the California Department of Health Services is to protect and improve the health of all Californians through population-based public health and preventative services, environmental health programs, medical care services and other programs that focus on special medical needs. According to the agency's web site, "These programs and services must be responsive to the changing needs of our communities and must be designed and delivered with the understanding that a one size fits all state program will not meet the health care and public health needs of California's ethnically, culturally, and geographically diverse communities."

For additional information, contact Gary Butner—the Acting Branch Chief for the Radiological Health Branch at gbutner@dhs.ca.gov or go to http://www.dhs.ca.gov.

Other In addition to the State of California and the Toxco Material Management Center, Studsvik also recently joined the LLW Forum a non-federal associate member. Studsvik is a leading supplier of services to the international nuclear industry. (See LLW Forum News Flash titled, "LLW Forum Welcomes Studsvik as its Newest Member," October 22, 2006.)

The LLW Forum looks forward to having the State of California, Toxco Material Management Center, and Studsvik as active members and strong participants of our organization.

(Continued from page 1)

- disposal current prices in FY 08/09. Responses from regional generators were due in October 2006.
- Chem-Nuclear is reviewing financial options for operating the Barnwell facility post-June 08 with limited volumes from only in-region waste.

For additional information, go to www.barnwelldisposal.com.

Central Compact

- In September of 2002, a federal district court ruled against Nebraska in a lawsuit challenging the state's actions in review of US Ecology's license application. The court held that the process was "politically tainted."
- In August of 2005, Nebraska paid the Central Compact \$145.8 million to settle the suit.
- Nebraska withdrew from the Central Compact effective July 17, 2004.
- In April 2006, generators sued the Central Compact in federal district court to preserve their interest in \$5 million in remaining, undisbursed settlement funds. The suit remains pending.
- In May 2006, the Central Compact transferred land in Nebraska that was previously designated for a regional facility to the Village of Butte.

For additional information, go to www.cillrwcc.org

Northwest Compact/State of Utah

◆ In October 2006, the Utah Department of Environmental Quality (DEQ) released a legislatively mandated review of closure, postclosure and perpetual care funding for commercial hazardous and radioactive waste facilities. Financial assurance of radioactive waste facilities was deemed to be adequate at current levels, with projected future value of the perpetual care and maintenance fund being \$93 million at the end of the 100 years institutional control period. Financial assurance for closure and post-closure care of hazardous waste facilities was deemed adequate, but the report concludes that financial assurance should be required for the perpetual care of, maintenance

- of, or corrective actions at such facilities postclosure. (See related story this issue.)
- ◆ On February 2, 2005, the Utah Division of Radiation Control at the request of the new owners terminated Energy Solutions Class B and C license. The license was approved by DEQ in 2001, subject to approval by the legislature and Governor (who opposes it). On February 15, 2005, Energy Solutions filed an amendment request to expand operations, which has been approved but is pending appeal before Utah Supreme Court.
- In 2005, Energy Solutions achieved record disposal volumes. The company recently signed "life of plant" contracts with the South Texas Project and BWX Technologies.
- On February 22, 2006, NRC issued a license to a consortium of 8 utilities named Private Fuel Storage (PFS) to build a temporary storage facility for up to 44,000 tons of spent nuclear fuel on the Goshute Indian reservation in Utah. In September 2006, the Bureau of Land Management refused to grant needed transportation rights of way to the site and the Bureau of Indian Affairs disapproved the PFS lease agreement.

For additional information, go to <u>www.deq.utah.gov</u> and <u>www.energysolutions.com</u>.

Northwest Compact/State of Washington

- Voter initiative 297 (Cleanup Priority Act) was approved in November 2004 to require DOE to clean up Hanford before sending additional waste and to prevent the disposal of waste in unlined trenches.
- In June of 2006, a federal district court struck down the initiative as preempted by the Atomic Energy Act and in violation of sovereign immunity. The Washington Department of Ecology is appealing the court's decision.

Rocky Mountain Compact

◆ On September 14, 2006, in response to a letter from Senator Wayne Allard, Senate Judiciary Chair Arlen Specter agreed to "launch an inquiry into the actions of the Rocky Mountain

- Compact" concerning its claim of jurisdiction and authority over NORM & TENORM.
- On September 13, 2006, the Rocky Mountain Board amended its designation of Deer Trail to be a non-exclusive regional disposal facility for certain limited waste streams and clarified that utility residuals can continue to be disposed at any facility allowed by state laws.
- On September 1, 2006, Deer Trail filed suit to enjoin Adams County from prohibiting the facility to accept, treat and dispose of materials licensed or permitted by the Colorado Department of Public Health & the Environment. Two other lawsuits by Adams County were dismissed earlier this year for lack of judicial standing.

For additional information, go to www.rmllwb.us.

Southeast Compact

- On June 23, 2002, the Southeast Compact and member states sued North Carolina for over \$90 million for failing to meet its obligations to license a regional disposal facility (breach of contract, unjust enrichment and promissory estoppel claims). The case is before a Special Master appointed by the Supreme Court, where original jurisdiction is sought.
- On July 26, 1999, North Carolina enacted legislation to withdraw from the compact.

For additional information, go to www.secompact.org

Federal Agencies

U.S. Environmental Protection Agency

- EPA recently released the first volume of a technical report on TENORM wastes from uranium mining—the second volume will be released later this year. EPA also released a database compiling locations of uranium in the U.S., focusing on western states.
- EPA is implementing an upgraded national monitoring system (RadNet) for radiation.

For additional information, go to www.epa.gov.

U.S. Nuclear Regulatory Commission

- NRC is conducting a strategic assessment of its low-level radioactive waste program to identify and prioritize activities. The public comment period ended on September 5, 2006. [71 Federal Register 38,675 (July 7, 2006)]
- NRC has approved license extension requests for 47 reactor units, is processing requests for 7 others and has received letters of intent to file renewal requests for 26 more. [http:// www.nrc.gov/reactors/operating/licensing/ renewal/applications.html]

For additional information, go to <u>www.nrc.gov</u>.

Meetings, Roundtable Discussions and Workshops

Federal Sites Options Roundtable

The May 22, 2006 meeting—which was cosponsored by the Southeast Compact, Rocky Mountain Compact, Nuclear Energy Institute, Health Physics Society, & California Radioactive Materials Management Forum— explored issues surrounding the proposed use of federal facilities or federal land for commercial low-level radioactive waste disposal. Highlights of the meeting included:

- congressional staff warned that Congress is unlikely to revisit this issue at this time;
- several officials expressed the opinion that the use of federal facilities for the disposal of commercial waste is not feasible and that other options are available currently; and
- comments by many participants indicated that the problem is really one of economics (cost) rather than access.

For additional information, contact the Southeast Compact at (919) 821-0500 and see <u>LLW Notes</u>, May/June 2006, p. 5.

ACNW Workshop

The Advisory Committee on Nuclear Waste (ACNW) recently finalized a White Paper on low-level radioactive waste disposal issues. In addition, ACNW held a workshop on May 23-24, 2006 that

focused on regulatory, technical and policy issues surrounding commercial low-level radioactive waste disposal and generated these ACNW recommendations to NRC:

- there is no need to revise NRC's Part 61 lowlevel radioactive waste regulations, but license conditions and regulatory guidance should be developed to better implement Parts 20.2002 and 61.58;
- guidance should be developed for management and disposal of emerging waste streams in a risk-informed and performance-based manner consistent with 61.41 - 61.44/61.58;
- a more risk-informed approach to low-level radioactive waste management should be encouraged that places greater emphasis on the radionuclide content of the waste rather than source or origin;
- an examination should be made of how NRC and the Agreement States are preparing to regulate potential increases in the storage of Class-B and -C low-level radioactive waste after June 2008; and,
- it is important to identify and evaluate any unintended consequences, though unlikely.

For additional information, go to http://www.nrc.gov/reading-rm/doc-collections/acnw/letters/2006/ and see LLW Notes, September/October 2006, pp. 17 – 19.

<u>LLW Forum Workshop re Current and Post-2008</u> Problematic Waste Streams

The LLW Forum's September 19, 2006 special workshop was devoted to addressing current problematic waste streams and post-2008 concerns should the Barnwell facility close to out-of-region waste as scheduled and no other alternative disposal options become available. Attendees were divided into break-out groups to brain-storm about mitigating actions and potential solutions. Group comments were as follows:

 Group 1 identified escalating disposal costs and a lack of a definition for what constitutes lowactivity waste as the basic issues and identified as solutions to encourage competition, expedite the review process for new facilities, and institute a public process for international

- coordination for defining low-activity waste.
- Group 2 identified safe and cost effective disposal of medical and academic waste as their primary concern and recommended federal or legislative solutions.
- Group 3 said institutional people do not know all of the available options and that too much reliance is placed upon brokers and suggest that the LLW Forum serve as catalyst.
- Group 4 identified problem areas as biological waste, Class B and C waste disposal, and sealed sources. For biological waste, they discussed development of regional disposal contracts by compacts. For B and C waste, they expressed hope for the success of the proposed Waste Control Specialists' (WCS) facility in Texas and suggest alternate disposal provisions and rulemaking may offer some relief. For sealed sources, they discussed recycling, DOE's recovery program, and storage at WCS.
- Group 5 focused on Department of Defense (DoD) and medical waste disposal. DoD noted that it is very interested in gaining access to the planned WCS facility. As for the medical arena, they believe that there are options for biological waste and better education and coordination is needed.
- Group 6 focused on small irradiator sources and the need for a mechanism to identify generators with similar wastes to negotiate better prices, access and/or solutions.

For additional information, see <u>LLW Notes</u>, Supplement November 2006, pp. 1 - 42.

Reports and Studies

National Academy of Sciences

On March 9, 2006, the National Academy of Sciences (NAS) released a report which concludes that "[w]astes containing small concentrations of radioactive material should be regulated based on the risk they pose rather than the type of industry that produced them, as is currently the case." It finds (1) that low-activity waste (LAW) regulations adequately protect the public, but are inconsistent and overly restrictive; (2) LAW from nuclear utilities and NRC-licensed operations must be sent

to an LLW disposal facility, but more radioactive wastes from other industries can go to landfills; and (3) a "risk-informed" approach should be adopted in incremental steps.

For additional information, go to <u>www.nap.edu</u>.

U.S. Government Accountability Office

- A June 2004 U.S. Government Accountability Office (GAO) report found that "[t]here appears to be enough disposal availability to serve the nation's needs at least until mid-2008" and that Class A disposal availability doesn't appear to be a national problem in the short- or long-term. [GAO-04-604]
- In 2005, GAO released a report that examined DOE's efforts to recover unwanted sources & develop GTCC disposal, actions to recover & dispose of non-GTCC source waste, and ability to identify sources for recovery and disposal. [GAO-05-967]
- GAO is working on a report on lessons learned from international low-level radioactive waste disposal experiences to determine to what extent national waste inventory and source tracking systems have been established, requirements for timely removal of waste from user sites, reliable and cost effective waste disposal options, and funding mechanisms to cover waste storage and disposal costs. The report is expected to be released in late 2006 or early 2007.

For additional information, go to www.gao.gov.

Positions Statements

American Nuclear Society

In November 2004, the American Nuclear Society (ANS) issued a revised low-level radioactive waste disposal position statement that supports the Low-Level Radioactive Waste Policy Act and the compact system, but recommends facilitation of development of new sites including the possibility of making DOE sites available for commercial disposal and allowing commercial companies to establish sites on federal land under NRC authority. For additional information, go to www.ans.org.

Health Physics Society

In September 2005, the Health Physics Society (HPS) issued a new position statement that asserts that the federal act should be amended to allow non-DOE waste generators access to existing disposal facilities and to facilities owned and operated by DOE and to provide new disposal capacity for all low-level radioactive waste at a facility operated by DOE or by private industry on federal land.

For additional information, go to www.hps.org

Low-Level Radioactive Waste Forum, Inc.

On September 22, 2005, the Low-Level Radioactive Waste Forum's Board of Directors approved a discussion statement that provides that (1) commercial low-level radioactive waste is well regulated and managed safely; (2) the current system is flexible and there is no immediate crisis; (3) when evaluating alternatives, it is important to consider political realities, economic consequences, and regulatory concerns; and (4) the federal government provides appropriate assistance to states and compacts related to commercial low-level radioactive waste management.

For additional information, go to www.llwforum.org

Other

The LLW Forum and Southeast Compact Commission have jointly developed a National Directory of Brokers and Processors. The directory, which is available in both electronic and hard-copy format, provides information about services offered by brokers and processors around the country. The on-line version provides various search engines so that users may search by waste type, services offered, geographic location, or company name. The directory is available to all users free of charge.

For additional information, go to <u>www.bpdirectory.com</u>.

States and Compacts

Atlantic Compact/State of New Jersey

NRC Reviews NJ Facility's Decommissioning Plan

U.S. Nuclear Regulatory Commission staff held two public meetings on December 5 and 12 to discuss a decommissioning plan submitted by the Shieldalloy Metallurgical Corporation for its facility in Newfield, New Jersey. The facility conducted smelting and alloy production from 1940 through 2001. One of the raw materials used by the company was a niobium ore called pyrochlore, which contains uranium and thorium and is subject to NRC licensing requirements. The majority of the radioactive material remaining at the site consists of slag generated during production operations and dust from baghouses, which are devices used to filter dust from air exhausted during the manufacturing process. On October 18, NRC notified the company that it had sufficient information to begin its technical review of the proposal.

Under Shieldalloy's decommissioning plan, the company has proposed consolidating all of the materials containing uranium and thorium into a single pile on the site's storage yard, and then shaping, grading and covering it with an engineered barrier. A fence would be installed around the material. The pile would then be subjected to longterm maintenance and monitoring, and use of that section of the property would be restricted. The focus of the NRC review is to determine if the proposed decommissioning plan meets the agency's requirements for protecting public health and safety and the environment. That would include ensuring that no member of the public would receive exposure to radiation from the material in excess of allowable regulatory limits. The remainder of the site could then be released for unrestricted use, provided that the company could demonstrate there was no residual contamination above allowable limits.

On November 17, NRC announced an opportunity for interested organizations or individuals to seek a hearing on the decommissioning plan. The deadline for submitting such requests is January 16. Petitions may be filed by anyone whose interest may be affected by the plan and who wishes to participate as a party in the proceeding.

Shieldalloy's decommissioning plan is available on the NRC web site through its ADAMS document system at http://www.nrc.gov/reading-rm/adams/web-based.html using docket number 04007102.

Midwest Compact/State of Ohio

NRC Environmental Reviews for Centrifuge Plant

On October 18, the U.S. Nuclear Regulatory Commission held a public meeting in Piketon, Ohio to discuss its final Safety Evaluation Report and Environmental Impact Statement on the proposed gas centrifuge uranium enrichment plant to be constructed and operated by USEC, Inc. During the course of the meeting, members of the NRC technical staff presented brief summaries of the safety and environmental reports. The bulk of the meeting, however, was devoted to answering questions from the public.

USEC submitted its license application for the plant, to be known as the American Centrifuge Plant, on August 23, 2004. The Environmental Impact Statement (NUREG-1834), which concluded that there would be no adverse environmental impacts that would preclude granting a license, was published in April 2006. USEC proposed to use a design based on gas centrifuge technology developed by the U.S. Department of Energy to enrich uranium for use in fuel for commercial nuclear power reactors. The plant is to be built at DOE's Portsmouth Gaseous Diffusion Plant reservation in Piketon.

Published in September 2006, the Safety Evaluation Report (NUREG-1851) documents the NRC staff's review and safety and safeguards evaluation of USEC's application. The review evaluates the facility's potential adverse impacts on worker and public health and safety, under both normal operating and accident conditions. The review also considers physical protection of special nuclear material and classified matter, material control and accounting of special nuclear material, as well as the management organization, administrative programs and financial qualifications provided to ensure the facility's safe design and operation.

The license review process is scheduled to be completed in February 2007 following an adjudicatory hearing by the Atomic Safety and Licensing Board.

Information on the USEC application can be found on the NRC web site at http://www.nrc.gov/materials/fuel-cycle-fac/usecfacility.html.

Northwest Compact/State of Utah

Utah Legislative Committee Rejects Perpetual Care Requirement

On November 15, the Natural Resources, Agriculture and Environment Committee of the Utah legislature voted to accept most, but not all, of the recommendations in a legislatively mandated closure, post-closure and perpetual care report recently completed by the Utah Department of Environmental Quality. Specifically, the committee rejected a proposal in the report to require the establishment of a perpetual care fund for local hazardous waste disposal facilities and expressed support for the repeal of an existing requirement for the maintenance of a perpetual care fund for Energy *Solutions*, the state's only radioactive waste disposal facility. State environmental regulators had

recommended increasing the existing \$400,000 annual fee for perpetual care of the Energy *Solutions'* site and creating a requirement for hazardous waste facilities to pay a similar fee. Clean Harbors Environmental Services, Inc. operates all the state's three operating hazardous waste disposal facilities.

The four affected facilities are all located in the Hazardous Waste Corridor located in Tooele County. All are required to provide funding for closure operations and for a post-closure period. For hazardous waste disposal facilities, the post-closure requirement is for 30 years after closure. For the radioactive waste disposal facility, it is for 100 years after the site closes.

The perpetual care funds rejected by the legislative committee would extend forever after the post-closure period. Energy *Solutions* is required under law to contribute to such a fund annually, with the current value of the fund being approximately \$2 million. No such fund exists under current law for hazardous waste facilities.

In the report, which is titled "Evaluation of Closure, Post-Closure, and Perpetual Care and Maintenance for Commercial Hazardous Waste and Commercial Radioactive Waste Treatment, Storage, and Disposal Facilities," DEQ recommended that Energy *Solutions'* annual contribution to the perpetual care fund be increased in case the company uses up all of its disposal cells earlier than expected. DEQ also recommended that a similar funding requirement be created for hazardous waste disposal facilities.

Although the committee voted to support repeal of the perpetual care fund requirement for the Energy *Solutions'* facility, current law remains in effect until and unless the legislature amends it.

Background

Utah Senate Bill 24, dated February 2005, stipulated that the Utah Radiation Control Board and the Utah Solid and Hazardous Waste Control Board prepare and submit a report evaluating adequacy of funding and financial assurances provided for the

closure, post-closure, and perpetual care and maintenance of hazardous waste and radioactive waste treatment, storage, and disposal facilities. (See *LLW Notes*, January/February 2005, p. 6.) The report was prepared by URS Corporation, a contractor to the Utah Department of Environmental Quality, and then reviewed by both boards. Upon review and concurrence, the boards developed recommendations contained in the report.

The Report

Commercial Radioactive Waste Management Facilities The report concludes that "[t]he amounts of financial assurance required and provided for closure and institutional control of commercial radioactive waste disposal facilities under UC 19-3-104(12) are judged to be adequate at current levels and with current rules, controls, and practices." According to the report, given specified assumptions, the projected future value of the Radioactive Waste Perpetual Care and Maintenance Fund is \$93 million at the end of the 100 years of the institutional control period. The report estimates a range of \$1 million to \$60 million (with \$5 million to \$32 million being the most likely) for probable costs (or financial risk) for unplanned or unexpected events in excess of the minimal

The report recommends that the annual contribution to the perpetual care and maintenance fund should be based on the amount of disposal capacity depleted each year or, in the alternative, that an immediate one-time contribution be required to bring the fund to an adequate level. In either case, it recommends that the value of the fund in constant 2006 dollars be no less than about \$13 million in the year 2026—meaning that the present value of the fund should be no less than about \$9 million.

maintenance and monitoring for reasonable risks

that may occur following closure.

Commercial Hazardous Waste Facilities The report concludes that "[t]he amounts of financial assurance required and provided for closure and post-closure care of commercial hazardous waste

treatment, storage, and disposal facilities under Section 19-6-108 are judged to be adequate at current levels and with current rules, controls, and practices." It recommends that a perpetual care fund should be created and funded to provide for ongoing monitoring and maintenance of commercial hazardous waste land disposal facilities after termination of the post-closure permit and that additional funds should not be required at this time to cover potential catastrophic failure of the landfill cells, groundwater corrective action or major maintenance at commercial hazardous waste land disposal facilities.

For additional information, please contact William Sinclair, Deputy Director of the Utah Department of Environmental Quality, at (801) 536-4405. The DEQ report can be found on the agency's web site at http://www.deq.utah.gov under "Issues to Watch."

Southwestern Compact/State of California

NRC Discusses Rancho Seco Termination Plan

On November 14, 2006, the U.S. Nuclear Regulatory Commission hosted a public meeting in Rancho Cordova, California to discuss the license termination plan for the Rancho Seco nuclear power plant. The plant, located near Herald, California, permanently ceased operation in 1989. During the course of the meeting, NRC and the owner of the plant, the Sacramento Municipal Utility District, made short presentations on the license termination plan for the facility, answered questions and accepted public comments.

The license termination plan is available at the NRC's Public Document Room or electronically through the Agencywide Documents Access and Management System (ADAMS) using accession number ML061460053.

Commonwealth of Massachusetts

Massachusetts AG Files Spent Fuel Storage Petition

On November 1, 2006, the U.S. Nuclear Regulatory Commission published for public comment a notice of receipt of a petition for rulemaking, dated April 25, 2006, which was filed on behalf of the Massachusetts Attorney General. The petition, which was docketed by NRC on September 19, 2006, requests "that the NRC revoke certain regulations in their entirety, and revoke other regulations to the extent that these regulations, in the petitioner's view, state, imply, or assume that the environmental impacts of storing spent nuclear fuel in high-density pools are not significant; issue a generic determination to clarify that the environmental impacts of high-density pool storage of spent fuel, will be considered significant; and require that any NRC licensing decision concerning high-density pool storage of spent nuclear fuel be accompanied by an environmental impact statement that addresses the environmental impacts of this storage and alternatives for avoiding or mitigating any environmental impacts."

The petition is a companion to contentions filed by the Massachusetts Attorney General on May 26, 2006 before the NRC's Atomic Safety and Licensing Board (ASLB) in the license renewal proceedings for the Pilgrim and Vermont Yankee nuclear power plants. It raises the same substantive concern as those contentions—namely, that spent fuel stored in high-density fuel storage pools is much more vulnerable to fire than the NRC's NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (May 1996) concludes. The petition seeks the generic treatment of spent fuel pool hazards due to a belief that a pool accident at any operating nuclear power plant in the New England and Mid-Atlantic states could significantly affect the health, environmental, and economic well being of Massachusetts.

The Massachusetts Attorney General's petition can be found at 71 <u>Federal Register</u> 64,169 (November 1, 2006). Comments on the petition should be submitted by January 16, 2007. Comments should be mailed to Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attn: Rulemakings and Adjudications Staff. Comments may also be e-mailed to <u>SECY@NRC.gov</u> or submitted via the NRC's rulemaking web site at http://ruleforum.llnl.gov. Please include PRM-51-10 in the subject line.

Industry/Disposal Facility Operators

Energy Solutions Announces Signing of Life-of-Plant Contracts

Energy Solutions recently announced that it has entered into long-term service contracts to provide radioactive waste disposition services with both BWX Technologies (BWXT) and the South Texas Project commercial nuclear reactors. The agreements, known as life-of-plant contracts, guarantee disposal capacity at Energy Solutions' disposal facilities for both operational and decommissioning wastes and sets lifetime disposal rates.

Energy Solutions is headquartered in Salt Lake City, Utah. The company provides a full range of integrated services and solutions including characterization, decommissioning, decontamination, site closure, transportation, nuclear materials management and the safe, secure disposition of nuclear waste. Services are also provided that support uranium conversion and enrichment, fuel fabrication, nuclear reactor operations, spent fuel management and storage, reprocessing and high-level radioactive waste vitrification.

BWXT is headquartered in Lynchburg, Virginia. The company supplies nuclear operation services and products to the U.S. government and commercial clients and manages complex production facilities and advanced energy products.

Among its diverse capabilities are decontamination and decommissioning, waste management, engineering, and project management services.

The South Texas Project Electric Generating Station, one of the newest and largest nuclear power plants in the country, has two reactors that produce nearly 2,600 megawatts of electricity. The reactors went online in August 1988 and June 1989 and are the sixth and fourth youngest of the more than 100 operating nationwide. Unit 1 has led all reactors nationwide in electricity production and the plant has twice won the nuclear industry's highest honor—the Best of the Best Trophy. The plant is located near Bay City, about 90 miles southwest of Houston.

For more information on EnergySolutions' life-of-plant contracts, contact Mark Walker at (801) 231-9194.

Energy Solutions Acquires Safeguard International Solutions

On December 4, Energy Solutions EU announced that it has completed the acquisition of Safeguard International Solutions Ltd—a leading provider in the United Kingdom of turn-key services for the dispositioning of radioactive materials (including waste) from non-nuclear power generating facilities. This marks Energy Solutions' first acquisition in the UK that, according to the company, demonstrates its "commitment to work in the UK and grow its business here."

Energy Solutions was formed earlier this year when BNG America, Envirocare of Utah, and Scientech D&D merged to create "a national energy services company headquartered in Salt Lake City, Utah, that ... will manage over 1000 employees in 14 states with operating support facilities in Virginia, South Carolina, Massachusetts, Tennessee, Washington State, Connecticut, Idaho, and Utah." (See LLW Notes, January/February 2006, pp. 1, 6 - 7.) Shortly thereafter, Energy Solutions

acquired Duratek—a Columbia, Maryland-based radioactive waste disposal company that, among other things, operates the Barnwell low-level radioactive waste disposal facility in South Carolina. With the acquisition of Duratek, Energy Solutions more than doubled its work force to 2,500 persons in 40 states and increase its annual revenue by approximately \$280 million based on prior Duratek financial statements.

Company Statements

As for the recent acquisition, Energy Solutions
International Group President, Philip Strawbridge, stated: "Energy Solutions has a long-term commitment to invest in the UK. We aim to provide services to customers across the nuclear fuel cycle. We believe that Safeguard's expertise in radioactive waste collection will be valuable to both nuclear and non-nuclear customers. Safeguard adds to the growing base of operations that Energy Solutions already has in the UK."

Safeguard International's Managing Director, Barry Moloney, added: "This acquisition represents an exciting opportunity for our company and its people. Our existing customers can expect uninterrupted and a wider choice of services. In addition, now as part of Energy Solutions, we can offer services across the UK nuclear industries."

Company Information

Energy *Solutions* Energy *Solutions* was formed in February 2006 from the merger of BNG America, Envirocare of Utah, and Scientech D&D. "The combined companies have provided specialized nuclear services in the United States market for over 20 years including high consequence nuclear operations, such as high level waste management, spent fuel handling and transportation; complex D&D projects of nuclear reactors and highly radioactive nuclear facilities; high-end technical challenges such as fuel sludge treatment and high level waste treatment; and major decommissioning of both government and commercial nuclear facilities." Steve Creamer, formerly the President and CEO of Envirocare, serves as Chief Executive Officer of Energy Solutions.

Safeguards International Solutions Ltd

Safeguards—which is based in Harwell, Oxfordshire—says that it is "the leading brand in provision of radioactive materials recycling and disposal services to the other than nuclear power radioactive materials market." The company routinely untertakes removals of radioactive materials from universities, hospitals, industry and government and ensures that surplus radioactive sources are processed and stored safely and securely.

For additional information, contact Paul Larsen of EnergySolutions at 0207 624 3742 or 07784 878242.

Industry/Treatment & Processing Facility Operators

Perma-Fix to Acquire PEcoS

On October 24, 2006, Perma-Fix Environmental Services announced that it has signed a letter of intent to acquire Nuvotec USA, Inc. and its wholly owned subsidiary, Pacific EcoSolutions, Inc. (PEcoS), a mixed waste management company based in Richland, Washington. According to the terms of the letter of intent, Perma-Fix will issue up to \$7 million of its shares of common stock, assume certain debts and obligations, and pay cash in consideration for the purchase. The acquisition is subject to, among other things, the completion of due diligence, assessment of liabilities, and execution of definitive agreements.

PEcoS' facility is permitted to treat, store and process hazardous, low-level radioactive, and mixed waste. It is located adjacent to the U.S. Department of Energy's Hanford site, which is engaged in one of the country's largest environmental cleanups, which is expected to continue until 2030.

The PEcoS facility is located on 45 acres of land and is comprised of a low-level radioactive waste facility and a mixed waste facility. The LLRW facility has a radioactive materials license. The MW facility has RCRA and TSCA permits and a radioactive materials license.

Louis Centofanti, Chair and Chief Executive Officer, stated:

Assuming completion, we expect the acquisition of the PEcoS nuclear waste facility would provide Perma-Fix with a number of strategic benefits. In addition to PEcoS' existing contracts to treat waste at Hanford, this acquisition will secure PEcoS' radioactive and hazardous waste permits and licenses, which further solidifies our position within the mixedwaste industry. Moreover, the PEcoS facility expands our west coast presence, increases our treatment capacity, and is located adjacent to the Hanford site. By nearly all estimates, the Hanford site will be one of the most expensive of all the DOE's nuclear weapons facilities to remediate ... This acquisition will allow us greater opportunities in processing higher level radioactivity.

Bob Ferguson, President of Nuvotec and PEcoS, commented:

We believe that Perma-Fix's mixed waste treatment capabilities are unparalleled in the industry. We look forward to combining our existing facilities, licenses and contracts at Hanford, with Perma-Fix's state-of-the-art technologies.

Perma-Fix is a national environmental services company that provides unique mixed waste and industrial waste management services. The company states that it has increased its focus on the nuclear services segment, which provides radioactive and mixed waste treatment services to hospitals, research laboratories and institutions, numerous federal agencies and nuclear utilities. The industrial services segment provides hazardous and non-hazardous waste treatment services for a diverse group of customers including Fortune 500 companies; numerous federal, state and local agencies; and, thousands of smaller clients. Perma-Fix operates nine major waste treatment facilities across the nation.

Federal Agencies and Committees

U.S. Department of Energy

Technical Evaluation Issued for Idaho Tank Farm

A Technical Evaluation Report (TER) has been issued for the Idaho Nuclear Technology and Engineering Center Tank Farm at the Idaho National Laboratory near Idaho Falls, Idaho. The report, which was prepared by the U.S. Nuclear Regulatory Commission, concludes that the U.S. Department of Energy has met appropriate criteria for determining that the residual waste in the tanks is not high-level radioactive waste and clears the way for DOE to clean and stabilize the tanks.

DOE is required by the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 (NDAA) to consult with NRC when determining that certain wastes associated with spent nuclear fuel reprocessing are not high-level wastes. The NDAA has three criteria for making that determination: (1) the waste does not require permanent isolation in a deep geologic repository for spent nuclear fuel or high-level waste; (2) the waste has had highly radioactive radionuclides removed to the maximum extent practical; and, (3) the waste will be disposed of in compliance with NRC regulations for land disposal of waste.

As required by NDAA, DOE submitted its waste "Determination for the Idaho Nuclear Technology and Engineering Center Tank Farm Facility" for NRC review in September 2005. Based on this information, NRC staff has concluded that there is reasonable assurance that the applicable criteria of the NDAA can be met for residual waste associated with the Tank Farm Facility. NRC's Technical Evaluation Report includes DOE's disposal strategy, applicable review criteria, and the NRC staff's review, analysis and conclusions.

A copy of the TER is available in the NRC's Agencywide Documents Access Management System (ADAMS) under accession number ML062490108 at http://www.nrc.reading-rm/adams.html.

Advisory Committee on Medical Uses of Isotopes

NRC Seeks Nominations for ACMUI

The U.S. Nuclear Regulatory Commission is seeking nominations for the position of radiation therapy medical physicist on the Advisory Committee on the Medical Uses of Isotopes (ACMUI). The position is for a four-year term beginning October 1, 2007, with possible reappointment to an additional term. Nominees must be American citizens and able to devote approximately 160 hours per year to committee business. Nominees undergo a security background check and are required to complete financial disclosure statements to avoid possible conflict of interest issues. All members are reimbursed for travel and members who are not federal employees are compensated for their service.

The ACMUI was established in 1958 and advises NRC on policy and technical issues related to the regulation of medical uses of radioactive material. Responsibilities include providing comments to changes on NRC rules, regulations and guidance documents; evaluating certain non-routine uses of radioactive material; providing technical assistance in licensing, inspection and enforcement cases; and, bringing key issues to the attention of the NRC for appropriate action.

ACMUI members possess the medical and technical skills needed to address evolving issues. The current committee membership is comprised of the following professionals: nuclear medicine physician, nuclear cardiologist, medical physicist in nuclear medicine, therapy medical physicist, radiation safety officer, nuclear pharmacist, two radiation oncologists, patients' rights advocate, Food and Drug Administration representative, Agreement State representative, and health care administrator.

Applications will be accepted for 60 days following publication of a call for nominations in the *Federal*

Register. Interested candidates should submit four copies of their resume to the Office of Human Resources, Attn: Ms. Joyce Riner, Mail Stop T2D32, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

For additional information, please contact Mohammad S. Saba in the NRC's Office of Federal and State Materials and Environmental Management Program at (301) 415-7608 or via e-mail at mrs.@nrc.gov.

Advisory Committee on Nuclear Waste

ACNW Holds December Meeting

The U.S. Nuclear Regulatory Commission's Advisory Committee on Nuclear Waste met at the agency's headquarters in Rockville, Maryland from November 13 –16, 2006. Among other things, committee members discussed seismic issues and reviewed methodologies related to the proposed Yucca Mountain high-level radioactive waste repository. The committee also addressed results from the recently completed report from the Liquid Radioactive Release (Tritium) Lessons Learned Task Force. The ACNW working group on decommissioning lessons learned met on the second day of the meeting.

The ACNW reports to and advises the Commission on all aspects of nuclear waste management.

Agendas for ACNW meetings can be found on the NRC web site at http://www.nrc.gov/reading-rm/doc-collections/acnw/agenda/2006/.

Advisory Committee on Reactor Safeguards

ACRS Reviews Draft Final Regulatory Guides

The Advisory Committee on Reactor Safeguards, which advises the U.S. Nuclear Regulatory Commission on licensing and operation of nuclear power plants and related safety issues, held a public meeting in Rockville, Maryland on December 7 – 9 to, among other things, discuss two draft final regulatory guides. The guides relate to combined license applications for nuclear power plants and evaluating fatigue analyses for new reactors. The committee also discussed proposed revisions related to emergency preparedness.

U.S. Nuclear Regulatory Commission

NRC Approves Rule re National Source Tracking

In late October, the U.S. Nuclear Regulatory Commission announced that it had approved a final rule implementing a National Source Tracking System (NSTS) to enhance controls for certain radioactive materials used in industry, academia and medicine. The tracking system, which was developed through close cooperation with other federal and state agencies, is part of NRC's efforts to enhance controls over radioactive materials following the terrorist attacks of September 11, 2001. Once fully operational, the NSTS will enhance the accountability of radioactive sources by helping the NRC and Agreement States conduct inspections and investigations, communicate nationally tracked source information to other government agencies, and verify legitimate ownership and use of nationally tracked sources.

The final rule, which will be published in the *Federal Register*; closely follows recommendations of a joint NRC—Department of Energy report on radiological dispersion devices (RDDs or "dirty bombs") published in May 2003 and is based upon an interim database of radiological sources initiated in 2004 and currently in use by the NRC. The rule also implements provisions of the Energy Policy Act of 2005. It will require licensees to report to the NSTS the manufacture, transfer, receipt, disassembly, and disposal of nationally tracked sources. Basic information to be collected will include the manufacturer, model number, serial number, radioactive material, activity and manufacture date of each source. Information on the facilities involved in any transaction will also be included. The NSTS will apply to radioactive sources that fall in Category 1 or Category 2 of the International Atomic Energy Agency's "Code of Conduct for the Safety and Security of Radioactive Materials." It is estimated that there are 44,000 sources in these categories in approximately 16,000 devices in use in the United States. They are typically used in devices such as irradiators, radiography cameras, welllogging devices, gamma knife surgical devices, and radioisotope thermoelectric generators, among others. Licensees will be required to report their inventories and transactions regarding Category 1 sources by November 15, 2007 and of Category 2 sources by November 30, 2007. Inventories must be updated and reconciled annually with information in the database.

A proposed rule on the NSTS was published in the *Federal Register* on July 28, 2005. The agency received 33 comment letters on the proposed rule. Public meetings on the proposed rule were also conducted at which an additional 17 individuals provided comments. NRC's responses to the comments are included in the *Federal Register* notice.

NRC Issues Tritium Report

On October 4, the U.S. Nuclear Regulatory Commission issued the findings of a group of experts from throughout the agency, as well as the State of Illinois, concerning inadvertent, unmonitored releases of radioactive liquids, containing primarily tritium, from U.S. commercial nuclear power plants. The task force, which looked at a wide range of releases going back to 1996, found no impact on public health from these events. Nonetheless, it did identify areas of NRC regulations "that could better cover these sorts of inadvertent spills and leaks." For instance, many of the components and systems that have leaked are built to standards less strict than those for systems needed for reactor safety. And, several of the systems involved in the releases fall outside the NRC's requirements for regular maintenance and inspections, increasing the possibility that leaks might go undetected.

The task force included staff from each of the NRC's regional offices, as well as the Offices of Nuclear Reactor Regulation, Nuclear Material Safety and Safeguards, Nuclear Regulatory Research, Public Affairs, and Executive Director for Operations. A representative from the Illinois Emergency Management Agency also served on the task force, which produced 26 recommendations that apply to the NRC, nuclear power plant operators or both. For instance, the task force recommended updating NRC regulations on monitoring radioactive releases and the environment in and around a plant to take into account state-of-the-art technology and practices. The task force also recommended that nuclear power plant operators work with local and state agencies to voluntarily report information on radioactive liquid releases that otherwise fall below NRC reporting requirements. Each of the NRC's program offices (i.e., Nuclear Reactor Regulation) will consider the recommendations relevant to their mission.

The report, as well as additional information on inadvertent releases, is available on the NRC web site at http://www.nrc.gov/reactors/operating/ops-experience/grndwtr-contam-tritium.html.

License Renewals Continue to Move Forward

In early November, the U.S. Nuclear Regulatory Commission announced that it is renewing the operating licenses of the Monticello Nuclear Generating Plant in Minnesota and the Nine Mile Point Nuclear Station, Units 1 and 2, each for an additional 20 years. Shortly thereafter, in mid-November, NRC held two public meetings to discuss the agency's review process for a license renewal application for the Susquehanna nuclear power plant in Salem Township, Pennsylvania.

One month earlier, in late October, NRC issued its final environmental impact statement on the proposed renewal of the operating license for the Palisades Nuclear Plant on the eastern shore of Lake Michigan. Earlier in October, NRC staff conducted two public meetings to discuss the agency's review process for the license renewal application for the James A. Fitzpatrick nuclear power plant in Scriba, New York.

Monticello Nuclear Generating Plant

On November 8, NRC announced that it had renewed the operating license of the Monticello Nuclear Generating Plant in Minnesota for an additional 20 years. The Monticello plant is located 30 miles northwest of Minneapolis. Its operating license was set to expire on September 9, 2010. The licensee, Nuclear Management Company, submitted a renewal application on March 24. A notice of opportunity to request a hearing was filed in the *Federal Register* on May 12. The deadline for requesting a hearing was July 11.

Earlier this year, NRC staff reached the preliminary conclusion that there are no environmental impacts that would preclude renewal of the operating license for the Monticello Nuclear Power Plant. NRC held public meetings to discuss the environmental review on June 30, 2005 and March 22, 2006. The draft environmental impact statement was open for public comment until May 4, 2006 and was the

subject of public meetings in March 2006 in Monticello. The "Safety Evaluation Report Related to the License Renewal of the Monticello Nuclear Generating Plant" (NUREG-1865) was published in October 2006. In addition, NRC conducted inspections of the plant to verify information submitted by the licensee. The Advisory Committee on Reactor Safeguards—an independent body of technical experts which advises the Commission—recommended that the Monticello operating license be renewed on September 19, 2006.

Reports relating to the renewal of the Monticello Nuclear Generating Plant can be found on line at http://www.nrc.gov/reactors/operating/licensing/renewal/applications/monticello.html.

Nine Mile Point Nuclear Station

NRC announced that it has renewed the operating licenses of the Nine Mile Point Nuclear Station, Units 1 and 2—each for an additional 20 years—on October 31, 2006. The Nine Mile Nuclear Power Plant is located in Scriba, New York. Constellation Nuclear submitted a license renewal application for the two units on May 26, 2004. The current operating licenses for Units 1 and 2 expire on August 22, 2009 and October 31, 2026, respectively.

In May 2006, NRC issued an environmental review (NUREG-1437, Supplement 24) for this license review that concluded that there are no environmental impacts that would preclude license renewal for an additional 20 years of operation. Public meetings to discuss the environmental review were held near the plant on September 21, 2004 and November 17, 2005. The "Safety Evaluation Report Related to the License Renewal of the Nine Mile Point Nuclear Station, Units 1 and 2" (NUREG-1900) was published in June 2006. In addition, NRC conducted inspections of the plant to verify information submitted by the licensee. The Advisory Committee on Reactor Safeguards recommended that the Nine Mile Point operating licenses be renewed on August 2, 2006.

Reports relating to the renewal of the Nine Mile Point Nuclear Station can be found on line at http://www.nrc.gov/reactors/operating/licensing/renewal/applications/nine-mile-pt.html.

Susquehanna Nuclear Power Plant

On November 15, NRC held two public meetings to discuss the agency's review process for a license renewal application for the Susquehanna nuclear power plant in Salem Township, Pennsylvania. The sessions also provided an opportunity for members of the public to comment on environmental issues they believe the NRC should consider during its review of the application.

The current operating license for the Susquehanna Unit 1 reactor is set to expire on July 17, 2022. The current license for Susquehanna Unit 2 has an expiration date of March 23, 2024. PPL Susquehanna, LLC submitted its license renewal application for the plant on September 15, 2006. As part of its application, the company submitted an environmental report.

At the conclusion of the information gathering process, NRC staff will prepare a summary of the conclusions reached and significant issues identified. A copy will be sent to each person who participated in the scoping process. The summary will also be available on NRC's web site. Subsequently, NRC staff will prepare a draft environmental impact statement (EIS) supplement for public comment and will hold a public meeting to solicit comments. After consideration of comments on the draft report, NRC will prepare a final EIS supplement.

A copy of the renewal application for the Susquehanna Nuclear Power Plant can be found on-line at http://www.nrc.gov/reactors/operating/licensing/renewal/applications/susquehanna.html.

Palisades Nuclear Plant

On October 23, NRC announced that the agency has issued its final environmental impact statement

on the proposed renewal of the operating license for the Palisades Nuclear Plant on the eastern shore of Lake Michigan. The report contains the NRC's finding that there are no environmental impacts that would preclude license renewal for an additional 20 years of operation.

The Palisades Nuclear Power Plant is located at Covert, Michigan. Nuclear Management Company submitted a renewal application for the plant on March 22, 2005. The current license for the Palisades plant expires on March 4, 2011. If approved, the plant's NRC license would be extended for 20 years.

As part of its environmental review of the application, NRC held public meetings near the plant to discuss the scope of the review and the draft version of the environmental impact statement. Comments were received and considered from members of the public, local officials, and representatives of state and federal agencies.

A copy of the final EIS and other documents related to the Palisades Nuclear Power Plant license application can be found on NRC's web site at http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/supplement27/index.html.

James A. Fitzpatrick Nuclear Power Plant

On October 12, NRC staff conducted two public meetings to discuss the agency's review process for the license renewal application for the James A. Fitzpatrick nuclear power plant in Scriba, New York. The sessions also provided an opportunity for members of the public to comment on environmental issues they believe the NRC should consider during its review of the application.

The Fitzpatrick plant is located approximately eight miles northeast of Oswego, New York. Its current operating license expires on October 17, 2014. The applicant, Entergy Nuclear Operations, Inc., submitted a renewal application on August 1. As part of its application, the company submitted an environmental report.

At the conclusion of the information gathering process, NRC staff will prepare a summary of the conclusions reached and significant issues identified. A copy will be sent to each person who participated in the scoping process. The summary will also be available on NRC's web site. Subsequently, NRC staff will prepare a draft environmental impact statement (EIS) supplement for public comment and will hold a public meeting to solicit comments. After consideration of comments on the draft report, NRC will prepare a final EIS supplement.

A copy of the Fitzpatrick plant license renewal request is available on the NRC web site at http://www.nrc.gov/reactors/operating/licensing/renewal/applications.fitzpatrich.html.

NRC Regulations/Status of Renewals

Under NRC regulations, a nuclear power plant's original operating license may last up to 40 years. License renewal may then be granted for up to an additional 20 years, if NRC requirements are met. To date, NRC has approved license extension requests for 47 reactor units. In addition, NRC is currently processing license renewal requests for several other reactors.

For a complete listing of completed renewal applications and those currently under review, go to http://www.nrc.gov/reactors/operating/licensing/renewal/applications.html.

ESP Applications Move Forward

On November 7 – 8, 2006, the Atomic Safety and Licensing Board—an independent judicial arm of the U.S. Nuclear Regulatory Commission—conducted a hearing on the proposed Early Site Permit (ESP) for the Clinton Nuclear Power Plant. A public meeting was held on October 19 in

Waynesboro, Georgia to discuss the agency's review of Southern Nuclear Company's ESP application for the Vogtle site and the environmental issues NRC should consider in reviewing the application. And, a supplement to the safety evaluation report (SER) for a requested ESP at the North Anna site in Louisa County, Virginia was issued on October 3 by NRC staff.

The ESP process allows an applicant to address site-related issues, such as environmental impacts, for possible future construction and operation of a nuclear power plant at the site. If a permit is granted, the applicant has up to 20 years to decide whether to build a new nuclear unit on the site and to file an application with the NRC for approval to begin construction.

Clinton ESP

The November 7 – 8 hearings on the Clinton ESP permit application were open to the public, but testimony was restricted to NRC staff and Exelon Generation Company. The hearings focused on the suitability of the proposed site from safety and environmental viewpoints. Oral comments from interested members of the public were received at a separate evening session on November 8.

Exelon filed the Clinton application on September 25, 2003. NRC staff subsequently issued a final EIS in July 2006 and a final Safety Evaluation Report in May 2006. The conclusions of both documents support the issuance of the ESP. The NRC staff's conclusion is based on its independent review of a report submitted by Exelon, taking into account consultations with federal, state, tribal and local organizations, and consideration of comments received during the public scoping process. The staff's conclusions include a finding that there are no obviously superior alternative sites, and that any adverse environmental impacts from possible site preparation and preliminary construction activities at Clinton could be redressed. A final decision on the Clinton permit application is expected in May 2007.

Documents related to the Clinton ESP permit application and review are available at http://www.nrc.gov/reactors/new-licensing/esp.clinton.html.

Vogtle ESP

The October 19 public meetings on the Vogtle ESP permit application focused on environmental issues that the NRC should consider in its review. NRC staff was available before the meeting for informal discussions with members of the public during an open house, though no formal comments on the environmental review were accepted at that time.

The Vogle site, which is owned by Southern Nuclear Operating Company, currently contains two commercial nuclear power plants. Last May, NRC held two public meetings in Waynesboro, Georgia to provide information to the public about the ESP process including how it works and how the public can participate. NRC has begun a technical review of the application, which is ongoing.

The Vogtle ESP application can be found at http://www.nrc.gov/reactors/new-licensing/esp.html.

North Anna ESP

The SER supplement issued for the North Anna ESP permit application contains NRC staff's review and verification of information provided by the applicant to reflect changes to the potential power output, cooling methods and liquid effluent releases for the proposed reactors.

Dominion Nuclear North Anna filed the original North Anna application on September 25, 2003. NRC staff's preliminary recommendation is that a permit should be issued for the site. The staff's conclusion is based on its independent review of a report submitted by Dominion—taking into account consultations with federal, state, tribal and local agencies. The staff's preliminary conclusions include a finding that no environmentally preferable or obviously superior sites have been identified, and that any adverse environmental impacts from possible site preparation and preliminary construc-

tion activities at North Anna could be redressed. NRC expects to reach a final decision on the North Anna ESP permit application in late 2007.

The supplement and related documents regarding the North Anna ESP application are available at http://www.nrc.gov/reactors/new-licensing/esp/north-anna.html.

NRC Proposes Plant Security Requirements

In November, the U.S. Nuclear Regulatory Commission hosted two public meetings to receive public comment on a proposed rule on nuclear power reactor physical security requirements. The first meeting was held on November 15 at the agency's headquarters in Rockville, Maryland. The second meeting was held on November 29 in Las Vegas, Nevada. Both meetings consisted of agency presentations on various aspects of the proposed rule, including training and qualification of security guards, access authorization and safety/security interface, followed by public comment periods. Classified and Safeguards Information was not discussed.

A proposed rule on nuclear power reactor physical security requirements was published in the *Federal Register* on October 26, 2006. It can be found on the NRC Rulemaking web page at http://ruleforum.llnl.gov/. The *Federal Register* notice also outlines how the public can comment in writing.

NRC Reviews Physical Security Requirements

The U.S. Nuclear Regulatory Commission is seeking public comment on a proposed rule amending its security regulations related to the physical protection of nuclear power reactors. This proposed rulemaking also includes a limited number of new security requirements for certain facilities that manufacture uranium fuel. It supplements requirements for access controls, event reporting, security personnel training, coordination between safety and security activities, contingency planning and protection against radiological sabotage. The proposed rule also adds requirements to background checks for firearms users and authorization for enhanced weapons to fulfill certain provisions in the Energy Policy Act of 2005.

The proposed rulemaking incorporates requirements that were previously imposed by the Commission through orders issued after the terrorist attacks of September 11, 2001. Additionally, the proposed requirements for safety/ security interface address in part a Petition for Rulemaking (PRM 50-80) that requested regulations for governing proposed changes to facilities that could adversely affect the licensees ability to protect against radiological sabotage. The proposed rule supplements the security requirements deemed necessary by the NRC to protect against the Design Basis Threat (DBT). In November 2005, NRC issued a proposed rule on the supplemented DBT for public comment. A final DBT rule is still under development by staff.

Information about security requirements for NRC licensees can be found on the NRC web site at http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/safety-security.html.

NRC Seeks Comment on Reactor Oversight

The U.S. Nuclear Regulatory Commission is seeking public comment on the implementation of the Reactor Oversight Process (ROP). NRC implemented the ROP six years ago to revamp and improve its inspection and enforcement programs for commercial nuclear power plants. NRC seeks feedback each year to help the agency continue to improve its regulatory approach.

In particular, NRC is seeking public responses to a list of 22 questions contained in the *Federal Register* notice of the request for comment, which was published on October 10, 2006. The notice can be found on the NRC web site at http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/rop2006survey.pdf.

NRC Reviews Limited Work Authorization Rules

On November 1, 2006, the U.S. Nuclear Regulatory Commission held a public meeting at its headquarters in Rockville, Maryland to solicit comment on a supplemental proposed rule that would amend its regulations regarding the issuance of limited work authorizations (LWA) for construction related to new nuclear power plants. The proposed changes supplement NRC's rulemaking to revise Part 52 of the agency's regulations that deal with licensing processes such as Early Site Permits (ESP), Design Certifications and Combined Licenses (COL). The Part 52 proposal would clarify its relationship to Part 50, which has license requirements for currently operating reactors.

The supplement's changes would revise the definition of "construction" that requires a LWA, a Part 50 construction permit or a COL. No LWA

would be required under the proposed rule for activities such as site clearing, transmission line routing, road building and construction of permanent buildings not required in safety analysis reports for the nuclear power plant. A construction permit, LWA or COL would be required, however, for activities including excavation, pile driving and foundation work for any structure, system or component required in a safety analysis report.

Under the proposed rule, an LWA application may be submitted before the filing of an application for a construction permit or COL. However, the Atomic Safety and Licensing Board and NRC staff would have to render decisions on the LWA request before work could begin. For a site where a construction permit was issued but no plant was built, the LWA application could reference an existing environmental impact statement for the site, taking into account the possible need for updated information.

The text of the proposed changes is available on the NRC's RuleForum page at http://ruleforum.llnl.gov by clicking on the "Draft Rule Text for Comment" link.

NRC Releases Avian Flu Pandemic Plan

The U.S. Nuclear Regulatory Commission has released a 90-page plan outlining how the agency would maintain mission-essential and supporting functions during a possible flu pandemic that may cause staff absenteeism of 40 percent or more. The plan complements the agency's existing Continuity of Operations Plan and reflects considerations provided by the Department of Homeland Security pandemic planning guidelines. Under the plan, NRC would systematically "shed" lower priority work and take certain action ahead of time to better support staff during a pandemic, including enhanced telecommunications and stocking of hygiene supplies.

"This is a plan that we hope never to have to implement," said NRC Commissioner Jeffrey Merrifield, who is taking a lead role in the review of the planning effort. "But it is prudent to plan ahead and anticipate what actions might be needed and what prioritization of activities must be done in order for the NRC to maintain its essential, core mission of protecting public health and safety."

The federal government planning assumptions for the pandemic include absenteeism as high as 40 percent for periods of weeks in the course of a 12to 18-month period. The nuclear power industry is creating its own business continuity planning and site-specific options, and is discussing its efforts and potential needs with NRC. Among other items, the NRC plan includes a three-state implementation process of initiation, execution and reconstitution, and designated lines of succession for agency leadership. Identified "pandemic priority functions" include incident response, threat assessment and dissemination, external communications, critical licensing activities, enforcement and administrative support. Some routine licensing, exercises and inspections may be deferred, delayed or cancelled depending on the availability of staff. However, the NRC will not allow operational safety or security to be jeopardized regardless of the pandemic situation. The plan will be updated annually with new planning assumptions.

The public portion of the pandemic plan can be found on the NRC web site at http://www.nrc.gov/reading-rm/doc-collections/commission/comm-secy/2006/2006-0033comscy-attachment2.pdf.

NRC Reorganizes Materials & Agreement State Programs

In an effort to meet new challenges in the materials, waste and environmental areas, the U.S. Nuclear Regulatory Commission has reorganized its nuclear materials and Agreement State programs into two new offices. The reorganization, which was approved by the Commission in June 2006, is in

part a response to an increase in the number of Agreement States and an expected influx of applications for new nuclear power plants, spent fuel reprocessing plants and a high-level radioactive waste repository at Yucca Mountain. NRC's Agreement State program has grown to 34 states, with three more in the process of negotiating agreements to regulate the industrial, academic and medical uses of radioactive materials. Agreement States currently maintain approximately 18,000 licenses, while the NRC has jurisdiction over approximately 4,400 licenses in the remaining states.

The newly created Office of Federal and State Materials and Environmental Management Programs (FSME) officially began operations on October 1. It is comprised of the former Office of State and Tribal Programs, two of the technical divisions from the Office of Nuclear Material Safety and Safeguards (NMSS) and a small program support staff. Director Charles L. Miller is heading the FSME, with George Pangburn serving as Deputy Director. Other senior FSME staff include Janet Schleuter as Director of the Division of Materials Safety and State Agreements; Dennis Rathbun as Director of the Division of Intergovernmental Liaison and Rulemaking; Larry Camper as Director of the Division of Waste Management and Environmental Protection; and, Joseph Holonich as Director of the Program Planning, Budgeting and Program Analysis Staff.

Also effective October 1, a refocused NMSS began operations concentrating on the nuclear fuel cycle, from uranium conversion and enrichment to fuel manufacturing and high-level waste storage, transportation and disposal. Jack Strosnider serves as Director of the office and Margaret Federline serves as Deputy Director. Other senior staff includes E. William Branch as Director of the Division of Spent Fuel Storage and Transportation; Robert Pierson as Director of the Division of Fuel Cycle Safety and Safeguards; Lawrence Kokajko as Director of the Division of High-Level Waste and Repository Safety; and, Mark Flynn as Director of the Program Planning, Budgeting and Program Analysis Staff.

NRC Honors Commissioner McGaffigan

On November 8, the U.S. Nuclear Regulatory Commission held a ceremony at its Rockville, Maryland headquarters to honor Commissioner Edward McGaffigan for "his exemplary public service, leadership and tenure as the longest serving Commissioner in the agency's history." McGaffigan, who was first appointed in August 1996 and subsequently reappointed for an unprecedented two additional five-year terms, was presented with the Distinguished Service Award by NRC Chairman Dale Klein before a crowd of NRC colleagues, staff and invited guests. Klein praised McGaffigan for working "tirelessly" to protect the independence of the NRC, help establish an effective license renewal process, inaugurate the improved Reactor Oversight Process and increase security at nuclear facilities. NRC Commissioners Jeffrey Merrifield, Peter Lyons and Gregory Jaczko also made presentations. Several Congressional leaders sent their delegations.

Prior to his first appointment to NRC, McGaffigan served as a legislative assistant, then legislative director, and finally senior policy advisor to Senator Jeff Bingaman (D-NM). McGaffigan had previously served as a member of the Foreign Service and as a senior policy analyst and then assistant director in the White House Office of Science and Technology Policy. Earlier in his career, McGaffigan worked on Japanese science and technology at the RAND Corporation and on strategic arms control issues at the Arms Control and Disarmament Agency.

Commissioner McGaffigan's biography can be found on the NRC web site at http://www.nrc.gov/who-we-are/ organization/commission/mcgaffigan.html.

NRC Commissioner Merrifield Will Not Seek Third Term

On October 20, 2006, Commissioner Jeffrey Merrifield—one of five members of the U.S. Nuclear Regulatory Commission, notified White House Chief of Staff Joshua Bolton that he would not be seeking a third term at the agency. A Republican, Merrifield was first appointed to the NRC by President Clinton in October 1998 and subsequently reappointed by President Bush in August 2002. Merrifield plans to serve out the remainder of his term, which ends on June 30, 2007.

"It has been an honor to serve the nation as a Commissioner," commented Merrifield. "NRC is an outstanding agency and I am proud to have served for over 8 years." NRC Chairman Dale Klein stated "Commissioner Merrifield has made extraordinary contributions to the work of the NRC and rendered exceptional service to the American people."

Merrifield has served with five NRC Chairmen, as well as serving as Acting Chairman during the August 2003 blackout when nine nuclear units shut down as part of the major grid disturbance that darkened the homes of 50 million people in North America. He has toured all 103 operating nuclear power plants in the United States as well as over 120 nuclear power plants outside of the U.S. in visits to 29 of the 31 countries that operate civilian nuclear generating facilities. He previously served as a legislative assistant to two U.S. Senators and was the Majority Staff Director of the Senate Environment and Public Works Subcommittee on Superfund, Waste Control and Risk Assessment.

Commissioner Merrifield's biography can be found on the NRC web site at http://www.nrc.gov/who-we-are/organization/commission/merrifield.html.

NRC Executives Receive Presidential Awards

President George W. Bush has selected ten senior managers of the U.S. Nuclear Regulatory

Commission for either Distinguished or Meritorious Executive Rank Awards for 2006. Presidential awards are granted for "sustained extraordinary accomplishment," focusing on leadership to produce results. Less than one percent of the career Senior Executive Service corps receives the prestigious Distinguished Rank award each year. The Meritorious Rank Award is given to fewer than five percent of the corps. Winners are selected through nomination by their agencies and evaluation by boards of private citizens. The President must approve winners.

Karen D. Cyr and Luis Reyes were selected to receive the Distinguished Executive Award. Cyr is NRC's chief legal officer and has made significant contributions to developing the legal framework for nuclear energy regulation for more than 28 years. She provided key support and counsel on legislation incorporated into the Energy Policy Act of 2005 and has been in the forefront of the agency's responses to the terrorist attacks of September 11, 2001. Reyes serves as NRC's Executive Director for Operations. He has demonstrated exceptional leadership directing NRC's regulatory, licensing and administrative programs to help the agency to meet challenges including enhancing the security of nuclear power plants and materials, preparing future licensing to meet national energy needs, and meeting the agency's human capital challenges.

The following eight NRC employees were selected to receive Meritorious Awards: Edward Baker, Deputy Chief Information Officer and Director of the Office of Information Services; Randolph Blough of Region I (King of Prussia, Pennsylvania); William Branch of the Office of Nuclear Material Safety and Safeguards; Cynthia Carpenter, Director of the Office of Enforcement; Charles Casto of Region II (Atlanta, Georgia); Farouk Eltawila of the Office of Nuclear Regulatory Research; Glenn Tracy of the Office of Nuclear Security and Incident Response; and, Michael Weber, Deputy Director of the Office of Nuclear Reactor Regulation.

NRC plans to recognize all of the individuals receiving the Distinguished and Meritorious Executive Rank Awards at its annual awards ceremony in the spring.

Obtaining Publications

To Obtain Federal Government Information

by telephone

DOE Public Affairs/Press Office	(202) 586-5806
DOE Distribution Center	(202) 586-9642
• DOE's National Low-Level Waste Management Program Document Center	(208) 526-6927
EPA Information Resources Center	(202) 260-5922
GAO Document Room	(202) 512-6000
• Government Printing Office (to order entire Federal Register notices)	(202) 512-1800
NRC Public Document Room	(202) 634-3273
• Legislative Resource Center (to order U.S. House of Representatives documents)	(202) 226-5200
U.S. Senate Document Room	(202) 224-7860

by internet

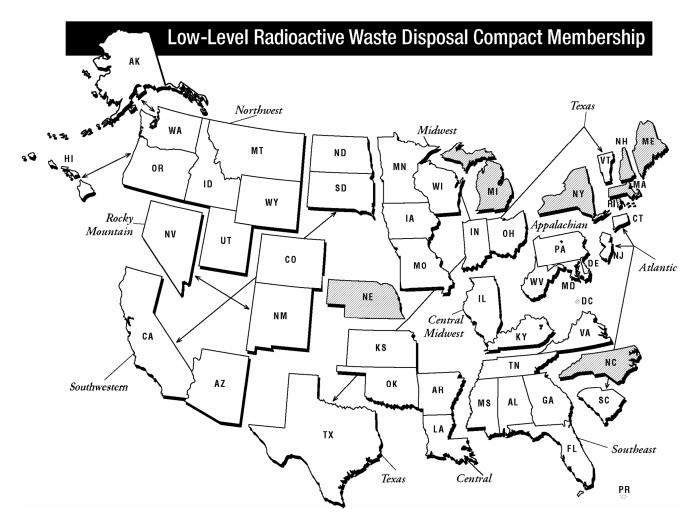
- EPA (for program information, publications, laws and regulations)<u>www.epa.gov</u>
- GAO homepage (access to reports and testimony)<u>www.gao.gov</u>

To access a variety of documents through numerous links, visit the web site for the LLW Forum, Inc. at www.llwforum.org

Accessing LLW Forum, Inc. Documents on the Web

LLW Notes, LLW Forum Meeting Reports and the Summary Report: Low-Level Radioactive Waste Management Activities in the States and Compacts are distributed to the Board of Directors of the LLW Forum, Inc. As of March 1998, LLW Notes and LLW Forum Meeting Reports are also available on the LLW Forum web site at www.llwforum.org. The Summary Report and accompanying Development Chart, as well as LLW Forum News Flashes, have been available on the LLW Forum web site since January 1997.

As of March 1996, back issues of these publications are available from the National Technical Information Service at U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161, or by calling (703) 605-6000.



Appalachian Compact

Delaware Maryland Pennsylvania West Virginia

Atlantic Compact

Connecticut **New Jersey** South Carolina

Central Compact

Arkansas Kansas Louisiana Oklahoma **Northwest Compact**

Alaska Hawaii Idaho Montana Oregon Utah Washington Wyoming

Midwest Compact

Indiana Iowa Minnesota Missouri Ohio Wisconsin

Central Midwest Compact

Illinois Kentucky **Rocky Mountain Compact**

Colorado Nevada New Mexico

Northwest accepts Rocky Mountain waste as agreed between compacts

Southeast Compact

Alabama Florida Georgia Mississippi Tennessee Virginia

Southwestern Compact

Arizona California North Dakota South Dakota

Texas Compact

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