

LLW *notes*

Volume 26, Number 5 September/October 2011

U.S. Nuclear Regulatory Commission

Comment Deadline Extended re LLRW Reduction Policy Statement Revisions

In September 2011, the U.S. Nuclear Regulatory Commission announced that the agency was extending the comment period on proposed revisions to its policy statement on volume reduction of low-level radioactive waste. Public comments were accepted through October 14, 2011. (The original deadline for comments was September 14, 2011.)

For additional information on NRC's proposed revisions to the policy statement on LLRW volume reduction, see 76 Federal Register 50,500 (August 15, 2011).

Revised Policy Statement

The proposed revisions to the policy statement on volume reduction of low-level radioactive waste, published at 76 *Federal Register* 50,500, recognize progress licensees have made in reducing the volume of low-level radioactive waste generated during operations since the current policy statement was issued in 1981.

According to NRC, widespread use of volume reduction practices, which have been encouraged by nuclear industry groups, has resulted in a

significant reduction in the amount of low-level radioactive waste produced by licensees. NRC notes that the high cost of disposal, and lack of disposal access, have also contributed to the use of volume reduction techniques.

The revised policy statement would continue to urge licensees to minimize the volume of waste they produce, since "a continued focus on volume reduction will extend the operational lifetime of the existing commercial low-level disposal sites and reduce the number of waste shipments." In this regard, NRC notes that Title 10 of the *Code of Federal Regulations* 20.1406, currently requires applicants for licenses to describe in the application how facility design and procedures for

(Continued on page 29)

In This Issue

Register Now for Spring 2011 LLW Forum Meeting—page 8

Update re EnergySolutions' Class A Waste License Amendment—page 10

NRC Discusses Prioritizing Recommendations of Japan Task Force
—page 23

USEC's Plan Approved re Return of Portsmouth Plant to DOE—page 27

COPYRIGHT POLICY

The Low-Level Radioactive Waste Forum, Inc. is dedicated to the goals of educating policy makers and the public about the management and disposal of low-level radioactive wastes, and fostering information sharing and the exchange of views between state and compact policy makers and other interested parties.

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.

Current members are allowed to distribute these written materials to a limited number of persons within their particular organization (e.g. compact commissioners, state employees, staff within a federal agency, employees in a commercial enterprise.) It has become clear, however, that there will be instances where members and subscribers wish to share LLW Forum materials with a broader audience of non-members.

This Copyright Policy is designed to provide a framework that balances the benefits of a broad sharing of information with the need to maintain control of published material.

1. LLW Forum, Inc., publications will include a statement that the material is copyrighted and may not be used without advance permission in writing from the LLW Forum.
2. When LLW Forum material is used with permission it must carry an attribution that says that the quoted material is from an LLW Forum publication referenced by name and date or issue number.
3. Persons may briefly summarize information reported in LLW Forum publications with general attribution (e.g., the LLW Forum reports that . . .) for distribution to other members of their organization or the public.
4. Persons may use brief quotations (e.g., 50 words or less) from LLW Forum publications with complete attribution (e.g., *LLW Forum Notes*, May/June 2002, p. 3) for distribution to other members of their organization or the public.
5. Members and subscribers may with written approval from the LLW Forum's officers reproduce LLW Forum materials one time per year with complete attribution without incurring a fee.
6. If persons wish to reproduce LLW Forum materials, a fee will be assessed commensurate with the volume of material being reproduced and the number of recipients. The fee will be negotiated between the LLW Forum's Executive Director and the member and approved by the LLW Forum's officers.

Low-Level Radioactive Waste Forum, Inc.

LLW Notes

Volume 26, Number 5 September/October 2011

Editor and Writer: Todd D. Lovinger

Layout and Design: Rita Houskie, Central Interstate Low-Level Radioactive Waste Compact

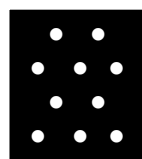
LLW Notes is published several times a year and is distributed to the Board of Directors of the Low-Level Radioactive Waste Forum, Inc. - an independent, non-profit corporation. Anyone - including compacts, states, federal agencies, private associations, companies, and others - may support and participate in the LLW Forum, Inc. by purchasing memberships and/ or by contributing grants or gifts. For information on becoming a member or supporter, please go to our web site at www.llwforum.org or contact Todd D. Lovinger - the LLW Forum, Inc.'s Executive Director - at (202) 265-7990.

The *LLW Notes* is owned by the LLW Forum, Inc. and therefore may not be distributed or reproduced without the express written approval of the organization's Board of Directors.

Directors that serve on the Board of the Low-Level Radioactive Waste Forum, Inc. are appointed by governors and compact commissions. The LLW Forum, Inc. was established to facilitate state and compact implementation of the Low-Level Radioactive Waste Policy Amendments Act of 1985 and to promote the objectives of low-level radioactive waste regional compacts. The LLW Forum, Inc. provides an opportunity for state and compact officials to share information with one another and to exchange views with officials of federal agencies and other interested parties.

Table of Contents

Federal Agencies and Committees (Cover Story)	1
Comment Deadline Extended re LLRW Reduction Policy Statement Revisions	1
Low-Level Radioactive Waste Forum, Inc	4
LLW Forum Hosts Fall 2011 LLW Meeting	4
LLW Forum Resolution	6
Disused Source Working Group Holds Inaugural Meeting	7
Register Now for the Spring 2011 LLW Forum Meeting	8
Low-Level Radioactive Waste Forum Meetings 2011 and Beyond	9
States and Compacts	10
NRC Issues License to AREVA for Uranium Enrichment Plant	10
Update re EnergySolutions' Class A West License Amendment	10
Utah Radiation Control Board Hosts September Meeting	11
Special Inspection Conducted at Uranium Recovery Facility	12
NRC Extends Construction Permit for Bellefonte Unit 1	12
Meeting Held re Restart Readiness at North Anna	13
Southwestern Compact Commission Hosts 62nd Meeting	14
Governor Perry Appoints New Commissioners to Texas Compact	15
Texas Compact Commission to Meet in Austin	16
TCEQ Hosts Meetings re Waste Acceptance	18
WCS Enters Disposal Agreement with the Utilities Service Alliance	19
Confirmatory Action Letter Issued re Fort Calhoun Restart	21
Special Inspection at Rhode Island Research Reactor	22
International	23
Symposium Held re International System of Radiological Protection	23
NRC Discusses Prioritizing Recommendations of Japan Task Force	23
Federal Agencies and Committees (continued)	25
ACMUI Holds September 2011 Meeting	25
ACRS Holds Open Meeting re Part 61 Rulemaking	25
ACRS to Meet in November 2011	26
USEC's Plan Approved re Return of Portsmouth Plant to DOE	27
Second Technical Evaluation Report Issued re Yucca Mountain	27
NAS Holds Meeting re Cancer Risk Study	28
Meetings Held re Compatibility of State Regulations for Certain Devices	30
Draft Guidance re Treatment of Uranium for Local Water Systems	30
License Renewals Continue to Move Forward	31
COL Application Reviews Continue	32
Definitions of Construction Changed for Materials Applicants	33
Emergency Preparedness Regulations Approved for Nuclear Plants	34
Input Sought re Updated Seismic Analysis for Power Plants	34
Fuel Cycle Facilities to be Inspected re Natural Disaster Preparations	35
Rulemaking Re Emergency Core Cooling Requirements	35
Meetings Held re Long-Term Storage of Spent Fuel	36
Comment Sought re Proposed Changes to Consumer Policy Statement	36
NRC issues Mid-Cycle Assessment Letters	37
Proposed Changes to Regulations for Research and Test Reactors	38
NRC Goes Live on You Tube	38
Obtaining Publications	39



LLW
FORUM, INC

Low-Level Radioactive Waste
Forum, Inc.
1619 12th Street N.W.
Washington, DC 20009
(202) 265-7990
FAX (202) 265-7995
E-MAIL llwforuminc@aol.com

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	GAO
U.S. Nuclear Regulatory Commission	NRC
Naturally-occurring and accelerator-produced radioactive material	NARM
Naturally-occurring radioactive material	NORM
Code of Federal Regulations	CFR

Low-Level Radioactive Waste Forum, Inc.

LLW Forum Hosts Fall 2011 LLW Meeting Santa Fe, New Mexico on October 17-18, 2011

The Low-Level Radioactive Waste Forum hosted its fall 2011 meeting at the Inn and Spa at Loretto in Santa Fe, New Mexico. The Rocky Mountain Low-Level Radioactive Waste Board and the Midwest Interstate Low-Level Radioactive Waste Compact Commission co-sponsored the full two-day meeting. URENCO, a longtime member of the LLW Forum, hosted a dinner event for meeting attendees on Monday evening at the Coyote Café in Santa Fe.

A meeting bulletin and draft agenda can be found on the LLW Forum's web site at www.llwforum.org.

Meetings Overview

The Board of Directors held an Executive Committee meeting on Monday, October 17. Immediately thereafter, the LLW Forum held its regularly scheduled meeting all day on Monday and Tuesday morning, October 17-18. On Tuesday afternoon, October 18, there was a special session during which state and compact officials were afforded an opportunity to provide feedback and comment to representatives of the U.S. Nuclear Regulatory Commission on current activities and initiatives (other meeting attendees were also allowed to observe). A closed meeting of the LLW Forum's Disused Source Working Group was held on Wednesday, October 19. (See related story, this issue.) In addition, NRC held a public workshop on the Concentration Averaging Branch Technical Position (CA BTP) on Thursday, October 20, in Albuquerque, New Mexico.

Executive Committee Meeting

The LLW Forum's Board of Directors met on Monday morning before the start of the regular

meeting.

The board began the meeting with a presentation of the 2011 financial report and audit results. The board then reviewed and approved an operating budget for the coming year. The board also reviewed the current membership dues and subscription fee rates and determined to maintain them at current levels for the coming year.

The board then received an update on the status of the Disused Source Working Group. (See related story, this issue.) The group was formed in response to a request from the National Nuclear Security Administration to study the issue of management and disposition of disused sources. The group will study both front and back end issues over the next 18 to 24 months and issue a report to the full LLW Forum and NNSA at the conclusion of the process.

Thereafter, the board received reports from future meeting hosts. (See related story, this issue.) The board also heard information regarding the panel session that was organized by the LLW Forum for the Exchange Monitor's Rad Waste Summit in Summerlin, Nevada during the previous month.

Finally, the board began planning for an LLW Forum sponsored panel presentation at the upcoming Waste Management Symposia in Phoenix, Arizona. The panel will address "Hot Topics and Emerging Issues in Commercial LLRW Management."

Regular Meeting

The following items, among others, were on the agenda for the Fall 2011 LLW Forum meeting:

- reports on new developments from states, compacts, federal agencies and industry representatives;

Low-Level Radioactive Waste Forum, Inc. *continued*

- licensing and activities update for the WCS planned low-level radioactive waste disposal facility in Texas;
 - current status of and future plans for the Waste Isolation Pilot Plant (WIPP);
 - risk-informed, performance-based revision to NRC's 10 CFR Part 61 to require a site-specific analysis;
 - international developments in uranium enrichment and management;
 - uranium enrichment in the United States;
 - International Isotopes proposed fluorine extraction facility in New Mexico;
 - DOE uranium deconversion projects and disposition pathways;
 - potential geologic considerations regarding the disposal of depleted uranium;
 - EnergySolutions performance assessment for the proposed disposal of depleted uranium at the Clive facility;
 - Utah's response and other regulatory activities and initiatives;
 - application of NRC licensing requirements to depleted uranium at Army installations;
 - status update and lessons learned from the Fukushima incident in Japan;
 - EPA's radiogenic cancer risk estimates study and analysis of the associated data;
 - DOE's Greater-than-Class C draft Environmental Impact Statement;
 - EPA's low-activity waste rulemaking;
 - publication of final NRC rule to prevent future legacy sites;
 - overview and analysis of the NRC's volume reduction policy statement; and,
 - NRC's concentration averaging branch technical position.
- consideration of a risk-informed, performance-based revision to 10 CFR Part 61;
 - volume reduction policy statement;
 - issuance of interim guidance regarding the draft branch technical position on concentration averaging and encapsulation; and,
 - other regulatory issues and items of interest and/or concern.

Resolution re Dialogue with Sited States

During the course of the Fall 2011 meeting, the LLW Forum's Board of Directors passed a resolution expressing appreciation to NRC for engaging in dialogue with the states and compacts and requesting the designation of an ombudsman "for the purpose of collecting specific input from States and Compacts related to all aspects of the proposed revisions to 10 CFR Part 61, analyzing and understanding the input, and directly incorporating the input into the NRC revision process and working drafts."

See page 6 for the full text of the LLW Forum's resolution.

To access information about LLW Forum meetings, please go to www.llwforum.org and scroll down to the first bold paragraph on the Home Page. The documents may also be found on the About Page under the header "Meetings."

For additional information, please contact Todd Lovinger, the LLW Forum's Executive Director, at (202) 265-7990 or at LLWForumInc@aol.com.

Dialogue with NRC

On the afternoon of October 18, NRC staff participated in an interactive dialogue with state and compact officials on a variety of issues including, but not limited to, the following:

- current issues in NRC's low-level radioactive waste program;

**Request for an Ombudsman with
Sited States Throughout the Process of Revising 10 CFR Part 61**

**LLW Forum Resolution
Santa Fe, New Mexico
October 17, 2011**

Whereas the U.S. Nuclear Regulatory Commission (NRC) is considering various rulemaking, guidance and position statement initiatives related to low-level radioactive waste disposal and federal regulations at Title 10, Code of Federal Regulations, Part 61 (10 CFR Part 61);

Whereas the Low-Level Radioactive Waste Policy Act assigns responsibility for low-level radioactive waste management to the states and compacts;

Whereas all licensed commercial low-level radioactive waste disposal sites in the United States are located in NRC Agreement States, where NRC has transferred their authority for regulation of sites to the respective state regulator;

Whereas all licensed commercial low-level radioactive waste disposal sites in the United States are located in states that are members of a compact;

Whereas the LLW Forum expresses its appreciation to NRC staff for participating in a dedicated session with States and Compacts at the Fall 2011 LLW Forum meeting to gather specific input on the agency's initiatives related to 10 CFR Part 61;

Whereas the States and Compacts believe it would be productive to continue the dialogue begun during the above-referenced dedicated session;

Now Therefore Be it Resolved that the LLW Forum hereby requests that the NRC:

- seek specific input from States and Compacts early in the process on NRC initiatives to revise 10 CFR Part 61, that may include among other things, explanation of the issues, goals and potential impacts, practical aspects of implementation, and a discussion of possible unintended consequences;
- in consideration of the unique impacts on States and Compacts, provide an advanced dedicated time interval of sufficient duration (i.e., 90 to 120 days) for states and compacts to be able to participate and provide written comments responding to NRC proposals; and,
- assign one staff person or contract with a consultant for the purpose of collecting specific input from States and Compacts related to all aspects of the proposed revisions to 10 CFR Part 61, analyzing and understanding the input, and directly incorporating the input into the NRC revision process and working drafts.

Disused Source Working Group Holds Inaugural Meeting

Members of the LLW Forum's Disused Source Working Group held their first meeting on October 20, 2011.

The group was formed in response to a request from the National Nuclear Security Administration (NNSA) to study the issue of management and disposition of disused sources.

The group will study both front and back end issues over the next 18 to 24 months and issue a report to the full LLW Forum and NNSA at the conclusion of the process.

Membership

Eight members of the LLW Forum have been appointed to the working group, including

- Max Batavia of the Atlantic Compact;
- Mike Garner of the Northwest Compact/State of Washington;
- Kathryn Haynes of the Southeast Compact;
- Susan Jablonski of the State of Texas;
- Rusty Lundberg of the State of Utah;
- Alyse Peterson of the State of New York;
- Leonard Slosky of the Rocky Mountain Board; and,
- Stan York of the Midwest Compact.

Todd Lovinger, the LLW Forum's Executive Director, will serve as the Project Director. Gary Robertson, a retired official from the State of Washington, has been retained as a Technical Expertise Consultant.

Agenda

The following items, among others, were discussed as part of the October meeting agenda:

- introduction and announcements (*Leonard Slosky, LLW Forum Chair*)

- background information (*Abigail Cuthbertson, NNSA/DOE*)
 - statement of problem and issues of concern
 - work done by other groups, task forces, and so forth
 - collection experience and problems to date
 - information sought from the working group
- NRC regulatory overview/plans (*John O'Donnell, Materials Licensing Division, NRC*)
 - overview re how the agency licenses sealed source users
 - issues of concern
 - regulatory agenda and other plans to tighten up the front-end
- CRCPD's experience (*Jennifer Opila, Colorado/CRCPD*)
 - agreement state regulation of sealed sources
 - differences from NRC regulations
 - potential regulatory gaps leading to orphaned sources or sources that need special recovery
- election of working group Chair and Vice-Chair (*Working Group Members*)
- discussion of procedures and policies (*Working Group Members*)
 - work scope/process
 - procedures/attendance
 - decision making
 - filing of monthly reports
 - other
- consideration of hiring of technical expertise consultant and/or support staff (*Working Group Members*)
- next meeting date, location and topics (*Working Group Members*)

Meetings of the Disused Source Working Group will be limited to working group members and invited guests.

Register Now for the Spring 2011 LLW Forum Meeting

Burlingame, California on April 23-24, 2012

The Low-Level Radioactive Waste Forum will host its spring 2012 meeting at the Hyatt Regency San Francisco Airport in Burlingame, California. The Southwestern Low-Level Radioactive Waste Compact Commission and the State of California are co-sponsoring the one and one-half day meeting—which will be held on Monday, April 23, and Tuesday, April 24. The Executive Committee will meet on Monday morning.

A meeting bulletin and registration form can be found on the LLW Forum's web site at www.llwforum.org.

Attendance

Officials from states, compacts, federal agencies, nuclear utilities, disposal operators, brokers/processors, industry, and other interested parties are invited and encouraged to attend. The meeting is an excellent opportunity to stay up-to-date on the most recent and significant developments in the area of low-level radioactive waste management and disposal. It also offers an important opportunity to network with other government and industry officials and to participate in decision-making on future actions and endeavors affecting low-level radioactive waste management and disposal.

Registration

The meeting is free for members of the LLW Forum. Non-member registration is \$500, payable to the “LLW Forum” by check. (*Credit card payments are not accepted.*)

All persons must pre-register for the meeting and pay any associated registration fees in order to be allowed entry. Registration forms are needed in order to ensure that you receive a meeting packet and name badge.

Accordingly, interested attendees are asked to please take a moment to complete the registration form at your earliest convenience and return it to Kathy Davis of the Southwestern Compact at the address, e-mail or fax number listed at the bottom of the form.

Hotel Reservations

Persons who plan to attend the meeting are encouraged to make their hotel reservations and send in their registration forms as soon as possible, as we have exceeded our block for the last several meetings.

A block of rooms has been reserved for Sunday (April 22) and Monday (April 23) for meeting attendees at the Hyatt Regency San Francisco Airport Hotel at the special, discounted rate of \$123/night (single/double rate) plus tax. A limited number of rooms are available at this rate for Saturday, April 21, as well as Tuesday and Wednesday, April 24-25.

To make a reservation, please call the Hyatt Regency San Francisco Airport Hotel directly at (888) 421-1442 and ask for a room in the SWLLRWCC EVENT block. You may also make your reservations on-line at https://resweb.passkey.com/Resweb.do?mode=welcome_ei_new&eventID=4031598. Please reserve by Monday, March 20, to receive the special, discounted rate.

Transportation

The Hyatt Regency San Francisco Airport Hotel is located just minutes from the San Francisco International Airport on Interstate 101. Complimentary shuttle service is available through the hotel 24 hours a day. In addition, the Bay Area Rapid Transit (BART) commuter train station with direct service to downtown San Francisco will also be available by shuttle service from the hotel.

(Continued on page 9)

Low-Level Radioactive Waste Forum Meetings *2011 and Beyond*

The following information on future meetings of the Low-Level Radioactive Waste Forum is provided for planning purposes only. Please note that the information is subject to change.

For the most up-to-date information, please see the LLW Forum's web site at www.llwforum.org.

2012 Meetings

The Southwestern Low-Level Radioactive Waste Compact Commission and State of California will co-host the spring 2012 meeting of the LLW Forum. (See related story, this issue.) The meeting will be held at the Hyatt Regency San Francisco Airport Facility in Burlingame, California on April 24-25, 2012. The hotel—which is rated AAA Four Diamond Award Winning Service & Accommodations—has 24 hr complimentary shuttle service to and from the airport, as well as shuttle service from the hotel to the Bay Area Rapid Transit (BART) station.

The Central Midwest Interstate Low-Level Radioactive Waste Commission and the State of Illinois have agreed to cohost the LLW Forum's fall 2012 meeting. This will be the third time that the Commission and Illinois have cohosted a meeting of the LLW Forum since we began operations as an independent, non-profit organization in 2000. The meeting will be held at the Embassy Suites Lakefront Hotel in downtown Chicago on October 11-12, 2012.

Search for Volunteer Hosts for 2013 Meetings

The LLW Forum is currently seeking volunteers to host both the spring and fall 2013 meetings and those thereafter. Although it may seem far off, substantial lead-time is needed to locate appropriate facilities.

If your state or compact has not hosted a meeting in the past two years, we ask that you consider doing so. If necessary, we may be able to assist you in finding a co-host.

Non-state and non-compact entities are eligible to co-host LLW Forum meetings, so please let us know if your company or organization is interested in doing so.

Anyone interested in potentially hosting or sponsoring a meeting should contact one of the officers or Todd D. Lovinger, the organization's Executive Director, at (202) 265-7990 or at LLWForumInc@aol.com.

(Continued from page 8)

To access the meeting bulletin and registration form, please go to www.llwforum.org and scroll down to the first bold paragraph on the Home Page. The documents may also be found on the About Page under the header "Meetings."

For additional information, please contact Todd Lovinger, the LLW Forum's Executive Director, at (202) 265-7990 or at LLWForumInc@aol.com.

Northwest Compact/State of Idaho

NRC Issues License to AREVA for Uranium Enrichment Plant

On October 12, 2011, the U.S. Nuclear Regulatory Commission announced the issuance of a license to AREVA Enrichment Services LLC (AES) to construct and operate a gas centrifuge uranium enrichment plant in Bonneville County, Idaho.

The license for the Eagle Rock Enrichment Facility authorizes AES to enrich uranium up to 5 percent by weight in the fissile isotope U-235 for use in the manufacture of nuclear fuel for commercial nuclear power reactors. AES plans to begin construction in 2012.

AES submitted its application on December 30, 2008. Thereafter, NRC staff completed thorough safety and environmental reviews of the proposed facility. A Safety Evaluation Report (NUREG-1951) was published in September 2010, with the staff's conclusion that AES's proposed facility complies with NRC regulations and would not pose an undue risk to the health and safety of workers or the public. An Environmental Impact Statement (NUREG-1945) was published in February 2011, with the determination that there would be no significant environmental impacts that would preclude licensing of the facility.

A three-judge Atomic Safety and Licensing Board conducted a hearing on the AES application, with evidentiary sessions on the safety review in January 2011 and on the environmental review in July 2011. The ASLB issued its decision authorizing the staff to issue the license on October 7, 2011.

NRC staff will conduct inspections during the construction and operation of the Eagle Rock Enrichment Facility. The agency plans to hold a public meeting in Idaho Falls before construction

begins to explain its oversight plans to members of the public.

The AES application, as well as the Safety Evaluation Report and Environmental Impact Statement, are available on the NRC web site at www.nrc.org.

Northwest Compact/State of Utah

Update re EnergySolutions' Class A West License Amendment

The Utah Division of Radiation Control has posted on the "EnergySolutions' Issues" web page the Round I Interrogatory regarding EnergySolutions' Class A West License Amendment request.

In addition, the Utah Department of Environmental Quality (DEQ) has submitted to the Legislative Management Committee its report on the Five-Year Review of Financial Assurance & Perpetual Care of commercial hazardous waste and radioactive waste treatment, storage and disposal facilities.

Low-level radioactive waste is currently being disposed of at EnergySolutions' Clive facility in the Class A North and Class A cells. A license amendment was submitted on May 2, 2011 to create a new combined disposal cell that will encompass the footprints of the existing Class A and Class North embankments. Part of this request also retracts the Class A South/11e.(2) embankment design changes submitted in January 2008.

A copy of the Five-Year Review fo Financial Assurance and Perpetual Care report can be found on the DEQ's web site at: <http://www.deq.utah.gov/Issues/perpcare/index.htm>.

States and Compacts *continued*

A copy of the Round I Interrogatory can be found on the DEQ's web site at <http://www.deq.utah.gov/Issues/energysolutions/docs/sept2011/CAWDraftRnd1IntsRedline110825r1drcfinalcleanr1.pdf>

Utah Radiation Control Board Hosts September Meeting

The Utah Radiation Control Board held a regularly scheduled meeting on Tuesday, September 13, 2011. The meeting—which was open to the public—was held in Conference Room 1015 of the Multi Agency State Office Building at 195 North 1950 West in Salt Lake City, Utah.

The following items, among others, were on the September meeting agenda:

- Approval of Minutes of Past Meeting
- Board Chair and Vice-Chair Election
- Administrative Rules
 - (a) R305-6-101, et. seq., Administrative Procedures -- Final Status
 - (b) R313-17, Administrative Procedures -- Final Status
 - (c) Approval of Five Year Review: R313-19, R313-22, R313-25, R313-28, R313-32, R313-36, R313-70
 - (d) R313-26-4, Shipper's Requirements -- Proposed Final Adoption of the proposed change to add arequirement related to the integrity of shipping containers

- Radioactive Materials Licensing/Inspection
- X-Ray Registration/Inspection
- Radioactive Waste Disposal
 - (a) EnergySolutions'
 - i. Financial Assurance/Perpetual Care - Five Year Update Report to Legislature
 - ii. Depleted Uranium Performance Assessment Status
 - iii. August 18 - Stakeholder Outreach Meeting Regarding Sealed Sources
 - iv. September 1 - Briefing Meeting on EnergySolutions' Proposed Class A West License Amendment
- Uranium Mill Licensing and Inspection
- Other Division Issues
 - (a) Division Activities Report
 - (b) Nuclear Regulatory Commission - Activity Update
 - i. Integrated Materials Performance Evaluation Program (IMPEP) -- Draft Report of NRC Evaluation of DRC Agreement State Programs
- Public Comment

The Radiation Control Board—which is appointed by the Utah Governor with the consent of the Utah Senate—guides development of Radiation Control policy and rules in the state.

The Board holds open meetings ten times per year at locations throughout the state. A public comment session is held at the end of each meeting.

States and Compacts *continued*

The next Board meeting has been scheduled for October 11, 2011. The meeting will be held in Conference Room 1015 of the Multi Agency State Office Building at 195 North 1950 West in Salt Lake City, Utah. The meeting will be open to the public.

Copies of the Utah Radiation Control Board meeting agendas can be found at <http://www.radiationcontrol.utah.gov/Board/minagd/agenda.pdf>.

Northwest Compact/State of Wyoming

Special Inspection Conducted at Uranium Recovery Facility

On October 5, 2011, the U.S. Nuclear Regulatory Commission began a special inspection at the Uranium One Irigaray and Chistensen Ranch in situ uranium recovery facility located near Casper, Wyoming. Uranium One USA Inc operates the facility.

In situ recovery facilities recover uranium from ores using a chemical injection process to remove the uranium. The uranium is then separated from the solution, concentrated, and dried to form yellowcake.

On October 2, 2011, two operators were working at the Uranium One USA facility when an alarm sounded and the yellowcake dryer automatically shut down. Operators then noticed airborne yellowcake uranium outside the dryer enclosure within the process building.

An NRC inspector traveled to the site to evaluate the incident and corrective actions have been initiated. It appears that a seal on the dryer may have broken, allowing yellowcake powder to escape. Current information indicates that there were no major safety impacts or release to the

environment as the dryer is housed inside a pressurized sealed room within a building. The licensee began cleanup of the uranium within the facility after the incident.

NRC is conducting a special inspection to determine if the workers received any exposure to the yellowcake. The site ceased uranium recovery operations in 2000 and was restarted in January. The special inspection will ensure that the licensee takes appropriate corrective actions after reviewing the incident.

The Uranium One USA facility is authorized to produce up to 2.5 million pounds of uranium oxide, or yellowcake, annually.

NRC inspectors will issue a publicly available inspection report on their findings within 45 days of the end of the inspection.

Southeast Compact/State of Alabama

NRC Extends Construction Permit for Bellefonte Unit 1

On September 30, 2011, the U.S. Nuclear Regulatory Commission announced that the agency has extended the construction permit for Tennessee Valley Authority's (TVA) unfinished Unit 1 reactor at the Bellefonte site near Scottsboro, Alabama. The site is located on approximately 1,600 acres adjacent to the Tennessee River in northern Alabama.

On October 8, 2010, TVA submitted a permit extension request, which was then supplemented on April 25, 2011 and September 1, 2011. The permit, which was originally set to expire on October 1, 2011, is now valid until October 1, 2020.

After withdrawing both Bellefonte permits in 2006, TVA determined in August 2008 that completing the Bellefonte reactors could be viable and requested that the NRC reinstate the permits. In March 2009, the agency reinstated the permits, returning the plant to “terminated” status under the Commission Policy Statement on Deferred Plants (52 *Federal Register* 38,077 October 14, 1987).

In January 2010, NRC placed the plant in “deferred” status. TVA must re-establish control over the plant’s physical condition and records regarding the quality of Units 1 and 2 before the NRC will authorize a return to active construction. This approach provides assurance to the public that the NRC will thoroughly scrutinize the plant and that any issues identified will be addressed before TVA can move forward.

NRC granted construction permits for Bellefonte’s two pressurized-water reactors in 1974. By 1988, when TVA deferred completion of the plant, Unit 1 was approximately 88 percent complete and Unit 2 was approximately 58 percent complete. When TVA submits its request to return to active construction, it must provide the current slate of construction and work remaining. There is no nuclear fuel on the site.

Bellefonte Unit 2’s construction permit expires on October 1, 2014.

NRC’s Order extending the Bellefonte Unit 1 construction permit is available on ADAMS by entering accession number ML11245A128.

Southeast Compact/State of Virginia

Meeting Held re Restart Readiness at North Anna

On November 1, 2011, the U.S. Nuclear Regulatory Commission held a public meeting to discuss its inspections of the North Anna nuclear power station and its assessment of the plant’s readiness to restart following the August 23 earthquake near the facility. The meeting—which was held at the Louisa County Middle School Auditorium in Mineral, Virginia—began at 7:00 pm.

NRC staff discussed its restart review and inspections at the plant since the earthquake. The presentation provided an overview of the restart requirements, the staff review process, an overview of the key technical areas associated with the safety review, a summary of the Restart Readiness Inspection activities, and the next steps or path forward.

Members of the NRC inspection teams attended, as well as managers from the NRC Region II office in Atlanta and agency headquarters in Rockville, Maryland. After the meeting, NRC staff was available to answer questions from media representatives and members of the public.

NRC issued Dominion Nuclear, the owner of the North Anna plant, a Confirmatory Action Letter on September 30. The letter reaffirms that the company must prove the plant can operate safely before the agency will approve North Anna’s restart. NRC continues to review Dominion’s submittals regarding the plant’s status.

The August 23 earthquake generated stronger ground motion than what was anticipated during the licensing of North Anna—which is located approximately 40 miles northwest of Richmond. During the quake, the North Anna station’s two units automatically shut down. The company

States and Compacts *continued*

declared an Alert, the next to lowest NRC emergency classification for plant events, and exited the alert after the plant staff restored offsite power. Prior to the restart review, an NRC Augmented Inspection Team completed a separate follow-up inspection of the plant.

Southwestern Compact

Southwestern Compact Commission Hosts 62nd Meeting

On October 14, 2011, the Southwestern Low-Level Radioactive Waste Commission hosted its 62nd meeting in Sacramento, California.

The following topics, among others, were on the meeting agenda:

- call to order
- roll call
- welcome and introductions
- statement regarding due notice of meeting
- reports: Commission Chair, Executive Director, licensing agency, license designee, and party states
- exportation: ratification of approved petitions and amendment of dates
- report on status of NRC visit with California Department of Public Health (CDPH) and status of incompatibility issue
- discussion re DOE Draft GTCC EIS correspondence
- discuss status of Record of Decision for McClellan Air Force Base
- discuss DOE sealed sources working group with LLW Forum
- discuss NRC and blending status
- discuss and review proposed new forms for Texas-Vermont Compact for exportation

- discuss status of spring conference and requesting the waiver of fees from LLW Forum
- review and approve Financial Audit Report
- review and approve Annual Governor's Report
- Executive Session to discuss staff performance evaluations
- review and approve Executive Director's and Counsel's contracts
- amend Fiscal Year 2011-12 budget
- approve new Fiscal Year 2012-13 budget
- discuss and adopt fee schedules
- public comment
- election of officers
- future agenda items
- next meeting: April 24, 2012 at Hyatt San Francisco Airport, California
- adjournment

Members of the public were invited to attend the meeting and comment on specific agenda items as the Commission considered them. The total public comment time on each agenda item was limited to 15 minutes. Written material was also accepted. A 15-minute public comment period was provided near the end of the meeting at which time members of the public were invited to bring before the Commission issues relating to low-level radioactive waste but which were not on the agenda.

For additional information, please contact Kathy Davis, Executive Director of the Southwestern Compact Commission, at (916) 448-2390 or at swllrwcc@swllrwcc.org.

Texas Compact Commission

Governor Perry Appoints New Commissioners to Texas Compact

Texas Governor Rick Perry (R) has appointed new state members to the Texas Low-Level Radioactive Waste Disposal Compact Commission with staggered terms, as per the terms of recently passed legislation.

Two of the members, Robert Wilson and Richard Dolgener, are current Commissioners. The other four are new appointments.

Robert Wilson has been designated to serve as Chair of the Commission. Milton Lee has been designated to serve as Vice-Chair.

Texas Commissioners

Governor Perry has made the following appointments to the Texas Compact Commission:

To Expire September 1, 2013:

- Eric J. Doyal (Houston): Doyal is a senior associate at Capital Point Partners. He is a member of the Houston Private Equity Association, and co-founder and past president of the Houston Chapter of Young Professionals in Finance. He is also a board member of the Texas A&M University Greek Former Student Leadership Council, and a mentor for the Texas A&M Horizons Program. Doyal received a bachelor's degree from Texas A&M University and is currently pursuing a Master of Business Administration at the Rice University Jones Graduate School of Business.
- Milton B. Lee (San Antonio): Lee is a registered professional engineer and retired

CEO of CPS Energy. He is co-chair of the National Society of Black Engineers Region 5 Advisory Board, a member of the Texas Alliance for Minorities in Engineering and American Public Power Association, a member and past vice chair of the Large Public Power Council, and a member and past president of the Texas Public Power Association. He is a board member of the Southwest Research Institute, San Antonio Economic Development Foundation, San Antonio Medical Foundation, and Alamo Colleges Foundation. He is also a board member of the University of Texas (UT) Engineering Advisory Board, UT at San Antonio Development Board, UT Health Science Center at San Antonio Cancer Therapy and Research Center, and Texas Research and Technology Foundation. Lee received a bachelor's degree from the University of Texas.

To Expire September 1, 2015:

- Richard H. Dolgener (Andrews): Dolgener is the Andrews County judge. He is a member of the Texas Association of Counties, West Texas County Judges, and Permian Basin Regional Planning Commission. He is also a volunteer with the Andrews Downtown Lions, Andrews Food Bank and Kairos Prison Ministries.
- Linda L. Morris (Waco): Morris is a licensed medical health physicist, and an associate professor and chair of the Texas State Technical College Waco Environmental Health and Safety and Radiation Protection Technologies departments. She is a fellow of the Health Physics Society, and a member and past president of the South Texas Chapter of the Health Physics Society. She is also a board member of the Central Texas Regional Science and Engineering Fair, a first aid instructor for the American Red Cross Heart of Texas Chapter, and a member of the Waco Garden Patch Garden Club. Morris received a

States and Compacts *continued*

bachelor's degree from Lamar University and a master's degree in biophysics from Texas A&M University.

To Expire September 1, 2017:

- John M. Salsman (College Station): Salsman is a certified health physicist, and director of Environmental Health and Safety at Texas A&M University. He is a member of the Health Physics Society and American Academy of Health Physics. He is also a board member and past president of the South Texas Chapter of the Health Physics Society. Salsman received a bachelor's degree and master's degree in nuclear engineering from Texas A&M University.
- Robert C. Wilson (Lockhart): Wilson is an attorney and partner at Jackson, Sjoberg, McCarthy and Wilson. He is a member of the State Bar of Texas, Caldwell County Bar Association and University of Texas School of Law Environmental Law Clinic Advisory Board. He is also a member of the Health Physics Society, Texas Water Conservation Association and Texas Mining and Reclamation Association. Wilson received a bachelor's degree and law degree from the University of Texas at Austin.

Background

Pursuant to the terms of SB 1605, which was passed by the Texas Legislature and signed into law by Governor Perry earlier this year, the term of office of the current Commissioners expired on September 1, 2011 -- the date the bill became effective.

The law further provides that the Governor is then to appoint host state Commissioners with staggered terms, two each expiring on September 1, 2013; September 1, 2015; and, September 1, 2017. (See *LLW Notes*, May/June 2011, pp. 1, 13-15.)

By letter dated August 21, 2011, Michael Ford resigned as Chairman of the Texas Low-Level Radioactive Waste Disposal Compact Commission. (See LLW Forum memo dated September 2, 2011.) In his letter, Ford expresses his support for the directives set out in the recently passed legislation and offers his assistance to support the transition to new leadership.

Texas Compact Commission to Meet in Austin

November 9, 2011

The Texas Low-Level Radioactive Waste Disposal Compact Commission (the "Commission") has scheduled its next meeting in Austin, Texas on November 9, 2011. The meeting start time, location and agenda will be announced shortly.

Information regarding Commission meetings is posted in the Texas Register and on the Commission web site at <http://www.tllrwdcc.org>.

For additional information, please contact Margaret Henderson, Interim Executive Director of the Commission, at (512) 820-2930 or at margaret.henderson@tllrwdcc.org.

Background re Recent Legislative Action

During the current session, the Texas Legislature passed legislation (SB 1504, SB 1605 and HB 2694) regarding, among other things, the disposal of out-of-region waste at the WCS facility that is currently being constructed in Andrews County and the terms of Commissioners to the Texas Compact Commission.

Although the bills both contain language pertaining to the disposal of out-of-region waste at the WCS facility, no waste may be imported to

States and Compacts *continued*

the State of Texas without approval by the Commission.

For an in-depth overview of waste-related bills as originally approved by the Senate, please see [LLW Notes](#), March/April 2011, pp. 1, 22-28. For an in-depth overview of the House amendments and final bills, please see [LLW Notes](#), May/June 2011, pp. 1, 13-15.

Background re Import/Export Rules

On January 4, 2011, the Commission approved revised Preliminary Rules on the Exportation and Importation of Waste by a vote of five to two. (See [LLW Notes](#), January/February 2010, pp. 1, 16.) Various amendments to the rules were accepted prior to passage, including those offered by the Vermont Commissioners that clarified issues regarding the reserving of disposal capacity at the regional commercial facility for generators from the State of Vermont.

The vote followed a series of legal maneuvers by Public Citizen and the Texas Civil Rights Project that attempted to block the Commission from proceeding to act on the proposed rules. The groups initially succeeded at getting a state district court judge to enjoin the Commission from adopting, approving, or otherwise implementing the proposed rules. However, a federal district judge subsequently dismissed the case and dissolved the temporary restraining order ("TRO") after determining that neither the state nor federal court had jurisdiction to prevent the Commission from acting on the proposed rules.

A copy of the Commission's import/export rules and other related information may be found on the Commission's web site at <http://www.tllrwdcc.org>.

Background re License Status

On January 14, 2009, by a vote of 2 to 0, Texas Commission on Environmental Quality (TCEQ) Commissioners denied hearing requests and approved an order on WCS' Radioactive Material

License Application No. R04100. (See [LLW Notes](#), January/February 2009, pp. 1, 9-11.) Following the completion of condemnation proceedings and the acquisition of underlying mineral rights, TCEQ's Executive Director signed the final license on September 10, 2009. (See [LLW Notes](#), September/October 2009, pp. 1, 12-13.)

The license allows WCS to operate two separate facilities for the disposal of Class A, B and C low-level radioactive waste—one being for the Texas Low-Level Radioactive Waste Disposal Compact, which is comprised of the States of Texas and Vermont, and the other being for federal waste as defined under the Low-Level Radioactive Waste Policy Act of 1980 and its 1985 amendments.

For additional information on WCS license application, please go to the TCEQ web page at http://www.tceq.state.tx.us/permitting/radmat/licensing/wcs_license_app.html or contact the Radioactive Materials Division at (512) 239-6466.

Background re Construction Authorization

On January 7, 2011, TCEQ Executive Director Mark Vickery approved the commencement of construction of the planned WCS low-level radioactive waste disposal facility "subject to all applicable license conditions, rules and statutes." (See [LLW Notes](#), January/February 2010, pp. 19-21.) Earlier the same day, TCEQ and WCS executed a "Lease and Indemnification Agreement Concerning Low-Level Radioactive Waste Disposal in Andrews County, Texas." The document sets forth provisions relating to conveyance of the Compact Waste Disposal Facility to the State of Texas, including indemnification for any liability imposed on the state.

WCS is currently authorized for the processing, storage and disposal of a broad range of hazardous, toxic, and certain types of radioactive waste. WCS is a subsidiary of Valhi, Inc.

For additional information, please contact Susan Jablonski—Director of the Radioactive Materials Division at TCEQ—at (512) 239-6466 or at sjablons@tceq.state.tx.us. You may also contact Rodney Baltzer—President of WCS—at (972) 450-4235 or at rbaltzer@valhi.net. Or, you may contact Robert Wilson, Chair of the TLLRWDC, at (512) 820-2930 or at bob.wilson@tllrwdcc.org.

Texas Compact/State of Texas

TCEQ Hosts Meetings re Waste Acceptance

On September 20, 2011, the Texas Commission on Environmental Quality (TCEQ) invited low-level radioactive waste generators to discussions with Waste Control Specialists LLC (WCS)—the facility operator for the Texas Low-Level Radioactive Waste Disposal Compact. Discussions focused on waste acceptance for the site currently under construction.

To facilitate discussions, there were two sessions:

- 1:00 pm meeting for nuclear utility waste generators, and
- 2:30 pm meeting for non-utility waste generators.

Both meetings were held at the TCEQ main campus in Austin, Texas in Building E, 201S.

For additional information, please contact RADMAT@tceq.texas.gov or (512) 239-6466.

Background

License Status On January 14, 2009, by a vote of 2 to 0, TCEQ Commissioners denied hearing requests and approved an order on WCS' Radioactive Material License Application

No. R04100. (See *LLW Notes*, January/February 2009, pp. 1, 9-11.) Following the completion of condemnation proceedings and the acquisition of underlying mineral rights, TCEQ's Executive Director signed the final license on September 10, 2009. (See *LLW Notes*, September/October 2009, pp. 1, 12-13.)

The license allows WCS to operate two separate facilities for the disposal of Class A, B and C low-level radioactive waste—one being for the Texas Low-Level Radioactive Waste Disposal Compact, which is comprised of the States of Texas and Vermont, and the other being for federal waste as defined under the Low-Level Radioactive Waste Policy Act of 1980 and its 1985 amendments.

Import/Export Rules On January 4, 2011, the Texas Low-Level Radioactive Waste Disposal Compact Commission (TLLRWDC) approved revised Preliminary Rules on the Exportation and Importation of Waste by a vote of five to two. (See *LLW Notes*, January/February 2010, pp. 1, 16.) Various amendments to the rules were accepted prior to passage, including those offered by the Vermont Commissioners that clarified issues regarding the reserving of disposal capacity at the regional commercial facility for generators from the State of Vermont.

The vote followed a series of legal maneuvers by Public Citizen and the Texas Civil Rights Project that attempted to block the Commission from proceeding to act on the proposed rules. The groups initially succeeded at getting a state district court judge to enjoin the Commission from adopting, approving, or otherwise implementing the proposed rules. However, a federal district judge subsequently dismissed the case and dissolved the temporary restraining order ("TRO") after determining that neither the state nor federal court had jurisdiction to prevent the Commission from acting on the proposed rules.

Construction Authorization On January 7, 2011, TCEQ Executive Director Mark Vickery

approved the commencement of construction of the planned WCS low-level radioactive waste disposal facility “subject to all applicable license conditions, rules and statutes.” (See *LLW Notes*, January/February 2010, pp. 19-21.) Earlier the same day, TCEQ and WCS executed a “Lease and Indemnification Agreement Concerning Low-Level Radioactive Waste Disposal in Andrews County, Texas.” The document sets forth provisions relating to conveyance of the Compact Waste Disposal Facility to the State of Texas, including indemnification for any liability imposed on the state.

WCS is currently authorized for the processing, storage and disposal of a broad range of hazardous, toxic, and certain types of radioactive waste. WCS is a subsidiary of Valhi, Inc.

Interim Disposal Rates On August 25, 2011, TCEQ announced that its Executive Director has established interim disposal rates for commercial low-level radioactive waste at the Compact Waste Disposal Facility currently under construction. (See *LLW Notes*, July/August 2011, pp. 13-14.) The Executive Director interim disposal rate establishes a base rate by volume, per cubic foot; by radioactivity, per curie; and surcharges to the base rate related to relative hazard for each waste shipment. Additionally, all waste shipments are subject to state fees. These interim disposal rates will apply to commercial low-level radioactive waste accepted at the operational Compact Waste Disposal Facility, owned by the State of Texas and operated under license by WCS.

Senate Bill 1504, adopted by the 82nd Texas Legislature, creates the option for the TCEQ Executive Director to set interim disposal rates in advance of the formal disposal rate-setting process. (See *LLW Notes*, May/June 2011, pp. 1, 13-15.) The formal disposal rate-setting process will begin later this year when the TCEQ proposes a recommended disposal rate schedule. The process will include public notice, consideration of public comment, and the opportunity for a contested case hearing, followed

by expedited rulemaking.

For additional information on WCS license application, please go to the TCEQ web page at http://www.tceq.state.tx.us/permitting/radmat/licensing/wcs_license_app.html or contact the Radioactive Materials Division at (512) 239-6466.

A copy of the TLLRWDC's import/export rules and other related information may be found on the Commission's web site at <http://www.tllrwdcc.org>.

For additional information, please contact Susan Jablonski—Director of the Radioactive Materials Division at TCEQ—at (512) 239-6466 or at sjablons@tceq.state.tx.us. You may also contact Rodney Baltzer—President of WCS—at (972) 450-4235 or at rbaltzer@valhi.net. Or, you may contact Margaret Henderson, Interim Executive Director of the TLLRWDC, at (512) 820-2930 or at margaret.henderson@tllrwdcc.org.

WCS Enters Disposal Agreement with the Utilities Service Alliance

Plans to Open Satellite Office Near Los Alamos Laboratory

In October 2011, Waste Control Specialists LLC (“WSC”) announced that the company has entered into an agreement with Utilities Service Alliance, Inc. (“USA”) to dispose of low-level radioactive waste, subject to regulatory approvals. Prior to accepting the waste, however, each utility must apply for an import petition from the Texas Low-Level Radioactive Waste Disposal Compact Commission (“TLLRWDC”). WCS must also receive a

States and Compacts *continued*

modification of its license to receive the waste and the Texas Commission on Environmental Quality (TCEQ) must approve the contract.

In a separate press release, WCS announced plans to open a satellite office in Los Alamos, New Mexico, near the Los Alamos National Laboratory (“LANL”), to better support the cleanup mission of the U.S. Department of Energy (“DOE”).

Utilities Service Alliance Disposal Agreement

In mid-October 2011, WCS' Chief Executive Officer William J. Lindquist announced that WCS has entered into an agreement with USA to dispose of Class A, B and C low-level radioactive waste, subject to regulatory approvals. USA is a non-profit cooperative of 15 utilities that operate 17 nuclear power stations across the United States.

“We are pleased that WCS was able to work closely with the USA to develop a safe, secure and cost effective disposal option for its members,” said Mr. Lindquist. “The benefit to nuclear utilities of disposing of waste in Texas is the certainty that their higher activity [low-level radioactive waste] will be permanently disposed in a state-of-the-art facility designed to protect the public and the environment. The WCS facility is unlike any other.”

WCS states in its press release that the company plans to complete construction of the Texas Low-Level Radioactive Waste Disposal Compact facility this month and plans to have a grand opening event at its site in Andrews County on November 10, 2011.

“Five USA member plants have already committed to ship [low-level radioactive waste] to WCS and other members may also commit to take advantage of this agreement,” said Lindquist.

Prior to accepting the waste at the Texas Compact

facility, each utility must apply for an import petition from the TLLRWDC. WCS must also receive a modification to its license to receive the waste and the contract must be approved by TCEQ.

Satellite Office Plans

In early-October 2011, WCS announced plans to open a satellite office in Los Alamos, New Mexico, near LANL, to better support the DOE's cleanup mission. The office opened on October 17, 2011.

WCS' press release states that the company will use the office to provide waste management and logistics support to the LANL low-level radioactive waste cleanup mission, which may include storage, treatment, and disposal.

“WCS’ close location and comprehensive capabilities should provide LANL with the most cost-effective waste management solutions,” said Rodney Baltzer, President of WCS.

“WCS employees have been traveling to Los Alamos regularly for the past year, and we now see a need for a full-time presence which will allow us to better interface with our customers and assist them in resolving any questions about how to send waste to WCS,” said Baltzer.

“The construction of our LLRW disposal facilities is progressing ahead of schedule, and we expect our Federal waste disposal facility to be ready to accept [low-level radioactive waste] for disposal from DOE facilities in the first quarter of 2012,” he said.

Background

The WCS facility in western Andrews County, Texas is licensed to dispose of commercial Class A, B and C low-level radioactive waste. It is also licensed for the treatment and storage of low-level radioactive waste – and has served as a temporary storage facility for past DOE projects.

Situated in an arid and isolated location, the WCS facility sits atop a formation of 500 feet of impermeable red-bed clay which the company states makes it an ideal setting for the storage and disposal of low-level radioactive waste.

The WCS facility is the site of the disposal facility for the Texas Low Level Radioactive Waste Disposal Compact, and most recently was the site of the storage and disposal of byproduct material from the DOE Fernald, Ohio cleanup site.

WCS has been processing and storing LLRW at its facility since 1998. WCS is a subsidiary of Valhi, Inc., which is engaged in the titanium dioxide products, component products (security products, furniture components and performance marine components) and waste management industries.

For additional information, please contact Susan Jablonski—Director of the Radioactive Materials Division at TCEQ—at (512) 239-6466 or at sjablons@tceq.state.tx.us. You may also contact Rodney Baltzer—President of WCS—at (972) 450-4235 or at rbaltzer@valhi.net. Or, you may contact Robert Wilson, Chair of the TLLRWDC, at (512) 820-2930 or at bob.wilson@tllrwdcc.org. Additional information about WCS may also be found at www.texassolution.com.

State of Nebraska

Confirmatory Action Letter Issued re Fort Calhoun Restart

In early September 2011, the U.S. Nuclear Regulatory Commission issued a Confirmatory Action Letter documenting actions that Omaha Public Power District (OPPD) officials have agreed to take prior to restarting the Fort Calhoun nuclear plant.

The plant, which is located approximately 19 miles north of Omaha, has been shut down since April for a refueling outage. The outage was extended due to flooding along the Missouri River, which prompted operators to declare an Unusual Event on June 6. On June 7, an electrical fire led to a declaration of an Alert and caused further restart complications. Both emergency declarations have been cancelled and the plant remains in a safe shutdown mode.

On July 27, OPPD officials participated in a public meeting to discuss post flooding recovery actions. The licensee agreed not to restart the plant without NRC approval. On August 10, OPPD submitted a detailed plan to the NRC. The plan details the completion of actions and assessments in six overall focus areas including: site restoration, plant systems and equipment, equipment reliability, design and licensing basis, emergency planning, and security.

NRC intends to perform several comprehensive inspections to verify that OPPD has thoroughly evaluated the condition of key systems, structures and components at the plant before authorizing restart.

A copy of the Confirmatory Action Order has been posted on NRC's web site at www.nrc.gov. OPPD's Post-Flooding Recovery Action Plan is accessible through ADAMS using Accession Number ML112231755.

State of Rhode Island

Special Inspection at Rhode Island Research Reactor

NRC will issue a written report of the special inspection approximately 30 days following its completion. The report will be available on the NRC web site at www.nrc.gov.

In late October 2011, the U.S. Nuclear Regulatory Commission began a special inspection at the Rhode Island Atomic Energy Commission's research reactor following a reported potential radiation overexposure of one of its workers. NRC's predecessor, the Atomic Energy Commission, originally licensed the research reactor to operate in 1964.

On October 25, the Rhode Island research reactor reported the potential overexposure after an employee entered the facility's dry gamma exposure room to calibrate a radiation probe as part of an experiment the facility was conducting.

The licensee estimates that the employee received approximately 2.5 rem (about half of the annual regulatory limit of 5 rem) total effective dose equivalent and estimated that radiation dose rate in the room was approximately 30 rem per hour. (Since the event report, the actual dose measured 0.115 rem—significantly lower than originally estimated.) The circumstances meet the criteria for conducting a special inspection. The area was posted as a high radiation area and the reactor was shut down at the time and remains secured. The licensee's investigation is ongoing.

NRC inspectors are on-site responding to this event at the research facility and they will stay on to lead the special inspection. The inspectors will seek to understand the circumstances surrounding the event and its probable causes, including conditions preceding the event, chronology, equipment performance, precursors, human factors considerations, quality assurance considerations and radiological considerations.

International Commission on Radiation Protection

Symposium Held re International System of Radiological Protection

From October 24-26, 2011, the International Commission on Radiological Protection (ICRP) held its first Symposium on the International System of Radiological Protection in Rockville, Maryland. Admission to the symposium was free, but advance registration was required.

The symposium was held in conjunction with the joint meeting of ICRP's main Commission and committees. It was sponsored in part by the NRC's Office of Nuclear Regulatory Research. NRC Commissioner Kristine Svinicki delivered a welcoming address on October 24.

Presentations at the symposium covered the following topics, among others:

- experiences in implementing ICRP recommendations on radiation protection;
- applications of effective dose, dose constraints, and reference levels;
- radiation protection in waste management;
- protection of medical patients;
- protection of the environment, including dosimetry for reference animals and plants; and,
- protection against radon in homes and workplaces.

For additional information, please contact Gladys Figueroa of the NRC's Office of Nuclear Regulatory Research at (301) 251-7545 or at Gladys.Figueroa@nrc.gov.

Japan Task Force

NRC Discusses Prioritizing Recommendations of Japan Task Force

On October 11, 2011, the U.S. Nuclear Regulatory Commission met to discuss the staff's prioritization proposal for the recommendations of the NRC's Japan Near-Term Task Force, which examined the Fukushima Dai-ichi nuclear accident in Japan.

The Commission established the Task Force to examine the agency's regulatory requirements, programs, processes, and implementation in light of information from the accident following the earthquake and tsunami on March 11, 2011. The Task Force presented its report to the Commission on July 12, 2011.

The report proposed 12 recommendations on improving several safety-related areas. The recommendations covered areas including loss of electrical power, earthquakes, flooding, spent fuel pools, venting and preparedness.

On August 19, 2011, NRC announced that staff has been directed to complete several actions within the next 45 days in response to recommendations from the Task Force. (See *LLW Notes*, July/August 2011, pp. 1, 23-24.)

NRC Prioritization Meeting

The Commission's prioritization meeting was held from 9:00 am – 3:30 pm in the Commissioners' Conference Room at NRC headquarters. The meeting was open to public observation and was web cast.

Discussion included external stakeholders' input on prioritization and a presentation by NRC staff. Other stakeholders participating in the meeting

included other federal agencies, state representatives, industry leaders, and public interest groups.

The first panel consisted of stakeholders who shared their perspectives on the recommendations related to preventing and mitigating an accident. The second panel consisted of stakeholders who addressed the recommendations related to emergency planning. In the third and final panel, NRC staff provided an overview of the additional information that the Commission requested concerning the recommendations.

“The Commission meets today to discuss the staff’s 45-day review of the Japan Task-Force’s safety recommendations,” stated NRC Chairman Gregory Jaczko at the beginning of the meeting. “The Steering Committee, which we established to conduct this review, has clearly confirmed that the Task Force did an outstanding job. The Steering Committee has endorsed moving forward with virtually all of the Task Force’s recommendations. In addition, they also have recommended several new measures beyond the steps outlined by the Task Force, which touch on important issues such as spent fuel storage and emergency planning.”

A detailed agenda and meeting slides can be found on the “Web Cast” page at www.nrc.gov. The NRC paper that formed the basis of the meeting is available on the Commission’s “Recently Released Documents” page at www.nrc.gov.

Prior NRC Meetings

On September 21, 2011, NRC staff met with the nuclear power plant industry representatives to discuss the industry’s plans and proposed actions to address the lessons learned from the Fukushima Dai-ichi nuclear accident. NRC considered the industry’s feedback as the agency prepared a proposal to prioritize recommendations from the Task Force.

On September 14, 2011, NRC held a meeting to discuss the staff’s proposal to implement those recommendations from the Task Force that can and should be implemented without unnecessary delay. Discussion at the meeting included external stakeholders’ input on the recommendations and a presentation by NRC staff.

On August 31, 2011, NRC staff met with stakeholder representatives and the public to discuss the staff’s proposal for near-term action on the Task Force’s recommendations. During the meeting, the staff proposed which of the Task Force recommendations the Commission should act on without unnecessary delay. The staff also described its process for selecting the near-term recommendations, as well as the Commission’s process for acting on the proposal. Stakeholder representatives offered their views on the proposal and the public also had an opportunity to comment on the recommendations.

Task Force Recommendations

NRC’s Japan Task Force proposed improvements in areas ranging from loss of power to earthquakes, flooding, spent fuel pools, and venting and preparedness. The Task Force recommends that a “patchwork of regulatory requirements” developed “piece-by-piece over the decades” should be replaced with a “logical, systematic and coherent regulatory framework” to further bolster reactor safety in the United States.

While declaring that “a sequence of events like the Fukushima accident is unlikely to occur in the United States” and that plants can be operated safely, the Task Force also recognized that “an accident involving core damage and uncontrolled release of radioactivity to the environment, even one without significant health consequences, is inherently unacceptable.” Thus, the Task Force developed a comprehensive set of 12 recommendations—many with both short and long term elements—to increase safety and redefine what level of protection of public health

Federal Agencies and Committees *continued*

is regarded as adequate. It also recommended additional study of some issues.

The Task Force report was given to the five members of the NRC, who are responsible for making decisions regarding the Task Force's recommendations.

For a full list of the Task Force report recommendations, please see [LLW Notes](#), July/August 2011, pp. 1, 23-24.

The Commission's direction to the staff and the Task Force report are both available on the NRC web site at www.nrc.gov.

- outcomes from the NRC medical-related rulemaking workshops;
- possible changes to the permanent implant brachytherapy subcommittee report; and,
- the status of the medical use of byproduct material (10 CFR Part 35) rulemaking.

Portions of the meeting were open to the public.

A detailed meeting agenda, draft transcript and meeting summary can be found on the ACMUI web page on the NRC's web site at www.nrc.gov.

Advisory Committee on Medical Uses of Isotopes (ACMUI)

ACMUI Holds September 2011 Meeting

On September 22-23, 2011, the U.S. Nuclear Regulatory Commission's Advisory Committee on the Medical Uses of Isotopes (ACMUI) held a meeting in Rockville, Maryland. The ACMUI advises NRC on policy and technical issues that arise in the regulation of the medical use of radioactive materials.

Meeting topics included, among other things, the following:

- the status of a Commission paper on data collections regarding patient release;
- perspectives from the NRC staff and the U.S. Food and Drug Administration on the strontium breakthrough with rubidium-82 generators;
- medical-related events;

Advisory Committee on Reactor Safeguards (ACRS)

ACRS Holds Open Meeting re Part 61 Rulemaking

On September 8, 2011, the U.S. Nuclear Regulatory Commission's (NRC's) 586th Advisory Committee on Reactor Safeguards (ACRS) held an open meeting to hear presentations by and hold discussions with the NRC staff and other interested persons regarding the Part 61 Site-Specific Analyses preliminary proposed rule language, its associated technical basis, and draft guidance document.

ACRS Meeting

Part 61-related presentations and discussions took place from 10:45 a.m. to 12:15 p.m. in Conference Room T2-B1 of the NRC headquarters at 11545 Rockville Pike, Rockville, Maryland. The ACRS arranged a bridge line for persons that were not able to attend the meeting in person, but wanted to participate via teleconference.

Federal Agencies and Committees *continued*

Transcripts for previous ACRS meetings on the Part 61 rulemaking are publicly available and can be accessed on ADAMS with the following accession numbers:

- ML11187A276 (June 23, 2011 subcommittee meeting)
- ML11221A059 (July 17, 2011 585th full committee meeting)

The ACRS advises the Commission, independently from the NRC staff, on safety issues related to the licensing and operation of nuclear power plants and in areas of health physics and radiation protection. Portions of ACRS meetings may be closed to discuss proprietary information, as well as organizational and personnel matters.

ACRS meeting agenda, meeting transcripts, and letter reports are available through the NRC Public Document Room at pdr.resource@nrc.gov, or by calling the PDR at (800) 397-4209, or from the Publicly Available Records System (PARS) component of NRC's document system (ADAMS) which is accessible at <http://www.nrc.gov/reading-rm/adams.html> or <http://www.nrc.gov/reading-rm/doc-collections/ACRS/>.

Background

NRC is proposing to amend its regulations to Part 61 to Title 10 of the Code of Federal Regulations that addresses "Licensing Requirements for Land Disposal of Radioactive Waste." The proposed rule includes new requirements for low-level radioactive waste disposal facilities to conduct site-specific analyses to demonstrate compliance with the performance objectives in Part 61. "While the existing regulatory requirements are adequate to protect public health and safety," NRC believes that "these amendments would enhance the safe disposal of low-level radioactive waste."

The proposed rule language and its associated regulatory basis documents may be found on the

Federal rulemaking Web site, <http://www.regulations.gov>, under Docket ID NRC-2011-0012, in ADAMS (ML111150205, ML111040419, and ML 111030586), and on NRC Site-Specific Analysis rulemaking Web site <http://www.nrc.gov/about-nrc/regulatory/rulemaking/potential-rulemaking/uw-streams.html>.

For additional information or questions, please contact Andrew Carrera, Rulemaking Project Manager for the U.S. Nuclear Regulatory Commission, at (301) 415-10178 or at Andrew.Carrera@nrc.gov.

ACRS to Meet in November 2011

The U.S. Nuclear Regulatory Commission's Advisory Committee on Reactor Safeguards (ACRS) will hold a public meeting on November 3-5, 2011 in Rockville, Maryland.

The following items, among others, are on the agenda for the November meeting:

- Nine Mile Point nuclear power plant Unit 2 extended power uprate; and,
- staff position on guidance for the evaluation of diversity and defense-in-depth in digital computer-based instrumentation and control systems used in operating nuclear reactors.

The meeting will be held in Room T2-B1 of the NRC headquarters. The sessions on November 3-4 will run from 8:30 am – 7:00 pm and on November 5 from 8:30 am – 1:30 pm.

The ACRS advises the Commission, independently from the NRC staff, on safety issues related to the licensing and operation of nuclear power plants and in areas of health physics and radiation protection. Portions of

ACRS meetings may be closed to discuss proprietary information, as well as organizational and personnel matters.

Complete agendas for ACRS meetings are available on the NRC web site at <http://www.nrc.gov/reading-rm/doc-collections/acrs/agenda/2011/>.

U.S. Department of Energy

USEC's Plan Approved re Return of Portsmouth Plant to DOE

The U.S. Nuclear Regulatory Commission has approved a plan by the United States Enrichment Corporation (USEC) to return the remainder of the Portsmouth Gaseous Diffusion Plant (GDP) to the regulatory control of the U.S. Department of Energy (DOE) and to terminate the NRC's Certificate of Compliance for the plant.

By letters dated March 15 and June 28, USEC requested termination of its certification. As part of the termination process, USEC will terminate its lease with DOE for the remaining facilities at the plant still under USEC control.

The Portsmouth plant—which is located near Piketon, Ohio—was a DOE-owned uranium enrichment plant that was transferred to USEC when that company was created and later privatized in the 1990s. USEC terminated enrichment operations in 2001 and has since maintained the plant in cold standby. In September 2010, USEC transferred the main process buildings back to DOE control. As part of the current certificate termination, USEC will transfer the remainder of the facility, including NRC-regulated material, to DOE. The department will regulate the plant under 10 CFR

830. At that point, NRC regulation under 10 CFR 76 will no longer be necessary.

DOE has agreed to assume regulatory authority over the plant and take possession and ownership of USEC-generated nuclear material at the site. Before the Certificate of Compliance can be terminated, USEC must certify to the NRC that all material has been transferred to DOE's possession and ensure proper accounting of all material in the Nuclear Material Management and Safeguards System. Upon receiving and verifying USEC's certification of the transfer, the NRC will issue a letter terminating the Certificate of Compliance.

USEC's Lead Cascade and American Centrifuge Plant, under construction, are unaffected by the termination of the GDP decertification. They remain under NRC license and regulation under 10 CFR 70.

Second Technical Evaluation Report Issued re Yucca Mountain

On September 1, 2011, the U.S. Nuclear Regulatory Commission published the second of three technical evaluation reports (TERs) detailing the agency staff's review of the U.S. Department of Energy's license application for a high-level radioactive waste repository at Yucca Mountain in Nevada.

The second report provides the staff's technical review of the pre-closure information in the Yucca Mountain application. The TER does not include findings as to whether NRC's regulatory requirements have been satisfied.

“Technical Evaluation Report on the Content of the U.S. Department of Energy's Yucca Mountain Repository License Application; Pre-closure Volume: Repository Safety Before Permanent

Closure,” is part of the agency’s orderly closeout of the Yucca Mountain license review process and is intended as a public record of the staff’s scientific and technical work in preparing for and reviewing the application. It was developed using the draft Volume 2 of the staff’s Safety Evaluation Report (SER) on the application.

A TER on post-closure safety, based on what would have been Volume 3 of the SER, was issued publicly on July 21, 2011. (See *LLW Notes*, July/August 2011, p. 22.) Volume 1 of the SER was published in August 2010, before the licensing review was stopped.

The TERs were prepared as part of the agency’s knowledge management activities during the closeout of the Yucca Mountain licensing review. The closeout, including publication of the third TER, is expected to be complete by September 30, 2011.

DOE submitted the license application for the proposed Yucca Mountain repository on June 3, 2008. On March 3, 2010, DOE filed a motion to withdraw its license application with prejudice.

The TER is available on the Yucca Mountain page of NRC’s web site at <http://www.nrc.gov/waste/hlw-disposal/yucca-lic-app.html>.

National Academy of Sciences

NAS Holds Meeting re Cancer Risk Study

The National Academy of Sciences (NAS) continues to hold committee meetings regarding a cancer risk study that it is conducting.

The study, “Analysis of Cancer Risks in Populations Near Nuclear Facilities: Phase I,” is being sponsored by the U.S. Nuclear Regulatory Commission.

Recent Meeting

The fifth committee meeting was held on October 20, 2011. It was originally scheduled for August 29, 2011, but was postponed due to the effects of Hurricane Irene.

During the meeting, both NRC and the U.S. Environmental Protection Agency made presentations. NRC outlined potential next steps for the study and described the agency’s public outreach and communications efforts. Representatives of both EPA and NRC were available to answer committee member questions.

Members of the public were invited to attend the meeting and provided the opportunity to comment prior to the end of the meeting.

Background

The NAS project will update the 1990 U.S. National Institutes of Health – National Cancer Institute (NCI) report titled, “Cancer in Populations Living Near Nuclear Facilities.”

NRC uses the 1990 NCR report as a primary resource when communicating with the public about cancer mortality risk in counties that contain or are adjacent to nuclear power facilities.

In the new study, NRC is asking the NAS to evaluate cancer diagnosis rates, in addition to mortality risk, for populations living near decommissioned, operating and proposed NRC-licensed nuclear facilities.

Phase I of the NAS study will determine whether a technically defensible approach to meet the goals of the study request is feasible and, if so, the approach will be developed using scientifically sound processes for evaluating cancer risk that could be associated with nuclear facilities.

For additional information on the study, please send an email to crs@nas.edu.

Federal Agencies and Committees *continued*

(Continued from page 1)

operation will minimize, to the extent practicable, the generation of radioactive waste.

However, the revised policy statement recognizes that volume reduction is only one aspect of an effective program for managing radioactive waste. While NRC continues to favor disposal over storage, the agency recognizes that licensees may manage waste in a variety of ways consistent with NRC regulations and guidance. In addition to ensuring public health and safety, the revised policy statement encourages licensees to consider operational efficiency, reductions in occupational exposures, security and cost in determining how best to manage low-level radioactive waste.

The revised policy statement states that licensees should consider all means available to manage waste in a manner that is secure and protects public health and safety, such as

- waste minimization;
- short-term storage and decay;
- long-term storage;
- use of the alternate disposal provision contained in 10 CFR 20.2002;
- use of waste processing technologies; and,
- use of licensed disposal facilities.

"The Commission understands that limited disposal access means that many licensees will be forced to store at least some of their LLW," states NRC. "Agreement State and NRC licensees must continue to ensure waste is safely and securely managed. However, disposal is considered the safest and most secure long-term management approach."

Approximately 96 percent of all low-level radioactive waste is generated by nuclear power plants. The remainder is generated by fuel cycle facilities such as uranium enrichment plants, and materials licensees such as hospitals, research institutes and universities.

Background

In 1981, NRC published a policy statement regarding the reduction of low-level radioactive waste that addressed

- the need for a volume reduction policy;
- suggested volume reduction techniques;
- that NRC would take expeditious action on requests for licensing of volume reduction systems; and,
- the need for waste generators to minimize the quantity of waste produced.

The 1981 policy statement was issued in response to a General Accounting Office report that recommended that NRC take this step to help preserve disposal facility space. At the time of issuance of the policy statement, disposal space was scarce since two of the three operating disposal sites had been threatening to close, and one had recently reduced the annual amount authorized for disposal by half. In addition, volume reduction techniques were not yet in widespread use.

On April 7, 2010, NRC staff published SECY-10-0043, "Blending of Low-Level Radioactive Waste" and addressed the 1981 policy statement in response to stakeholder comments that large-scale blending may not be consistent with the policy statement because it would enable licensees to avoid the use of an available volume reduction technology. In the blending paper, staff stated in Option 2 as follows:

"The staff believes that the Policy Statement could be updated to recognize the progress that has been achieved, and to acknowledge that other factors may be used by licensees in determining how best to manage their LLRW. Specifically, the Policy Statement could be revised to acknowledge that volume reduction continues to be important, but that risk-informed, performance-based approaches to managing waste are also appropriate in managing LLRW safely and that volume reduction should be evaluated in this light."

In the Staff Requirements Memorandum for SECY-10-0043, the Commission approved Option 2, which included the staff's proposed changes noted above. Consequently, NRC is publishing for public comment a revised Policy Statement on Volume Reduction and Low-Level Radioactive Waste Management.

For additional information, please contact Donald Lowman of the NRC's Office of Federal and State Materials and Environmental Management Programs at (301) 415-5452 or at donald.lowman@nrc.gov.

Meetings Held re Compatibility of State Regulations for Certain Devices

Recently, U.S. Nuclear Regulatory Commission staff held meetings to receive public comment on impacts to manufacturers and distributors and end-users of generally licensed medical and industrial devices from revisions to the compatibility categories of NRC regulations. The meetings were held in Illinois on September 20 and in Massachusetts on September 22.

In December 2010, the Commission directed staff to change the Agreement State compatibility categories of certain NRC requirements for generally licensed devices from "B" to "C." The change would give Agreement States greater flexibility to impose requirements on certain general licensees. Currently, there are 37 Agreement States that regulate radioactive materials under agreements with the NRC.

In a *Federal Register* notice published on September 12, 2011, NRC staff outlined several questions for manufacturers and distributors and the end-users of generally licensed devices which include, for example, certain fixed gauges, x-ray

fluorescence materials analyzers, and tritium exit signs. The staff accepted written answers to the questions through October 30, 2011.

Draft Guidance re Treatment of Uranium from Local Water Systems

On October 12, 2011, the U.S. Nuclear Regulatory Commission announced that the agency is requesting public comment on draft guidance that would allow uranium recovery facilities to accept, process, and dispose of certain resins used to remove naturally occurring uranium from municipal water systems.

The guidance would clarify that the NRC considers the resins "equivalent feed" (essentially identical to material already processed at the facility) rather than "alternative feed" that would require a license amendment to accept and process.

According to NRC, this clarification would help community water systems comply with regulations issued in 2003 by the U.S. Environmental Protection Agency that places a limit of 30 micrograms of uranium in drinking water. The transport, treatment and disposal of the uranium-loaded filter resins can be a significant cost—as much as 50 percent of the total operating costs for smaller community water systems.

NRC states that these treatment resins are chemically and physically essentially the same as ion-exchange resins already used at uranium recovery facilities and would be processed in the same way. NRC staff has determined that uranium recovery facilities should be permitted to accept these resins as equivalent feed without the need for a license amendment, provided that the

processing remains within the scope of the facilities' existing safety and environmental review.

The draft guidance, a draft Regulatory Issue Summary, was published in the *Federal Register* on September 30, 2011. It was subsequently corrected in a notice published on October 12, 2011.

Comments on the draft guidance may be submitted through November 14, 2011 at www.regulations.gov under Docket ID NRC 2011-0217.

License Renewals Continue to Move Forward

The U.S. Nuclear Regulatory Commission continues to process license renewal applications from various nuclear power plant operators. In that regard, the agency recently took the following actions:

- During two public meetings on September 27, 2011, NRC staff solicited public comments regarding its preliminary conclusion that there are no environmental impacts that would preclude a 20-year extension of the operating license for the Columbia Generating Station nuclear power plant. The Columbia plant is a boiling-water reactor located on the Columbia River about 160 miles southeast of Seattle. NRC issued a draft environmental impact statement (DEIS) on Columbia's proposed license renewal on August 23, 2011. Energy Northwest submitted a license renewal application for the Columbia plant, including an environmental report, on January 19, 2010. NRC reviewed the report, performed an on-site audit and considered comments during the environmental scoping process. The Columbia plant's current operating license will expire on December 20, 2023.
- On September 22, 2011, NRC staff held two public meetings to discuss the agency's review process for a license renewal application for the Limerick nuclear power plant. The sessions also provided an opportunity for members of the public to comment on environmental issues that they believe NRC should consider during its review of the application, which seeks a license extension for 20 years. Both units at Limerick are boiling-water nuclear reactors. They are located in Limerick, Pennsylvania—approximately 21 miles from Philadelphia. Exelon Generation Company submitted the renewal application on June 22, 2011. The current operating licenses for Units 1 and 2 expire on October 26, 2024 and on June 22, 2029, respectively.
- On September 15, 2011, NRC held a pair of public meetings to solicit comments on an NRC draft report which assesses possible impacts of a proposed 20-year extension of the Seabrook nuclear power plant's operating license. Seabrook is a pressurized-water reactor located in Seabrook, New Hampshire. It is operated by NextEra Energy Seabrook LLC. NextEra submitted the license renewal application for the plant on June 1, 2010. NRC has issued a Draft Environmental Impact Statement on the proposed license renewal, the comment period for which closed on October 26, 2011. The current operating license for Seabrook is set to expire on March 15, 2030.
- In late August 2011, NRC issued a supplemental safety evaluation report (SER) for the license renewal application of the Indian Point Nuclear Generating Plant Units 2 and 3. The plants are located in Buchanan, New York—approximately 24 miles north of New York City. The supplement did not change the staff's original conclusion that the applicant has identified actions that have been or will be taken to manage the effects of aging in the appropriate safety systems, structures,

and components of the plant, as well as that their functions will be maintained during the period of extended operation. The supplement addresses information submitted by Entergy Nuclear Operations Inc. subsequent to the issuance of the original SER in November 2009. The information reviewed includes annual updates of license renewal information and updated information and commitments in response to industry operating experience since 2009. The supplemental SER does not identify new open items. There are no new license conditions resulting from this supplement.

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 71 reactor units. In addition, NRC is currently processing 9 other license renewal requests.

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>.

COL Application Reviews Continue

The U.S. Nuclear Regulatory Commission continues to process Combined License (COL) applications.

If issued, a COL provides authorization to construct and, with conditions, operate a nuclear power plant at a specific site and in accordance with laws and regulations.

In this regard, the agency will take and/or recently took the following actions:

- NRC is seeking public comments on its preliminary finding that there are no environmental impacts that would preclude issuing a COL for a new reactor at the Fermi site near Newport, Michigan. NRC staff will discuss their Draft Environmental Impact Statement (DEIS) in meetings on December 15 at the Monroe County Community College in Monroe, Michigan. The agency will also consider written comments on the DEIS through January 11, 2012. Detroit Edison submitted its new reactor application on September 18, 2008—requesting a license to build and operate an Economic Simplified Boiling Water Reactor (ESBWR) at the Fermi site, adjacent to the company's existing reactor approximately 25 miles northeast of Toledo, Ohio. The DEIS is available on NRC's web site, as well as in ADAMS by entering accession numbers ML11287A108 and ML11287A109.
- On October 31, 2011, an Atomic Safety and Licensing Board panel conducted an evidentiary hearing in the South Texas Project COL proceeding. Participation was limited to the parties admitted to the proceeding (several public interest groups, the applicant—Nuclear Innovation North America (NINA)—and NRC staff) although it was open for public observation. The South Texas Project COL application was submitted on September 20, 2007. It seeks permission to construct and operate two new nuclear reactors at the site near Bay City, Texas. The ASLB granted intervenor status and an opportunity for a hearing to the Sustainable Energy and Economic Development Coalition, the South Texas Association for Responsible Energy, and Public Citizen. The groups have submitted objections, or contentions, challenging the COL application.
- On October 13-14, 2011, NRC conducted a mandatory hearing on a COL application to build and operate two new reactors at the V.C. Summer site near Jenkinsville, South

Carolina. The Summer application is the second to reach this final step in the Part 52 new reactor licensing process. The Commission's hearing included testimony and exhibits from the applicant, South Carolina Electric & Gas (SCE&G), and NRC staff on the question of whether the staff's review has been adequate to support findings necessary to issue a COL. SCE&G is applying for permission to build and operate two AP1000 reactors at the Summer site, adjacent to the company's existing reactor approximately 26 miles northwest of Columbia, South Carolina. SCE&G submitted its COL application on March 27, 2008. Because the application references the amended AP1000 design, the Commission must first make a decision on the AP1000 design certification rule before it can render a mandatory hearing decision on the COL.

- On September 27-28, 2011, NRC conducted a mandatory hearing on a COL application and related Limited Work Authorizations (LWA) to build and operate two new reactors at the Vogtle site near Waynesboro, Georgia. The Vogtle application was the first to reach this final step in the Part 52 new reactor licensing process. The Commission's hearing included testimony and exhibits from the applicant, Southern Nuclear Operating Company (SNC), and NRC staff on the question of whether the staff's review has been adequate to support the findings necessary to issue a COL and/or on LWA. SNC applied for permission to build and operate two AP1000 reactors at the Vogtle site, adjacent to the company's existing reactors approximately 26 miles southeast of Augusta, Georgia. SNC submitted its application on March 28, 2008 and supplemented it on October 2, 2009. The LWA would authorize a specific set of activities that fall short of full reactor construction. Because the application references the amended AP1000 design, the Commission must first make a decision on the AP1000 design certification rule before it can

render a mandatory hearing decision on the COL.

Additional information on the NRC's new reactor licensing process is available on the agency's web site at <http://www.nrc.gov/reactors/new-reactor-licensing.html>.

Definition of Construction Changed for Materials Applicants

The U.S. Nuclear Regulatory Commission has amended its regulations for nuclear materials licenses to change the meaning of "construction" and "commencement of construction" and allow applicants for some materials licenses to conduct certain site-preparation activities before a license is issued. A proposed rule was originally published for public comment on July 27, 2010.

The changes contained in the final rule apply to the licensing and approval processes for byproduct, source and special nuclear material licenses and irradiators. They make the definition of "construction" and "commencement of construction" consistent with NRC regulations for nuclear power plant applicants and licensees as amended in 2007. Previously, applicants for uranium recovery, fuel cycle facilities and other materials facilities had to apply for exemptions to conduct site preparation activities similar to those that power plant applicants are allowed to perform.

The final rule does not include a "limited work authorization" provision similar to that in NRC regulations for nuclear power plants.

The changes were included in a final rule published in the *Federal Register* on September 15, 2011. The changes become effective on November 14, 2011.

Emergency Preparedness Regulations Approved for Nuclear Plants

On August 30, 2011, the U.S. Nuclear Regulatory Commission affirmed their votes to approve changes to the emergency preparedness regulations. The proposed changes would enhance emergency preparedness requirements for existing nuclear power plants, for those that might be licensed and built in the future, and for research and test reactors.

Among the changes in the rule are limitations on the duties of a plant's onsite emergency responders to ensure they are not overburdened during an emergency event and requirements to incorporate hostile-action-based scenarios in the drills and exercise programs. New requirements for back-up measures for alerting and notification systems are also included in the proposed rule.

In addition, the new rule requires nuclear power plants to update their evacuation time estimates after every U.S. Census or when changes in population would increase the estimate by either 25 percent or 30 minutes, whichever is less.

"Although there are likely to be lessons learned from Japan that will apply to emergency preparedness, I do not think that we need to wait to implement the many enhancements that this rule will provide," said Chairman Gregory Jaczko. "This rule represents good work on the part of NRC staff members, who have spent several years working on the rule in coordination with other federal agencies and various stakeholders."

NRC staff members, working closely with the Federal Emergency Management Agency, had gathered public comments through multiple meetings held throughout the country in 2009 and 2010 and through a lengthy public comment

period. The rule was first put before the Commission in 2006.

The rule was published in the Federal Register and then became effective in 30 days.

Input Sought re Updated Seismic Analysis for Power Plants

The U.S. Nuclear Regulatory Commission is seeking public comments on a draft Generic Letter that would require U.S. nuclear power plants to re-examine their sites' seismic risk and provide that information to the agency. The draft letter was published in the September 16, 2011 issue of the *Federal Register*. Comments will be accepted through November 15 via www.regulations.gov using docket number NRC-2011-0204.

The letter represents the next step in the staff's ongoing multi-year examination of updated seismic hazard information for the eastern and central United States, through the NRC's Generic Issues program. This effort, labeled GI-199, began long before the events at the Fukushima Dai-ichi nuclear plant in Japan and the recent Virginia earthquake. GI-199 was prompted by the seismic analyses included in applications from 2003 related to new reactor activity. The NRC issued an Information Notice in September 2010 regarding GI-199, including the agency's conclusion that existing plant designs safely account for possible earthquakes.

NRC staff will consider comments on the draft Generic Letter before finalizing it, which the staff expects to issue near the end of the year. The draft letter's approach would have U.S. nuclear power plants perform their analysis within either

one or two years, depending on the analysis method used, and deliver their results to the NRC. The agency will then determine whether additional actions are necessary.

The draft Generic Letter is available in the NRC's electronic documents database, ADAMS, by entering ML111710783. The September 2010 Information Notice is also available in ADAMS by entering ML101970221.

Fuel Cycle Facilities to be Inspected re Natural Disaster Preparations

The U.S. Nuclear Regulatory Commission has directed inspections of major fuel cycle facilities to verify that licensees are adequately prepared to cope with the consequences of natural phenomena such as earthquakes and floods.

Under Temporary Instruction 2600/015, NRC inspectors will evaluate the adequacy of emergency prevention and/or mitigation strategies for consequences of natural events that exceed a licensee's safety or licensing basis.

Facilities covered under this Temporary Instruction include all commercial uranium enrichment plants and uranium conversion facilities operating in the United States.

Inspections will be tailored to the individual facilities, but at a minimum they will evaluate seismic hazards, external flooding hazards, internal flooding hazards, wind and tornadoes, extended loss of AC or emergency power, and fire impacts.

The inspections are part of the NRC's response to the nuclear crisis at Japan's Fukushima Dai-ichi nuclear power plant following the March 11 earthquake and tsunami.

The fuel cycle inspections will be completed by September 30, 2012.

A copy of NRC's Temporary Instruction 2600/015 can be found in the agency's ADAMS search engine by entering ML111030453.

Rulemaking re Emergency Core Cooling Requirements

In an effort to increase transparency and meet public interest, the U.S. Nuclear Regulatory Commission plans to begin posting preliminary conclusions and other material related to a petition about NRC regulations for reactor core emergency cooling systems.

By releasing preliminary findings in the course of reviewing Petition for Rulemaking (PRM) 50-93/95, NRC is departing from its usual petition review process. The agency states that it is doing so due to the complexity of the issues raised in the petition, the length of the anticipated review period, and the goal of providing a more transparent review process.

The petition claims that calculations required by NRC regulations underestimate cladding oxidation, hydrogen production, and heat generation from the zirconium-water reaction during loss-of-coolant accidents. NRC's initial assessment of the petition concluded that there are no immediate safety concerns.

However, to properly address the petitioners' detailed concerns, the agency must carefully review and re-consider more than 200 different technical citations related to experiments performed over the last 40 years. As the petition review completes its examinations of the experiments, NRC will release its preliminary conclusions to inform the public about the review's progress. The agency's final decision regarding PRM 50-93/95 will not be issued until

after the NRC Commissioners have considered all staff recommendations and evaluations.

These periodic preliminary evaluations and other documents related to PRM 50-93/95 will be available at www.regulations.gov by searching on NRC 2009-0554 and on the NRC web site at www.nrc.gov.

Meetings Held re Long-Term Storage of Spent Fuel

Recently, the U.S. Nuclear Regulatory Commission held three public meetings to discuss issues related to the long-term storage of spent nuclear fuel. The first meeting was held in Rockville, Maryland on September 28. Shortly thereafter, on October 4, a second meeting was held in Oakbrook Terrace, Illinois. The third and final meeting was held in San Luis Obispo, California on October 6.

The meetings were intended to inform and engage the public on the agency's plans to tackle technical and regulatory issues related to extended storage of spent fuel, and on plans to develop a draft environmental impact statement for an update of the NRC's waste confidence decision and rule.

Comment Sought re Proposed Changes to Consumer Policy Statement

On October 14, 2011, the U.S. Nuclear Regulatory Commission announced that the agency is seeking public comment on proposed changes to its policy statement on consumer products containing radioactive material. The proposed changes would make minor changes that would bring the statement up to date, but would not represent a shift in policy. They would update

terminology and reflect changes in theory and practice of radiation protection as it has evolved since 1965.

The original Consumer Products Policy Statement was issued by the Atomic Energy Agency in 1995 because, although presenting very low risks of significant individual doses to members of the general public, consumer products containing radioactive material are a source of routine exposure to the public. For instance, a substantial portion of the population receives a very small radiation exposure from the use of smoke detectors.

The policy statement incorporates the three fundamental principles of radiation protection:

- justification of a practice;
- optimization of protection (the "As Low As Reasonably Achievable, or ALARA," practice); and,
- application of dose limits to individuals.

For example, under the policy, approval of a proposed consumer product depends upon both associated exposures of persons to radiation and the apparent usefulness of the product. The policy calls for monitoring the amounts of radioactive materials being distributed for use by the general public and reconsidering the policy if there is any indication that materials in products reaching the public may result in a significant fraction of the permissible dose. Well-informed regulatory decisions in this area can have a significant effect on minimizing cumulative exposures to the public.

The proposed revisions were published in the *Federal Register* on October 14, 2011. Comments will be accepted through December 28, 2011.

Comments on the proposed revisions may be submitted at www.regulations.gov using Docket ID NRC 2010-0292.

NRC Issues Mid-Cycle Assessment Letters

The U.S. Nuclear Regulatory Commission has issued mid-cycle assessment letters to the nation's 104 operating nuclear power plants. These agency's most recent assessments show that all plants continue to operate safely.

"We ensure that nuclear power plants are safe, inspecting them and rating their performance regularly, as part of our mission to protect people and the environment," said Troy Pruett, Acting Director for the Division of Inspection and Regional Support Programs in the NRC's Office of Nuclear Reactor Regulation.

There are five levels of plant performance based on a detailed assessment of performance indicators (i.e., safety system availability and reliability, control of radiation exposure and unplanned shutdowns) and inspection findings. Levels range from "meeting all safety and cornerstone objectives" (highest level) to "unacceptable performance" (lowest level).

According to the latest round of assessments, 99 of the plants are performing in the two highest performance categories. Ninety-one plants are performing at the highest level and are being inspected by NRC using the normal detailed level inspection program. Eight plants are performing at the next highest level, needing to resolve one or two items of low safety significance, and will receive additional inspection and attention to follow up on corrective actions. These plants included:

- Brunswick 1 and 2 (North Carolina);
- Byron 2 (Illinois);
- Cooper (Nebraska);
- Ginna (New York);
- Millstone 2 (Connecticut);
- Prairie Island 1 (Minnesota); and,
- Turkey Point 4 (Florida).

Three nuclear reactors were at the third level of performance with one degraded safety cornerstone and will receive more NRC inspections, senior management attention and oversight focused on the cause of the degraded performance. These plants included:

- H.B. Robinson 2 (South Carolina);
- Perry 1 (Ohio); and,
- Susquehanna 1 (Pennsylvania).

Two plants require the NRC's highest level of attention, which will include additional inspections to confirm the plant's performance issues are being addressed. These plants include:

- Browns Ferry Unit 1 (Alabama); and,
- Fort Calhoun (Nebraska).

In addition, mid-cycle letters were also sent to both the Watts Bar Unit 2 site in Tennessee and the Vogtle Units 3 and 4 site in Georgia reviewing activities associated with the early site permit and limited work authorized by NRC.

Please note that some of the plants' ratings may have changed since the last day of the assessment period. For instance, Robinson 2 has resolved the performance issues and has transitioned from the third level to the second level of performance. Brunswick Units 1 and 2, and Turkey Point Unit 4, have resolved their issues that caused the increased regulatory oversight. All three units have since transitioned to the highest performing level.

NRC routinely provides changes to information on each plant's current performance and posts the latest information as it becomes available to the action matrix summary.

Every six months, each plant receives either a mid-cycle review letter or an annual assessment letter, along with an NRC inspection plan. The next annual assessment letters will be issued in March 2012.

A list of each plant's current performance rating is available on the NRC web site at http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/actionmatrix_summary.html. The mid-cycle assessment letters sent to each licensee are available on the NRC web site at <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html>.

Proposed Changes to Regulations for Research and Test Reactors

On September 13-14, 2011, the U.S. Nuclear Regulatory Commission held two public meetings during the 2011 National Organization of Test, Research and Training Reactors' annual meeting in Idaho Falls, Idaho. The meetings provided a forum for the public to ask questions and provide informal comments about proposed changes to regulations for research and test reactors (RTR) facilities.

The first meeting, on September 13, was held to discuss proposals to change the RTR license renewal process in order to enhance effectiveness and efficiency. The second meeting, on September 14, was held to discuss proposals to revise the regulatory guidelines (NUREG-1537) for preparing and reviewing applications that pertain to digital instrumentation and control systems for RTR facilities.

Both meetings were available for participants to view via Webcast or through teleconference. Full meeting notices were available on the "NRC Public Meeting" Web page.

For additional information, please contact Duane Hardesty at (301) 415-3274 or at Duane.Hardesty@nrc.gov; William Kennedy at (301) 415-2784 or at William.Kennedy@nrc.gov; or Meghan Creedon at (301) 415-2170 or at Meghan.Creedon@nrc.gov.

NRC Goes Live on You Tube

On September 8, 2011, the U.S. Nuclear Regulatory Commission began posting videos on You Tube.

The first video posted is a two-part 9/11 remembrance video that first premiered at the agency's 9/11 commemoration held in September 2011. The video features NRC employees talking about their 9/11 experiences and the effects on their lives.

You Tube joins Twitter and the NRC blog as social media tools that the agency is using to communicate with the public in new and meaningful ways. The NRC anticipates posting small segments of some important Commission briefings, some video previously produced but not extensively distributed, and new content.

The NRC's You Tube account can be reached at www.youtube.com/NRCgov or through the NRC web site at www.nrc.gov.

Obtaining Publications

To Obtain Federal Government Information

by telephone

- DOE Public Affairs/Press Office (202) 586-5806
- DOE Distribution Center (202) 586-9642
- 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

- NRC Reference Library (NRC regulations, technical reports, information digests, and regulatory guides). www.nrc.gov
- EPA Listserve Network • Contact Lockheed Martin EPA Technical Support at (800) 334-2405 or e-mail (leave subject blank and type help in body of message). listserv@unixmail.rtpnc.epa.gov
- EPA • (for program information, publications, laws and regulations) www.epa.gov
- U.S. Government Printing Office (GPO) (for the Congressional Record, *Federal Register*, congressional bills and other documents, and access to more than 70 government databases). www.access.gpo.gov
- GAO homepage (access to reports and testimony) www.gao.gov

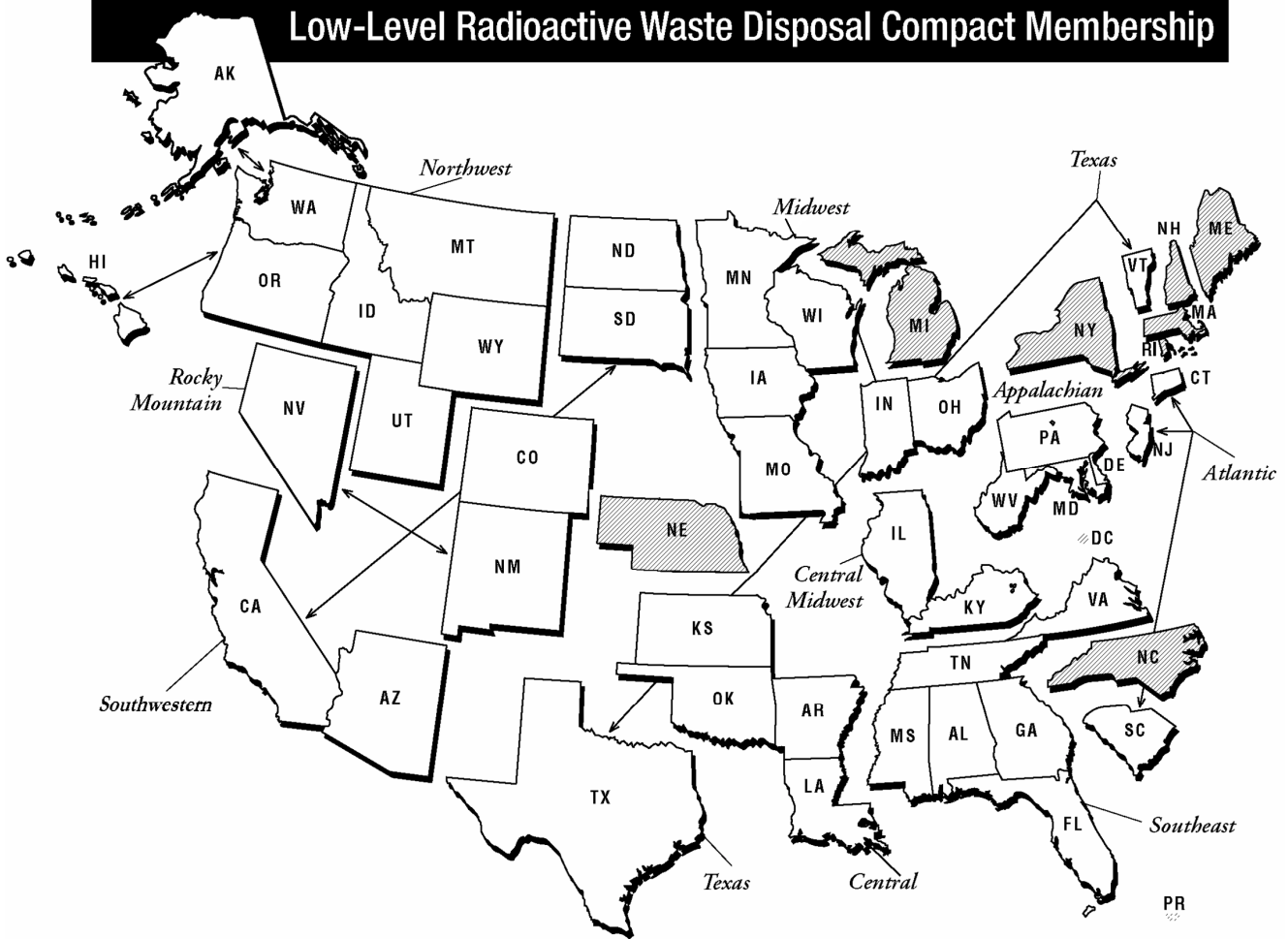
To access a variety of documents through numerous links, visit the web site for the LLW Forum, Inc. at www.llwforum.org

Accessing LLW Forum, Inc. Documents on the Web

LLW Notes, *LLW Forum Contact Information* 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 membership information are also available on the LLW Forum web site at www.llwforum.org. The *Summary Report* and accompanying Development Chart 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.

Low-Level Radioactive Waste Disposal Compact Membership



Appalachian Compact

Delaware
Maryland
Pennsylvania
West Virginia

Atlantic Compact

Connecticut
New Jersey
South Carolina

Central Compact

Arkansas
Kansas
Louisiana
Oklahoma

Central Midwest Compact

Illinois
Kentucky

Northwest Compact

Alaska
Hawaii
Idaho
Montana
Oregon
Utah
Washington
Wyoming

Midwest Compact

Indiana
Iowa
Minnesota
Missouri
Ohio
Wisconsin

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

Texas
Vermont

Unaffiliated States

District of Columbia
Maine
Massachusetts
Michigan
Nebraska
New Hampshire
New York
North Carolina
Puerto Rico
Rhode Island