LLW notes

Volume 33 Number 3 May/June 2018

Low-Level Radioactive Waste Forum, Inc. (LLW Forum)

Registration Open for Fall 2018 LLW Forum Meeting and Historic B Reactor Site Tour

Red Lion Hotel in Richland, Washington
October 2-4, 2018

The Low-Level Radioactive Waste Forum (LLW Forum) is pleased to announce that registration is now open for our fall 2018 meeting, which will be held at the Red Lion Hotel in Richland, Washington on October 3-4, 2018. Please mark your calendars accordingly and save the date!

In terms of planning and making travel arrangements, please note that there will be an optional site tour of Hanford's Historic B Reactor for interested stakeholders from 1:00 – 5:00 p.m. on October 2, 2018.

The Executive Committee will meet from 7:30 – 9:00 a.m. on Wednesday morning (October 3, 2018). The Disused Sources Working Group (DSWG) will meet from 1:00 p.m. – 5:00 p.m. on Thursday (October 4, 2018).

Interested stakeholders are encouraged to register and make hotel reservations for the meeting at your earliest convenience, as there is limited space available in our discount room block.

The Northwest Interstate Compact on Low-Level Radioactive Waste Management is sponsoring the meeting.

The meeting documents—including a meeting bulletin and registration form—are available on the LLW Forum Meeting page of the organization's web site at http://llwforum.org/llw-forum-meeting/.

As a new option for interested stakeholders, a registration form may be completed and submitted online.

(Continued on page 4)

In This Issue

LLW Forum, Inc. • 2657 Bayview Drive • Ft. Lauderdale, FL 33306
(754) 779-7551 • FAX (754) 223-7452 • EMAIL llwforuminc@aol.com WEBSITE www.llwforum.org

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 33, Number 3 May/June 2018
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 website at www.llwforum.org or contact Todd D. Lovinger — the LLW Forum, Inc.'s Executive Director — at (754) 779-7551.

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 each another and to exchange views with officials of federal agencies and other interested parties.

Table of Contents

LLW FORUM, INC.

Low-Level Radioactive Waste Forum, Inc.
2657 Bayview Drive
Ft. Lauderdale, FL 33306
(754) 779-7551
FAX (754) 223-7452
EMAIL llwforuminc@aol.com
INTERNET www.llwforum.org

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

(Continued from page 1)

Attendance

Officials from states, compacts, federal agencies, nuclear utilities, disposal operators, brokers/ processors, industry and other interested parties are encouraged to attend the fall 2018 LLW Forum meeting.

LLW Forum meetings are 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. They also offer 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.

LLW Forum Meeting Location and Dates

The fall 2018 LLW Forum meeting will be held on Wednesday, October 3 (9:00 am – 5:00 pm) and Thursday, October 4 (9:00 am – 1:00 pm) at:

Red Lion Richland Handford House Hotel
802 George Washington Way
Richland, Washington 99354

Located in the heart of historic Richland, the Red Lion Hanford House is centrally located for business and leisure travelers visiting the Hanford Reservation. The hotel, overlooking the Columbia River, is within easy walking distance of several restaurants and government buildings.

Optional Hanford B Reactor Site Tour Logistics

The Washington State Department of Health will sponsor an optional tour of Hanford's Historic B Reactor on Tuesday afternoon (October 2, 2018) from 1:00 – 5:00 p.m. The B Reactor is the world's first full-scale plutonium production reactor.

Interested parties need to check the box on the LLW Forum meeting registration form, as well as complete and submit the separate Hanford B Reactor optional site tour registration form. The tour originates from the B Reactor offices located about 7 minutes from the Hanford House.

Registration

All persons must pre-register for the LLW Forum 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 meeting registration form at your earliest convenience and return it to the LLW Forum at the mailing or e-mail address listed at the bottom of the form.

Attendees that are planning to participate in the optional Hanford B Reactor site tour must also pre-register. *Please note that there is a separate registration form with differential submittal directions for the optional site tour.*

The meeting is free for up to two individuals representing members of the LLW Forum. Additional and non-member registration is $600, payable by check only to the "LLW Forum, Inc." (Credit card payments are not accepted.)

Reservations

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

A block of rooms have been reserved for Monday through Thursday (October 1-4, 2018) for meeting attendees at the special, discounted rate of $96.00 (single/double rate) plus tax. To make a reservation, please go to the booking link on the attached meeting bulletin or call (509) 946-7611,

press zero for the operator and ask for a reservation under the discount group code WSDO1001. *Please note that you must provide the code in order to get the special, discounted rate.*

The deadline for reserving a room at the discounted rate is September 10, 2018.

Transportation and Directions

The Red Lion Richland Hanford House Hotel is located 10-12 minutes from the Pasco Airport, which is the nearest commercial travel connection.

If you have questions or require additional information, please contact Todd D. Lovinger, Esq. — Executive Director of the LLW Forum and Project Director of the Disused Sources and Part 61 Working Groups (DSWG/P61WG) — at (754) 779-7551 or at LLWForumInc@aol.com.

Atlantic Compact/State of New Jersey

New Jersey Governor Signs Several Clean Energy Initiatives

On May 23, 2018, New Jersey Governor Phil Murphy signed several legislative initiatives that are designed to advance the state's clean energy goals, including a bill that would subsidize the continued operation of nuclear power plants.

The cost for the new law to subsidize nuclear power plants is estimated to be approximately $300 million a year.

Overview of New Jersey Legislation

The new law establishes a Zero Emissions Certificate (ZEC) program in an effort to maintain New Jersey's nuclear energy supply, which is the state's largest source of carbon free energy and contributes almost 40 percent of the state's electric capacity. Under the law's provisions, plants seeking to participate in the program would be required, among other things, to demonstrate that they make a significant contribution to New Jersey air quality and are at risk of closure within three years.

There are currently four reactors operating in New Jersey with generating capacity over 4,100 megawatts (MW) of electricity. Three of the reactors are located at the Salem-Hope Creek nuclear plant and are operated by a unit of Public Service Enterprise Group (PSEG), which is the state's biggest power company. The other reactor, Oyster Creek, is owned by Exelon Corporation, which also owns part of the Salem reactors.

In addition to the nuclear subsidy law, Governor Murphy also signed legislation to require that 50 percent of the state's power come from renewable sources by 2030, as well as to establish plans to build 3,500 MW of offshore wind by 2030; implement energy efficiency programs to reduce electric and gas usage; and, achieve 2,000 MW of energy storage by 2030. The governor also signed an Executive Order directing state agencies to develop an Energy Master Plan by June 1, 2019 that provides a path to 100 percent clean energy by 2050.

Potential Action by Other States and DOE

Passage of the new legislation makes New Jersey the fourth state to adopt a program that is intended to provide a new revenue stream to assist nuclear reactors that are in service in an effort to meet the states' greenhouse gas reduction goals. Other states that have passed such laws include New York, Illinois and Connecticut.

States with reactors set to retire over the next few years for economic reasons (including Pennsylvania and Ohio) and officials at the

U.S. Energy Department (DOE) are reportedly also looking at programs designed to keep nuclear plants operating.

Background

Exelon has announced plans to shut the Oyster Creek reactor in October 2018 pursuant to a long-standing agreement with the state. In addition, PSEG has warned that it could shut its reactors if they do not receive some sort of federal or state assistance.

By the end of 2021, twenty-four of the operating nuclear power plants in the United States are either set to close or will no longer be profitable according to a report by Bloomberg New Energy Finance (BNEF) that was issued on May 15, 2018. In addition, the report cautions that more plants are likely to close. (See LLW Forum News Flash titled, "Report Cautions Early Retirement Risks for Nuclear Power Plants: Electricity Demand, Renewable Energy and High Fixed Costs Pressure Nuclear Fleet," May 22, 2018.)

Central Interstate Compact

Central Interstate Compact Commission Holds Annual Meeting

On June 19, 2018, the Central Interstate Low-Level Radioactive Waste Commission held its annual meeting. The meeting—which was held at the Oklahoma Department of Environmental Quality—began at 9:00 a.m. CDT.

The following items were on the draft agenda for the meeting:

1. Call to Order and Roll Call (Chair)
2. Website services offered by Low-Level Radioactive Waste Forum (LLW Forum) to Compact Commissions (Cecilia Snyder, LLW Forum)
   - The LLW Forum is offering a service whereby it will maintain and regularly update the websites for compacts. Cecilia Snyder with the LLW Forum will discuss this service and answer questions.
3. Administrator Report (Administrator)
4. Chair Report (Chair)
5. Commissioners Reports
   - Opportunity for each Commissioner to report on any activities in their states that may be of interest to the Commission.
6. Approval of Minutes of December 20, 2017 Special Teleconference Meeting
   A. Questions/Discussion by Commissioners
   B. Questions/Discussion by Public
   C. Roll Call Vote
7. Review and Approve Commission's FY 2019 Administrative Budget
   A. Questions/Discussion by Commissioners
   B. Questions/Discussion by Public
   C. Roll Call Vote
8. Set Date for November Special Teleconference Meeting and Date/Location for June 2019 Annual Meeting
9. Election of Vice-Chair
   - Article V(D) of the Commission's Bylaws sets election of a Vice-Chair during the Commission's annual meeting in each

even-numbered year. The current Vice-Chair assumes the position of Chair.

A. Nominations

B. Roll Call Vote

10. Adjourn

Pursuant to Article IX(H)(3) of the Commission's Bylaws, this Public Forum was an opportunity for members of the public to address the Commission on any matter under the Commission's jurisdiction.

For additional information, please contact Kristie Valtierra, Administrator of the Central Interstate Low-Level Radioactive Waste Compact Commission, at (402) 702-5220 or at admin@cillrwcc.org or visit their web site at www.cillrwcc.org.

Northwest Compact/State of Utah

Utah Waste Management and Radiation Control Board Holds Meeting

On May 10 2018, the Utah Waste Management and Radiation Control Board held an electronic/ telephonic meeting beginning at 1:30 p.m. in accordance with the Utah Open and Public Meetings Act.

The anchor location of the Board meeting, which was open to the public, was the Red Rocks Conference Room 3132, Department of Environmental Quality (DEQ), in the Multi Agency State Office Building that is located at 195 North 1950 West in Salt Lake City, Utah.

Agenda

The following items, among others, were on the agenda for the May 2018 Board meeting:

I. Call to Order

II. Approval of Meeting Minutes for the April 12, 2018 Board Meeting *(Board Action Item)*

III. Underground Storage Tanks Update

IV. X-Ray Program

A. Approval of Mammography Imaging Medical Physicists (MIMPs) in accordance with UCA-19-6-104(2)(b). *(Board Action Item)*

V. Adjourn

Background

The 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.

Copies of the Utah Waste Management and Radiation Control Board meeting agendas and packet information can be found at http:// www.deq.utah.gov/boards/waste/meetings.htm.

For additional information, please contact Rusty Lundberg, Deputy Director of the Division of Waste Management and Radiation Control at the Utah Department of Environmental Quality, at (801) 536-4257 or at rlundberg@utah.gov.

Northwest Compact/State of Wyoming

NRC Considering Wyoming's Request to Become an Agreement State

On June 26, 2018, the U.S. Nuclear Regulatory Commission (NRC) announced that the agency is considering a request from Wyoming Governor Matthew Mead to assume part of the NRC's regulatory authority over certain radioactive materials in the state.

If the request is accepted, Wyoming will become the 38th state to sign such an agreement with the NRC.

Overview

Under the proposed agreement, the NRC would transfer to Wyoming the responsibility for licensing, rulemaking, inspection and enforcement activities related to the extraction and concentration of uranium and thorium milling and the management and disposal of milling waste, or mill tailings.

If the proposed Agreement were approved, the NRC would transfer 14 specific licenses for radioactive material to Wyoming's jurisdiction. By law, NRC would retain jurisdiction over commercial nuclear power plants (of which there are none in Wyoming), federal agencies using certain nuclear material in the state and uses of nuclear material currently regulated by the NRC other than uranium and thorium milling activities.

Before entering into the agreement, the NRC must determine that Wyoming's radiation control program is adequate to protect public health and safety, and is compatible with the NRC's regulations.

Publication and Comment

The proposed agreement between the NRC and Wyoming, as well as the NRC staff's draft assessment of the Wyoming program, was published for public comment in the *Federal Register* on June 26, 2018. The publication will be repeated weekly for four weeks. Comments may be submitted at regulations.gov under Docket ID NRC-2018-0104 through July 26, 2018.

Background

Thirty-seven other states have signed similar agreements with the NRC. They include Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, Washington and Wisconsin.

Copies of the proposed agreement, the Governor's request/supporting documents and the NRC draft staff assessment are available on the NRC website at www.nrc.gov. For additional information, please contact David McIntyre at (301) 415-8200.

Rocky Mountain Compact

Rocky Mountain Board Holds Annual and Regular Meetings

On June 20, 2018, the Rocky Mountain Low-Level Radioactive Waste Board held both a Regular Meeting and an Annual Meeting in Santa Fe, New Mexico. The meetings—which were held at the La Posada de Santa Fe—began at 9:00 a.m.

Regular Meeting Agenda

The following items were on the draft agenda for the Regular Meeting:

- approval of minutes of the Regular Meeting on June 22, 2017 and Annual Meetings and notice of actions taken at the telephonic meetings on March 7, 2018 and April 30, 2018
- update from the Clean Harbors Regional Facility
- update from URENCO USA
- update from International Isotopes, Inc.
- discussion of Naturally Occurring Radioactive Material (NORM) oil and gas import and export
- update on Low-Level Radioactive Waste Forum (LLW Forum)
- update on national developments
- Executive Director's report
  - fiscal status/investment summary
  - permit fee revenue for 2017 and 2018
  - expenditure/budget comparison
  - status of volumes authorized for export and disposal in 2017 and 2018

Annual Meeting Agenda

The following items were on the draft agenda for the Annual Meeting:

- election of Officers
- consideration of fiscal year 2018-2019 budget
- consideration of establishment of SEP IRA retirement program

Interested parties and the public were invited to attend the meetings and an opportunity was provided for public comment.

For additional information, please contact Leonard Slosky, Executive Director of the Rocky Mountain Board, at (303) 825-1912 or lslosky@rmllrwb.us.

Southeast Compact Commission

Southeast Compact Commission Holds 110th Business Meeting

On June 26, 2018, the Southeast Compact Commission for Low-Level Radioactive Waste Management held its 110th business meeting at the Environmental Finance Authority Office in Atlanta, Georgia.

The Southeast Compact Commission's Policy and Planning Committee and Administrative Committee met one day earlier at the same location.

Business Meeting

The 110th business meeting of the Southeast Compact Commission began at 9:00 a.m. EDT on June 26 in the Board Room at the Environmental Finance Authority Office. During the business meeting, the Southeast Compact Commission received committee reports; adopted a budget for fiscal year 2018-19; elected a new Chair-Elect and Secretary-Treasurer; and, conducted other business as it came before the Commission.

Policy and Planning Committee Meeting

The Policy and Planning Committee met at 1:00 p.m. EDT on June 25 in the Board Room at the Environmental Finance Authority Office. During the Policy and Planning Committee meeting, the Committee considered and reviewed the Strategic Plan and other matters as they came before the committee.

Administrative Committee Meeting

The Administrative Committee began at 3:30 p.m. EDT on June 25 in the Board Room at the Environmental Finance Authority Office. During the Administrative Committee meeting, the committee discussed a budget for fiscal year 2018-19; Southeast Compact Commission finances; the ad hoc committee review of staff salaries and benefits; and, conducted other business as it came before the Commission.

All Southeast Compact Commission and committee meetings are open to the public.

For additional information, please contact the Southeast Compact Commission at (919) 380-7780 or at secc@secompact.org.

2019 Hodes Award Nominations Sought

The Southeast Compact Commission for Low-Level Radioactive Waste Management is accepting nominations for the 2019 Richard S. Hodes, M.D. Honor Lecture Award—a program that recognizes an individual, company or organization that contributed in a significant way to improving the technology, policy or practices of low-level radioactive waste management in the United States. The award recipient will present the innovation being recognized at a lecture during the Waste Management '19 Symposium in Phoenix, Arizona. The award recipient will receive a $5,000 honorarium and all travel expenses will be paid.

Nominations must be received by August 31, 2018.

Background

Dr. Richard S. Hodes was a distinguished statesman and a lifetime scholar. He was one of the negotiators of the Southeast Compact law, in itself an innovative approach to public policy in waste management. He then served as the chair of the Southeast Compact Commission for Low-Level Radioactive Waste Management from its inception in 1983 until his death in 2002.

Throughout his career, Dr. Hodes developed and supported innovation in medicine, law, public policy and technology. The Richard S. Hodes, M.D. Honor Lecture Award was established in 2003 to honor the memory of Dr. Hodes and his achievements in the field of low-level radioactive waste management.

Past Recipients

The following individuals and entities are past recipients of the Richard S. Hodes, M.D. Honor Lecture Award:

- W.H. "Bud" Arrowsmith (2004);
- Texas A & M University Student Chapter of Advocates for Responsible Disposal in Texas (2004 *honorable mention*);
- William Dornsife (2005);
- California Radioactive Materials Management Forum (2006);
- Larry McNamara (2007);
- Michael Ryan (2008);
- Susan Jablonski (2009);
- Larry Camper (2010);
- Christine Gelles (2011);
- Lawrence "Rick" Jacobi (2012);
- James Kennedy (2013);
- Energy*Solutions*, the Utah Department of Environmental Quality (DEQ), the Conference

of Radiation Control Program Directors (CRCPD) and the U.S. Department of Energy's (DOE) Global Threat Reduction Initiative (2013 *honorable mention*);
- Electric Power Research Institute (2014);
- Division of Radiation Control of the Utah DEQ and Energy*Solutions* (2015);
- Louis Centofanti (2016);
- Scott Kirk (2017); and,
- National Nuclear Security Administration (NNSA) and the Off-Site Source Recovery Program (OSRP).

The Award

The Richard S. Hodes Honor Lecture Award—established in March, 2003—is awarded to an individual, company or organization that contributed in a significant way to improving the technology, policy or practices of low-level radioactive waste management in the United States.

The award recipient will be recognized with a special plaque and an invitation to present a lecture about the innovation during the annual international Waste Management Symposium (WM '19). The 2019 symposium is sponsored by the University of Arizona and will be held in Phoenix, Arizona in the spring of 2019.

A special time is reserved during the Symposium for the lecture and the award presentation. The Southeast Compact Commission will provide the award recipient a $5,000 honorarium and will pay travel expenses and per diem (in accordance with Commission Travel Policies) for an individual to present the lecture.

Criteria

The Richard S. Hodes Honor Lecture Award recognizes innovation industry-wide. The award is not limited to any specific endeavor—contributions may be from any type of work with radioactive materials (nuclear energy, biomedical, research, etc.) or in any facet of that work, such as planning, production, maintenance, administration or research. The types of innovations to be considered include, but are not limited to:

- conception and development of new approaches or practices in the prevention, management and regulation of radioactive waste;
- new technologies or practices in the art and science of waste management; and,
- new educational approaches in the field of waste management.

The criteria for selection include:

1. *Innovation*. Is the improvement unique? Is it a fresh approach to a standard problem? Is it a visionary approach to an anticipated problem?
2. *Safety*. Does the practice enhance radiation protection?
3. *Economic*s. Does the approach produce significant cost savings to government, industry or the public?
4. *Transferability*. Is this new practice applicable in other settings and can it be replicated? Does it increase the body of technical knowledge across the industry?

Eligibility

To be eligible for the award, the individual/group must consent to being nominated and must be willing to prepare and present a lecture about the innovation being recognized at the Waste Management Symposium. Individuals or organizations can nominate themselves or another individual, company, institution or organization.

Nominations

To nominate yourself or another individual, company or organization for this distinguished award, please contact:

Awards Committee
c/o Ted Buckner
Executive Director
Southeast Compact Commission
Post Office Box 5427
Cary, NC 27512
(919) 380-7780
(919) 380-7710 - FAX
tedb@secompact.org

or visit the Southeast Compact Commission's website at http://www.secompact.org/.

Nominations must be received by August 31, 2018.

Southwestern Compact

Southwestern Compact Commission Hosts 78th Meeting

On May 15, 2018, the Southwestern Low-Level Radioactive Waste Commission hosted its 78th meeting beginning at 9:00 a.m. PDT at the Sheraton San Diego Hotel & Marina, which is located at 1380 Harbor Island Drive in San Diego, California 92101.

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 – activity and/or status
  - Commission Chair
  - Executive Director
  - licensing agency
  - party states
- exportation
  - ratification of approved petitions – 2017 (E-17-111 – E-17-124 & WCS-17-067 – WCS-17-084) and 2018 (E-18-001 – E-18-103 & WCS-18-001 – WCS-18-043)
  - export report – presented by Commissioner Vadnais
- discuss, review and possible action on impacts of Very Low-Level Waste (VLLW) and by-laws recommended by legal counsel
- discuss draft policy on "reuse" by legal counsel
- report on necessary "reserves" and direction from Commission on compact funds
- update on SONGS, PGE-Diablo, WCS new ownership and visit to Texas
- executive session pursuant to California Government Code § 11126(a)(1) to report and discuss action regarding interview and contract for legal counsel
- *return to open session*
- discuss and direct Executive Director pursuant to above closed session, if required
- review and approve current budget, if necessary
- public comment
- future agenda items

- next meeting – October 5, 2018
- 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 Low-Level Radioactive Waste Disposal Compact Commission

Texas Compact Commission Holds May 2018 Meeting

On May 17, 2018, the Texas Low-Level Radioactive Waste Disposal Compact Commission (Texas Compact Commission) held a regularly scheduled meeting in Austin, Texas.

The meeting began at 9:30 a.m. CDT. It was held in Room E1.028 at the Texas Capitol, which is located at 1100 Congress Avenue in Austin, Texas.

The formal meeting agenda is available on the Texas Compact Commission's web site at www.tllrwdcc.org.

Agenda

The following is an abbreviated overview of the agenda for the Texas Compact Commission meeting. Persons interested in additional detail are directed to the formal agenda themselves.

- call to order;
- roll call and determination of quorum;
- introduction of Commissioners, elected officials and press;
- public comment;
- consideration of and possible action on applications for importation of low-level radioactive waste from NextEra Point Beach, Entergy Grand Gulf, Talen Energy, Talen Energy (irradiated hardware), RAM Services and Thomas Gray;
- consideration of and possible action on amendments to existing agreements with Exelon and Energy*Solutions;*
- consideration and possible action on May 15, 2018 letter to U.S. Nuclear Regulatory Commission (NRC) regarding the February 14, 2018 notice in the *Federal Register* relating to the Very Low-Level Waste (VLLW) scoping study;
- receive reports from Waste Control Specialists LLC (WCS) about recent site operations;
- receive report from Chair on Texas Compact Commission activities including an update on the to-be-formed committee as a result of recent legislation;
- report from Leigh Ing, Executive Director of the Texas Compact Commission, on her activities relating to workshops and Texas Compact Commission operations;
- discussion and possible changes of dates and locations of future Texas Compact Commission meetings in 2018; and,
- adjourn.

Background

The Texas Compact Commission may meet in closed session as authorized by the Texas Open Meetings Act, Chapter 551, Texas Government Code. Texas Compact Commission meetings are open to the public.

For additional information, please contact Texas Compact Commission Executive Director Leigh Ing at (512) 305-8941 or at leigh.ing@tllrwdcc.org.

Texas Compact/State of Texas

Toshiba Withdraws from Two Planned South Texas Project Reactors

On June 7, 2018, Toshiba America Nuclear Energy Corporation — a U.S. wholly owned subsidiary of Japan's Toshiba Corporation — announced plans to withdraw from a project to build two additional advanced boiling water reactor units at the South Texas Project (STP) site in Matagorda County, Texas.

According to news reports and a company press release, Toshiba officials scrapped their involvement in the estimated $15 million project due to a lack of investors.

Overview

According to a press release from Toshiba, company officials plan to cancel all contracts related to Nuclear Innovation North America (NINA), which was established by an agreement with NRG Energy Inc. in 2008 for the purpose of building the two additional STP units. The corporation will also cancel an engineering, procurement and construction contract it signed in 2009 with STP, as well as canceling deferred loans and forgiving loans under loan contracts.

"Under current and expected economic conditions, further development of STP Units 3 and 4 has ceased to be financially viable," stated a press release from Toshiba. "In these circumstances, there is no clear pathway to securing profitability."

Tim Powell, President and CEO of STP, stated in the release that a meeting of NINA's Board of Directors is expected in the coming weeks to determine the future of STP Units 3 and 4. "While the further development of Units 3 and 4 are in question, I want to assure you that the safe and reliable operation of Units 1 and 2 remains the commitment of each and every employee at STP," stated Powell. "These units continue to be vital to the resilience and reliability of the Texas grid and we are focused on maintaining the exemplary performance we have achieved and creating further value for the community we call home."

"With our recently granted 20-year life extension for Units 1 and 2, that mission will continue today, tomorrow and for many years to come," continued Powell. "STP remains a proud partner of Matagorda County and the South Texas region for over 30 years and will remain so as we continue to move forward."

According to the release, Toshiba officials intend to meet with the NINA Board of Directors and continue the necessary withdrawal procedures with NRG. The release states that the corporation will have completely withdrawn from the project by the end of the year.

Combined License

In February 2016, the U.S. Nuclear Regulatory Commission (NRC) issued two Combined Licenses (COL) for the STP site in Texas. (See *LLW Notes*, January/February 2016, pp. 19-20.) Based on the mandatory hearing on NINA's

application, the Commission found the staff's review adequate to make the necessary regulatory safety and environmental findings.

NRC staff imposed several conditions on the license, including:

- specific actions associated with the agency's post-Fukushima requirements for Mitigation Strategies and Spent Fuel Pool Instrumentation;

- requiring monitoring and analysis of the reactors' steam dryers during initial plant startup, in line with current procedures for existing boiling-water reactors approved to operate at increased power levels; and,

- setting a pre-startup schedule for post-Fukushima aspects of the new reactor's emergency preparedness plans and procedures.

Background

The NRC certified the 1,300-megawatt ABWR design in 1997. On September 20, 2007, NINA submitted its application for the licenses.

The NRC's Advisory Committee on Reactor Safeguards (ACRS) independently reviewed aspects of the application that concern safety, as well as the staff's Final Safety Evaluation Report (FSER). The ACRS, a group of experienced technical experts, advises the Commission—independently from the NRC staff—on safety issues related to the licensing and operation of nuclear power plants, as well as on issues of health physics and radiation protection.

The NRC completed its environmental review and issued the Final Environmental Impact Statement (FEIS) for the proposed STP reactors in February 2011. Four years later, on February 19, 2015, the ACRS provided the results of its review to the Commission. The NRC completed and issued the FSER on September 29, 2015.

STP's two units produce 2,700 megawatts of carbon-free electricity — providing clean energy to 2 million Texas homes. According to STP officials, Units 3 and 4 would have doubled that production output and could have created about 800 additional jobs.

Additional information on the certification process is available on the NRC web site at www.nrc.gov. For additional information, please contact Scott Burnell of the NRC at (301) 415-8200.

U.S. Congress/U.S. Senate

Senate Approves All Three Nominees for NRC Commissioners

On May 24, 2018, by a voice vote during an evening session, the U.S. Senate approved en banc the confirmations of all three outstanding nominees to the U.S. Nuclear Regulatory Commission (NRC) including:

- Annie Caputo, a nuclear policy adviser to Senate Environment and Public Works Committee Chairman John Barrasso (R-WY);
- David Wright, an energy consultant and former president of the National Association of Regulatory Utility Commissioners; and,
- Jeff Baran, an attorney and member of the Commission since 2014 who's current term is scheduled to expire on June 30, 2017.

Shortly before the confirmations' vote, the Senate Appropriations Committee approved a budget proposal that provided no money for the proposed Yucca Mountain radioactive waste repository in Nevada.

Caputo and Wright were sworn-in as new NRC Commissioners the following week.

Nominees

U.S. President Donald J. Trump originally announced his intent to nominate Annie Caputo and David Wright as NRC Commissioners on May 22, 2017. The nominations have been waiting for a floor vote since July 2017. The Environment and Public Works Committee advanced Baran's nomination to the full Senate in October 2017.

Annie Caputo Trump nominated Annie Caputo of Virginia to be an NRC Commissioner for the remainder of a five-year term expiring June 30, 2021. Caputo currently serves as Senior Policy Advisor for Chairman John Barrasso (R-WY) on the Senate Environment and Public Works Committee. She also held this position for previous Chairman James Inhofe (R-OK) from 2007 to 2012.

From 2005 to 2006 and from 2012 to 2015, Caputo worked for the House Committee on Energy & Commerce handling nuclear energy issues. Prior to working for the Congress, Caputo worked as an Executive Assistant and Congressional Affairs Manager for Exelon Corporation.

Caputo has more than 20 years of experience advising the U.S. House of Representatives and Senate, as well as the nuclear industry, on nuclear energy regulation, policy development, legislation and communications. Caputo graduated from the University of Wisconsin-Madison with a Bachelor's degree in Nuclear Engineering. Caputo, her husband and two children reside in McLean, Virginia.

David Wright Trump nominated David Wright of South Carolina to be an NRC Commissioner for the remainder of a five-year term expiring June 30, 2020.

Wright is currently the President of Wright Directions, LLC—a strategic consulting and communications business in the energy sector. Wright previously served as a Member and Chair of the South Carolina Public Service Commission (SCPSC) from 2004 - 2013. He was elected to serve as President of the National Association of Regulatory Utility Commissioners (NARUC) for 2011 - 2012.

Wright has owned and operated several different businesses, and served as a Councilman, Mayor and a Member of the South Carolina House of Representatives. A colon cancer survivor,

Wright is active as an advocate for colon cancer awareness and education and is frequently asked to share his message with groups around the country.

Wright received his Bachelor's Degree from Clemson University. He has four children and three grandchildren and currently resides in Columbia, South Carolina.

Jeff Baran Jeff Baran was sworn in as an NRC Commissioner on October 14, 2014. He is currently serving the remainder of his first term, which is scheduled to end on June 30, 2018. He will be sworn in at a later date for his second term, which is scheduled to expire on June 30, 2023.

Since joining the Commission, Baran's priorities have included ensuring effective implementation of safety enhancements in response to the Fukushima Daiichi accident, improving oversight of power reactors entering decommissioning and boosting the openness and transparency of agency decisionmaking. He has visited a number of NRC-licensed facilities, including operating power reactors, a nuclear plant undergoing active decommissioning, a research reactor, fuel cycle facilities, a low-level radioactive waste disposal facility, as well as a variety of facilities using radioactive materials for medical and industrial purposes. Baran also traveled to Fukushima Daiichi for a first-hand look at conditions and activities at the site.

Before serving on the Commission, Baran worked for the U.S. House of Representatives for over 11 years. During his tenure with the Energy and Commerce Committee, oversight of NRC was one of his primary areas of responsibility. As a Senior Counsel and later as Democratic Staff Director for Energy and Environment, Baran worked on a range of NRC issues including new reactor licensing; existing reactor oversight and decommissioning; high-level and low-level radioactive waste; and, uranium mining, milling, and enrichment. He worked to coordinate the efforts of six federal agencies, including the NRC and two Native American tribes, to clean up uranium contamination in and around the Navajo Nation. He also helped negotiate bills related to pipeline safety, energy efficiency, hydropower and medical isotopes that were enacted with bipartisan support. From 2003 - 2008, he was Counsel to the House Oversight and Government Reform Committee. Prior to his work on Capitol Hill, Baran served as a Law Clerk for Judge Lesley Wells of the U.S. District Court for the Northern District of Ohio.

Born and raised in the Chicago area, Baran earned a Bachelor's Degree and a Master's Degree in Political Science from Ohio University. He holds a Law Degree from Harvard Law School.

Background

Five Commissioners appointed by the President and confirmed by the Senate for five-year terms head the NRC. One of them is designated by the President to be the Chairman and official spokesperson of the Commission.

The Chair is the Principal Executive Officer of and the Official Spokesperson for the NRC. As Principal Executive Officer, the Chair is responsible for conducting the administrative, organizational, long-range planning, budgetary and certain personnel functions of the agency. The Chair has ultimate authority for all NRC functions pertaining to an emergency involving an NRC license. The Chair's actions are governed by the general policies of the Commission.

The Commission operates as a collegial body to formulate policies, develop regulations governing nuclear reactor and nuclear material safety, issue orders to licensees and adjudicate legal matters.

The Commission is currently comprised of Chair Kristine Svinicki, Commissioner Jeff Baran and Commissioner Stephen Burns.

For additional information related to Commission business, please contact Annette Vietti-Cook, Secretary of the Commission, at (301) 415-1969 or at NRCExecSec@nrc.gov.

International

U.S. Launches International Initiative to Promote Nuclear Power

On May 31, 2018, Deputy Secretary of the U.S. Department of Energy (DOE) Dan Brouillette launched an initiative with international partners of the United States to promote nuclear power as a clean energy source and to encourage investment in new nuclear technologies.

Overview

According to Brouillette, the initiative is intended to "highlight the value of nuclear energy as a clean reliable energy source." The international partners participating in the initiative include Japan, Canada, Russia, South Africa, the United Arab Emirates, Poland, Argentina and Romania.

The Trump administration has also formed an alliance with Norway and Saudi Arabia that is aimed at boosting public and private partnerships on carbon capture, utilization and storage (CCUS). According to a statement from DOE Secretary Rick Perry, "The vital importance of both these energy technologies are often under-recognized in their contributions to clean air."

The initiatives aim to promote areas such as improved power system integration and applications that include hybrid nuclear-renewable systems.

Background

The U.S. nuclear industry is facing significant challenges from sluggish power demand, inexpensive natural gas and the rise of renewable energy. This is especially true in the Midwest, where the use of wind power and other renewable power options are being used increasingly. In addition, several countries have been seeking ways to reduce their dependency on nuclear energy following Japan's Fukushima nuclear accident in 2011.

By the end of 2021, twenty-four of the operating nuclear power plants in the United States are either set to close or will no longer be profitable according to a report by Bloomberg New Energy Finance (BNEF) that was issued on May 15, 2018. In addition, the report cautions that more plants are likely to close. (See LLW Forum News Flash titled, "Report Cautions Early Retirement Risks for Nuclear Power Plants: Electricity Demand, Renewable Energy and High Fixed Costs Pressure Nuclear Fleet," May 22, 2018.)

In May 2018, Japan released a draft of an updated basic energy policy. The document keeps Japan's preferred mix of power sources for 2030 in line with targets that were set three years ago, despite criticism that it placed too much emphasis on nuclear power.

Bloomberg New Energy Finance

Report Cautions re Early Retirement Risks for U.S. Nuclear Plants

By the end of 2021, twenty-four of the operating nuclear power plants in the United States are either set to close or will no longer be profitable according to a report by Bloomberg New Energy Finance (BNEF) that was issued on May 15, 2018. In addition, the report cautions that more plants are likely to close.

In March 2018, a similar analysis found that half of U.S. coal-fired power plant capacity is also facing significant financial challenges.

Overview

According to Power Magazine, which reported on the BNEF study, the struggling plants have a total generating capacity of 32.5 gigawatts. The U.S. Energy Information Administration lists the total capacity of the U.S. nuclear power fleet at slightly over 100 gigawatts.

In the BNEF report, analyst Nicholas Steckler and co-author Chris Gadomski state that it would cost approximately $1.3 billion to address the revenue gaps for all of the struggling plants across the country. The industry has successfully convinced policy makers in states including New York, Illinois and New Jersey to take steps to assist struggling plants in recognition of their emissions-free generation and concerns about job losses.

Despite the cautionary tone, the report finds that the average U.S. nuclear plant still is expected to make money before taxes, especially on the East Coast.

Background

According to the BNEF study, the industry is increasingly challenged by sluggish power demand, inexpensive natural gas and the rise of renewable energy. This is especially true in the Midwest, where the use of wind power and other renewable power options are being used increasingly.

In this regard, a February 2018 report from BNER and the Business Council for Sustainable Energy found that renewable power had reached 18 percent of the U.S. electricity generation capacity. The expansion has been spurred, in part, by an increase in hyrdopower investments in the West. Nuclear power recently contributed about 20 percent, but that figure is declining as operating facilities continue to shut down.

In addition, the U.S. Energy Department (DOE) is currently weighing a March 2018 request from the competitive power unit at FirstEnergy Corporation to declare that an emergency exists in its PJM market. (See *LLW Notes,* March/April 2018, p. 29.) The PJM Energy Market procures electricity to meet consumer's demands both in real time and in the near term. It includes the sale or purchase of energy in PJM's Real-Time Energy Market (five minutes) and Day-Ahead Market (one day forward). If DOE Secretary Rick Perry agrees to the request, it would mean the PJM would have to compensate both nuclear and coal generators in the at-risk market in order to protect the stability of the grid.

Nuclear Power Plants and Other NRC Licensees

News Briefs for Nuclear Power Plants Across the Country

The following news briefs provide updates on recent activities, enforcement actions and general events at nuclear power plants and other licensees around the country. The briefs are organized by compact and state.

For additional information, please contact the referenced facility or licensee.

Atlantic Compact/State of New Jersey

Oyster Creek Nuclear Power Plant On July 2, 2018, U.S. Nuclear Regulatory Commission (NRC) staff presented a webinar for interested members of the public regarding the decommissioning of the Oyster Creek nuclear power plant, which is located in Lacey Township (Ocean County), New Jersey. The purpose of the webinar was to provide key facts about the decommissioning process and how the NRC regulates such activities through on-site inspections and other reviews. During the webinar, participants were able to view slides prepared by NRC staff and ask questions in writing via a webpage set up to host the session. On July 17, 2018, the NRC will also hold a public meeting in Lacey Township to discuss and accept public comments on the Post-Shutdown Decommissioning Activities Report for Oyster Creek submitted by Exelon. Oyster Creek is scheduled to permanently cease operations in September 2018. *For additional information, please contact Diane Screnci at (610) 337-5330 or Neil Sheehan at (610) 337-5331.*

Central Interstate Compact/State of Louisiana

River Bend Nuclear Power Plant On June 6, 2018, NRC announced that the agency is seeking public comment on a draft supplemental environmental impact statement (SEIS) for renewing the operating license of the River Bend nuclear power plant in Louisiana. The draft report contains the NRC staff's evaluation and preliminary conclusion that the environmental impacts would not preclude renewing the license for an additional 20 years of operation. River Bend is a boiling-water reactor located about 24 miles northwest of Baton Rouge. Entergy Louisiana, LLC and Entergy Operations Inc. submitted the renewal application on May 31, 2017. The NRC's review of the application consists of a technical safety review and an environmental review. The draft SEIS is supplement 58 to NUREG-1437, Generic Environmental Impact Statement for License Renewal of Nuclear Plants. In a related *Federal Register* notice that was also published on June 6, 2018, the NRC provided detailed instructions on how to submit written comments on the draft SEIS. Comments will be accepted through July 23, 2018. *The River Bend license renewal application and general information about reactor license renewal are available on the NRC website at www.nrc.gov. For additional information, please contact Scott Burnell of the NRC at (301) 415-8200.*

Central Midwest Compact/State of Illinois

Clinton Nuclear Power Plant On June 21, 2018, NRC announced that the agency has launched a Special Inspection at the Clinton nuclear power plant to review the circumstances surrounding the inoperability of the emergency diesel generators for approximately three days during a recent refueling outage. During the inspection, which began the day before the announcement, the three-member team reviewed the sequence of events and the licensee's root cause analysis to determine the probable causes, evaluate Exelon's compliance to shutdown procedures and assess the corrective actions to address the inoperability. The team spent time both on and off of the site. After the inspection, a report documenting the team's findings will be issued and made publicly

available. The single-unit plant is operated by Exelon Generation Company and is located in Clinton, Illinois—approximately 23 miles southeast of Bloomington. Per NRC regulations, at least one emergency diesel generator must be operable during a refueling outage. Emergency diesel generators are safety-related systems designed to provide power to the site if there is a loss of offsite power. During the May outage, plant workers removed each emergency diesel generator from service one at a time to perform maintenance activities. However, as they were working on the second diesel, a plant worker discovered that the first diesel was not completely restored to an operable status. Once the issue was identified, workers took immediate action to restore one diesel generator to operable service as required per regulations. *For additional information, please contact Viktoria Mitlyng at (630) 829-9662 or Prema Chandrathil at (630) 829-9663.*

Midwest Compact/State of Missouri

Northwest Medical Isotopes LLC On May 9, 2017, NRC announced that agency staff has issued a construction permit to Northwest Medical Isotopes LLC (NWMI) for a molybdenum-99 production facility in Columbia, Missouri. The permit is for a site at the Discovery Ridge Research Park. The Commissioners authorized the Director of the NRC's Office of Nuclear Reactor Regulation to issue the permit following a hearing on the application on January 23, 2018. The Commission found the staff's review of the application sufficient to make the necessary regulatory safety and environmental findings. NWMI submitted its application for permission to build the facility in two parts on February 5, 2015 and July 20, 2015. It will produce molybdenum-99, which later generates the technicium-99m that is used in one of the most common nuclear medicine procedures in the United States. The NRC's Advisory Committee on Reactor Safeguards (ACRS) independently reviewed aspects of the application that concerned safety, as well as the staff's safety evaluation report. The committee provided the results of its review to the Commission in November 2017. The staff completed its environmental review and issued the final environmental impact statement for the proposed facility in May 2017. *For additional information, please contact Scott Burnell of the NRC at (301) 415-8200.*

Northwest Compact/State of Idaho

Idaho State University On May 4, 2018, NRC announced that the agency is proposing an $8,500 fine to Idaho State University for failing to maintain control and surveillance of one gram of radioactive material. In an inspection report on February 7, 2018, two apparent violations of NRC requirements were identified involving: (1) the failure to control and maintain surveillance of licensed radioactive material; and, (2) the failure to provide accurate and complete information to the NRC in its inventory records. The NRC considers the loss of control of licensed radioactive material a significant regulatory concern because of the potential for unauthorized possession or use of licensed radioactive material or the unnecessary exposure of members of the public to radiation. The NRC considers the failure to provide information to the Commission that is complete and accurate in all respects a significant regulatory concern because it affects the NRC's ability to perform its regulatory functions. On March 21, 2018, the NRC staff met with university representatives during a pre-decisional enforcement conference to discuss the proposed violations. Because the university took prompt corrective actions after the violations were identified, no fine was proposed for failing to provide accurate and complete information to the NRC. The university has 30 days in which to dispute the fine or request involvement of a neutral third-party mediator to resolve the issues. *For additional information, please contact Victor Dricks at (817) 200-1128.*

Southeast Compact/States of Florida and Tennessee

Turkey Point Nuclear Generating Units 3 and 4 On May 31, 2018, NRC staff held a meeting in Homestead, Florida to seek the public's views on environmental issues that the agency should consider in reviewing an application from Florida Power & Light (FP&L) for an additional 20 years of operation for Turkey Point Nuclear Generating Units 3 and 4. During the meetings, which were held at the City of Homestead City Hall, staff gave presentations that describe the environmental review process and the proposed review schedule. Each meeting's presentations were followed by a formal public comment period. NRC also held open houses to provide the public with the opportunity to speak informally with agency staff. NRC staff will consider written comments that were submitted on environmental issues before the deadline of June 21, 2018. FP&L submitted the Turkey Point subsequent license renewal application on January 30, 2018. The subsequent license renewal process determines whether an operating reactor license can be extended for an additional 20 years. *The FP&L application, minus proprietary details, is available on the NRC website at www.nrc.gov. For additional information, please contact Scott Burnell of the NRC at (301) 415-8200.*

Watts Bar Nuclear Power Plant On April 30, 2018, the NRC announced that the agency has launched a special inspection into the circumstances surrounding voids in the residual heat removal system at the Watts Bar nuclear plant, which made the system inoperable for a time on both Unit 1 and Unit 2. The plant, which is operated by the Tennessee Valley Authority (TVA), is located near Spring City, Tennessee—approximately 60 miles southwest of Knoxville. The residual heat removal system is used to complete the plant's cooldown process at lower pressures and also provides important functions during certain accident scenarios. On April 19, 2018, TVA informed the NRC that calculation revisions had reduced the acceptable size of a void due to gases in the system. On April 21, 2018, the accumulated gas in the Unit 1 system was found to have exceeded the acceptable value. On April 22, 2018, the same observation was made on Unit 2. The NRC inspectors are reviewing the sequence of events, drawings, calculations and acceptance criteria; walking down portions of the plant's systems; evaluating TVA's response; and, assessing the adequacy of actions to address the causes of the issues. A report documenting the results of the inspection should be issued within 45 days of the completion of the inspection. *For additional information, please contact Roger Hannah at (404) 997-4417 or Joey Ledford at (404) 997-4416.*

U.S. Department of Energy (DOE)

EM Assistant Secretary White Lays Out DOE Priorities

In two public appearances in early June 2018, U.S. Department of Energy (DOE or Department) Assistant Secretary for Environmental Management (EM) Anne White laid out her vision and priorities for the Department's environmental cleanup program.

White's two appearances included remarks at the annual meeting of the Energy Facility Contractors Group (EFCOG) at DOE headquarters on June 6, 2018, as well as a House Nuclear Cleanup Caucus event held on Capitol Hill later the same day that included several members of Congress who represent cleanup sites.

White's vision was also detailed in an EM newsletter article dated June 12, 2018.

Overview

White, who was sworn in as the new EM Assistant Secretary on March 29, 2018, pledged to bring more rigors to the EM program. She stated that she aims to reinstall a completion mentality focused on getting complex jobs done through new mindsets in contracting and procurement, as well as with regard to regulatory reform.

"Collectively, we have to think bigger and smarter about how to get to completion," stated White. She credited that attitude to successes EM enjoyed in accomplishing cleanup at the Rocky Flats and Fernald sites, as well as in the successful demolition of the massive K-25 Building at Oak Ridge. "There is lots of work to do, but this is a program that can be successful," stated White at the EFCOG event.

Contracting

According to White's remarks, EM plans to revive the concept of "end state contracting" in major contracts and procurements in the coming months. The Department states that these contracts will help shape EM over the next 10 years or so.

"We're going to create a situation where there is a very defined work scope that has specific end states that lead to limiting liabilities to get them off the books," stated White. "The concept is that it will deliver real results that are measurable and reduce risk. That gets successes rolling a little more quickly in a more defined way. It creates some enthusiasm for the program, for the mission."

"We're absolutely partners," White said in addressing contractors. "We have to be partners. We have to work together between headquarters, field sites, and the contractors to effectively deliver this program, and that needs to be a well-functioning machine."

Write also emphasized the importance of holding contractors accountable. "But when they are performing and doing the work properly and safely, we need to have contracting structures that incent that in a very strong way," stated White. "We need you guys to bring your 'A-Team,' and your 'A-Game.'"

Regulatory Reform

Beyond contracting reform, White said EM is engaged in an administration-wide effort at regulatory reform. "I know people always say we need to do regulatory reform, but this administration certainly has demonstrated they are working to be fairly aggressive in that area, so EM is very engaged in that process," said White. "The next part of it always is making sure that the implementation is driven down into the field in a way that is meaningful, provides cost savings and effectiveness."

At the caucus event on Capitol Hill, White said that her vision of success for EM is one in which many can share credit. "It has to be not my success. It has to be our success," she said. "It has to be the program's success. For me, I would like to see the program in such a stable mode that we have all worked together to create a path forward."

Environmental Liabilities

White said that she is concerned that the government's environmental liabilities are the third largest behind only the federal debt and entitlement programs such as Medicare and Social Security. According to White's remarks, the environmental liabilities associated with the EM program are a major part of that.

"It's a substantial liability," said White at the caucus event. "It's growing, not getting smaller." According to White's statements, her focus is on "getting an understanding of what's driving that, getting it under control and getting the systems, the contracting and all the things that are needed to really needed to start making some meaningful reduction against that liability." She added, "We need to capture the moment, move forward, and start to reduce these liabilities."

Background

On January 3, 2018, the White House announced President Donald J. Trump's intent to nominate White to be the EM Assistant Secretary. On March 22, 2018, White was confirmed for the position by voice vote of the U.S. Senate. White was sworn in as the new EM Assistant Secretary on March 29, 2018. (See *LLW Notes*, March/April 2018, p. 30.)

White is the founder of Bastet Technical Services, LLC — a consulting firm that has been engaged in providing strategic solutions to solve complex environmental challenges across the DOE complex. She has more than 25 years of experience across a broad range of activities within the nuclear field, mainly focused on project and program management projects with complex technical, regulatory and stakeholder challenges.

"She has industry-recognized credentials in technical skills that lead to sound, technically underpinned, cost effective solutions," stated an earlier announcement. "She has extensive hands on in the field experience at many of the Environmental Management sites for which she will have responsibility."

White, who has supported a number of emerging nuclear power nations to develop legal and regulatory structures and national policies, received a Master's Degree of Science in Nuclear Engineering from the University of Missouri-Columbia.

For additional information, please contact Douglas Tonkay, Director of the U.S. Department of Energy's Office of Disposal, at (301) 903-7212 or at Douglas.Tonkay@em.doe.gov or go to www.energy.gov.

DOE Plans to Move Forward with Key WIPP Infrastructure Upgrade

On May 14, 2018, the Office of Environmental Management (EM) at the U.S. Department of Energy (DOE) announced plans to move forward with a key infrastructure upgrade at the Waste Isolation Pilot Plant (WIPP) in New Mexico. According to the announcement, the upgrade will enable increased progress in DOE's mission to address the environmental legacy of decades of nuclear weapons production and government-sponsored nuclear energy research.

Assistant Energy Secretary for Environmental Management Anne White approved the start of construction for the $288 million underground

ventilation system. The Safety Significant Confinement Ventilation System (SSCVS) will be key to DOE's plans to increase shipments of transuranic waste to WIPP from cleanup sites across the DOE complex.

"This will be a significant improvement for WIPP in support of its critical role in our national mission," said White. "I am appreciative of the unwavering support from our local, state and federal elected officials and stakeholders at WIPP who have helped to ensure we have proper funding to make infrastructure improvements, like the new ventilation system."

According to EM, the SSCVS will significantly increase the amount of air available to the underground portion of the WIPP facility. As a result, DOE will be able to perform transuranic waste emplacement activities simultaneously with facility mining and maintenance operations. The new ventilation system will also allow for easier replacement and preventative maintenance activities. EM expects construction of the new ventilation system to be completed by early 2021.

The new ventilation system is one of a number of infrastructure projects planned for WIPP in the coming years to enable the facility to continue to play an integral role in DOE's cleanup program. To date, more than 90,000 cubic meters of transuranic waste have been disposed of at WIPP.

DOE Invests $64 Million in Advanced Nuclear Technology

By press release dated June 18, 2018, the U.S. Department of Energy (DOE or Department) announced nearly $64 million in awards for advanced nuclear energy technology to DOE national laboratories, industry and 39 U.S. universities in 29 states. In total, DOE's Office of Nuclear Energy selected 89 projects for funding concerning crosscutting technology and infrastructure development, facility access and nuclear energy research.

"Because nuclear energy is such a vital part of our nation's energy portfolio, these investments are necessary to ensuring that future generations of Americans will continue to benefit from safe, clean, reliable and resilient nuclear energy," said Ed McGinnis, DOE's Principal Deputy Assistant Secretary for Nuclear Energy. "Our commitment to providing researchers with access to the fundamental infrastructure and capabilities needed to develop advanced nuclear technologies is critical."

The awards are dispersed under three DOE nuclear energy programs: the Nuclear Energy University Program (NEUP), the Nuclear Energy Enabling Technologies (NEET) program and the Nuclear Science User Facilities (NSUF) program.

Nuclear Energy University Program

DOE is awarding $47 million through NEUP to support 63 U.S. university-led nuclear energy research and development projects in 29 states. According to the Department, these projects will maintain U.S. leadership in nuclear research across the country by providing top science and engineering faculty and their students with opportunities to develop innovative technologies and solutions for civil nuclear capabilities.

An additional $5 million is being awarded under NEUP to support 18 university-led projects for research reactor and infrastructure improvements. DOE states that these projects will provide important safety, performance and educational upgrades to a portion of the nation's 25-university research reactors.

Nuclear Energy Enabling Technologies

DOE is awarding $5 million under the NEET program for five research and development projects led by DOE national laboratories, industry and universities. Together, according to

the Department, they will conduct research to address crosscutting nuclear energy challenges that will help to develop advanced sensors and instrumentation, advanced manufacturing methods and materials for multiple nuclear reactor plant and fuel applications.

Nuclear Science User Facilities

Under its NSUF program, DOE has selected one industry-led and two university-led projects to investigate important nuclear fuel and material applications. According to the Department, these projects will receive $6.6 million in total for research, facility access costs and expertise in the following topics: experimental neutron and ion irradiation testing, post-irradiation examination facilities, synchrotron beamline capabilities and technical assistance for design and analysis of experiments through the NSUF program.

For more information on the Office of Nuclear Energy's programs and the complete list of awardees, visit their website at https://www.energy.gov/ne/office-nuclear-energy.

DOE Announces 10 Projects to Support Advanced Nuclear Reactor Power Plants

In a June 2018 press release, the U.S. Department of Energy (DOE) announced up to $24 million in funding for 10 projects as part of a new Advanced Research Projects Agency-Energy (ARPA-E) program: Modeling-Enhanced Innovations Trailblazing Nuclear Energy Reinvigoration (MEITNER).

"Nuclear energy is an essential component of the U.S. energy mix, and by teaming up with the private sector to reduce costs and improve safety, we are keeping America ahead of the curve in advanced reactor design and technology," said U.S. Secretary of Energy Rick Perry. "These next-generation ARPA-E technologies help us maintain our competitive, technological edge globally, while improving the resilience of the grid and helping provide reliable, baseload electricity to each and every American."

According to the release, MEITNER teams will identify and develop innovative technologies that enable designs for lower cost, safer, advanced nuclear reactors.

Overview

Nuclear power generates nearly 20 percent of electricity in the United States, offering a reliable source of power that complements the country's diverse portfolio of energy generation sources. Existing nuclear power plants, however, face comparatively high operational and maintenance costs.

MEITNER projects will leverage design, new manufacturing processes and technologies to lower costs and increase the competitiveness of nuclear power. Funded projects will support advanced reactor designs that achieve lower construction cost and autonomous operations while also improving safety.

ARPA-E developed this funding opportunity in close coordination with DOE's Office of Nuclear Energy. MEITNER teams will have access to Department modeling and simulation resources as they develop their concepts. Project teams will coordinate regularly with a DOE-supported resource team of experts from across the Department and DOE's National Laboratories.

For additional information on ARPA-E's MEITNER program, please go to https://arpa-e.energy.gov/?q=arpa-e-programs/meitner.

U.S. Nuclear Regulatory Commission (NRC) and Federal Energy Regulatory Commission (FERC)

NRC and FERC Meet re Grid Reliability and Reactor Issues

On June 7, 2018, the U.S. Nuclear Regulatory Commission (NRC) and the Federal Energy Regulatory Commission (FERC) held a joint meeting at FERC headquarters in Washington, D.C. The meeting began at 9:00 a.m. and ended at approximately 11:15 a.m. It was held at 888 First Street NE in Washington, DC.

During the meeting, staff members from both agencies and the North American Electric Reliability Corporation briefed NRC and FERC Commissioners on topics including:

- grid reliability;
- operating reactor issues;
- reactor decommissioning;
- new reactor construction;
- small modular and advanced reactor activities; and,
- cybersecurity.

The meeting was available via webcast to interested stakeholders.

For additional information, please contact Scott Burnell of the NRC at (301) 415-8200.

U.S. Nuclear Regulatory Commission (NRC)

NRC Issues RIS re National Terrorism Advisory System

On June 1, 2018, the U.S. Nuclear Regulatory Commission (NRC) issued Regulatory Issue Summary (RIS) 2018-03 to provide information on the U.S. Department of Homeland Security's (DHS's) National Terrorism Advisory System (NTAS) to licensees who are authorized to possess Category 1 and 2 quantities of radioactive material.

Although RIS 2018-03 requires no action or written response on the part of any addressee, and it does not impose new regulatory requirements on NRC licensees, it provides information that addressees may wish to consider in the event that DHS issues an NTAS alert.

Overview

In the NTAS advisory system, an "Elevated Alert" threat level warns of a credible terrorist threat against the United States and its territories that is general in both timing and target, or the alert details significant trends and developments in terrorism such that it is reasonable to recommend the implementation of protective measures to thwart or mitigate an attack. An "Imminent Alert" warns of a credible, specific and impending terrorist threat against the United States and its territories and recommends the implementation of protective measures to thwart or mitigate an attack.

In RIS 2018-03, the NRC recommends that licensees in possession of Category 1 and 2 quantities of radioactive material as listed in Appendix A to 10 CFR Part 37 maintain awareness of the NTAS. The NRC further recommends that, following an NTAS alert, these

licensees should consider the information found in the RIS enclosures.

NRC notes in RIS 2018-03 that licensees required to implement a physical security plan in accordance with paragraph (a) of 10 CFR 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage," are also required under 10 CFR 73.55(k)(10) to establish, maintain and implement a threat warning system. NRC advises that these licensees may wish to use the information in RIS 2018-03 to revise their existing threat warning system.

Background

On March 11, 2002, President George W. Bush signed Homeland Security Presidential Directive (HSPD)-3, creating the Homeland Security Advisory System (HSAS). The HSAS was a graduated, color-coded threat advisory system to alert government authorities at all levels, private-sector stakeholders and the general public about the risk of terrorist attacks. The HSAS consisted of five levels, ranging from the lowest threat level (Green) to the most severe (Red). Based on HSPD-3, the NRC issued a series of RISs to inform NRC licensees of the descriptions of the various threat advisory conditions and to inform NRC licensees about the preplanning of graded protective measures to respond to changes in the threat environment.

On January 26, 2011, President Barack Obama issued Presidential Policy Directive (PPD)-7, "National Terrorism Advisory System." PPD-7 reaffirmed the need for a strong, effective national-level advisory system and directed DHS to establish a new threat advisory system to replace the HSAS.

The NTAS has replaced the previous color-coded threat levels with a two-tiered advisory system designed to provide timely and relevant terrorist threat information to affected government, private-sector and public stakeholders, as appropriate and in accordance with classification levels. The NTAS's two threat levels are Elevated Alert and Imminent Alert.

In the changed threat environment after the attacks of September 11, 2001, the Commission determined that certain licensed material should be subject to enhanced security requirements, and that individuals with unescorted access to risk-significant quantities of certain radioactive material should be subject to background investigations. As part of the development of the enhanced security measures for this licensed material, the NRC performed threat and vulnerability assessments. The purpose of these assessments was to identify gaps or vulnerabilities in security and the effectiveness and costs of certain physical protection enhancements at various licensed facilities. The agency used the results of these assessments to develop enhanced security requirements that were issued to licensees via orders, using a graded approach based on the relative risk and quantity of material possessed by the licensee.

Generically applicable requirements are most effectively implemented through rulemaking rather than by orders. Therefore, the NRC developed a rule for enhanced security for Category 1 and 2 quantities of radioactive material. In developing this rule, the NRC considered, among other things, the various orders, lessons learned during implementation of the orders, recommendations of an independent external review panel and the Materials Program Working Group, and stakeholder comments received on the proposed rule and draft implementation guidance.

On December 8, 2011, NRC issued SECY-11-0170, "Final Rule: Physical Protection of Byproduct Material," in which the NRC staff requested Commission approval to publish a final rule in the *Federal Register* that would add a new 10 CFR Part 37. The final rule established security requirements for the commercial use of Category 1 and 2 quantities of radioactive

material and for the transportation of small quantities of irradiated fuel.

On March 16, 2012, NRC issued SRM-SECY-11-170, "Final Rule: Physical Protection of Byproduct Material, in which the Commission approved issuance of 10 CFR Part 37 to enhance the security measures for Category 1 and 2 quantities of radioactive material. On March 19, 2013, NRC published the final rule. (See 78 *Federal Register* 16,921). The new 10 CFR Part 37 established physical security requirements for the possession and use of Category 1 and 2 quantities of radioactive material that are listed in Appendix A to 10 CFR Part 37. NRC licensees were required to comply therewith by March 19, 2014.

For additional information, please contact Duane White of the NRC at (301) 287-3627 or at Duane.White@nrc.gov.

NRC Names Margaret Doane as Next Executive Director for Operations

By press release dated June 26, 2018, the U.S. Nuclear Regulatory Commission (NRC) announced that the Commission has selected Margaret Doane, the NRC's General Counsel, as the agency's next Executive Director for Operations. This is the agency's highest-ranking career position.

Doane, who will be the first female EDO in the NRC's history, succeeds Victor McCree. After long and distinguished service to the NRC, McCree retired on June 30, 2018.

Statement

"In working with Margie for the past 10 years, I have observed her professionalism, her mastery of the complex issues associated with our important safety and security mission, and her devotion to those she leads," NRC Chairman Kristine Svinicki said.

"These attributes will continue to guide her work as she sets about building upon the platform created by Vic and his predecessors as EDO in continuing to advance our critical work," continued Chairman Svinicki.

Background

Doane joined the NRC in 1991 as a Special Assistant (Legal) in the Office of the Secretary. She subsequently served as an attorney in the Office of Commission Appellate Adjudication from 1991 to 1998. During this time, she was responsible for drafting opinions on novel issues related to the NRC's licensing and regulatory responsibilities. From 1998 to 2004, Doane served on the staff of NRC Commissioner Jeffrey Merrifield as Legal Counsel, Deputy Chief of Staff and Chief of Staff. In 2004, she became Deputy Director and, in 2007, Director of the Office of International Programs. In that role, she led the agency's support of U.S. interests abroad in the safe and secure use of nuclear materials, including licensing exports and imports of nuclear materials and equipment. In 2012, the Commission appointed Doane as General Counsel.

Prior to joining the NRC, Doane served as an attorney advisor for the Department of Veterans Affairs, Board of Veterans Appeals. She received a Bachelor of Arts degree in Economics from Loyola College in Baltimore and a Juris Doctorate from the University of Maryland School of Law.

For additional information, please contact the NRC's Office of Public Affairs at (301) 415-8200.

NRC Announces Senior Management Selections

On May 3, 2018, the U.S. Nuclear Regulatory Commission (NRC) announced the following senior management selections in the Office of New Reactors (NRO), the Office Nuclear Regulatory Research (RES), the Office of Nuclear Reactor Regulation (NRR) and the Office of Commission Appellate Adjudication (OCAA):

- Office of New Reactors: Frederick Brown will become Director of NRO, effective immediately. Brown, whose permanent position was Deputy Executive Director for Materials, Waste, Research, State, Tribal, Compliance, Administration, and Human Capital Programs, has been serving as the NRO Acting Director. He joined the NRC in 1994, working in Region III, having served in both resident and senior resident inspector positions. After joining the Senior Executive Service (SES), Brown held positions in NRO and NRR, including Director of the Division of Inspection and Regional Support. He worked in Region II as the Deputy Regional Administrator for Construction and has worked in various SES positions in the Office of the Executive Director for Operations and the Office of the Chief Information Officer. Before joining the NRC, Brown worked as an engineer, supervisor and manager at California's Mare Island Naval Shipyard. He holds a Bachelor of Science degree, with a double major from the United States Merchant Marine Academy at Kings Point, New York.

- Office of Nuclear Regulatory Research: Effective July 3, 2018, Raymond Furstenau will become Director of RES, following the retirement of Mike Weber. Furstenau will transition to the NRC later this month from his current SES position at the U.S. Department of Energy (DOE), where he serves as Associate Principal Deputy Assistant Secretary and Central Technical Authority of the Office of Nuclear Energy. He has previously served as the Chief of Nuclear Safety for the Under Secretary of Energy. Prior to his senior leadership positions at DOE, Furstenau worked in various roles at the DOE Idaho Operations Office for more than 25 years, providing federal oversight of nuclear energy and national security research programs and safety oversight of nuclear facility operations at the Idaho National Laboratory. He also served in the military on active duty as an officer in the Army Finance Corps and in the Army Reserve. Furstenau holds a Bachelor of Science degree in Applied Science and Engineering from the U.S. Military Academy and a Master of Science degree in Nuclear Science and Engineering from Idaho State University.

- Office of Nuclear Reactor Regulation: Ho Nieh will become Director of NRR in August. Nieh, a member of the SES, will return to the NRC this summer from the Organisation for Economic Cooperation and Development, where he serves as the Director of the Division of Nuclear Safety Technology and Regulation at the Nuclear Energy Agency. He began his NRC career in 1997 as an engineer in Region I, joining the agency after serving in various engineering positions at the Knolls Atomic Power Laboratory. At the NRC, Nieh worked as a resident and senior resident inspector before joining the newly created Office of Nuclear Security and Incident Response in 2003. He has also served in various management positions in NRR, including as Director of the Division of Inspection and Regional Support, as well as Director of the Division of Reactor Projects. Additionally, Nieh was assigned to the International Atomic Energy Agency (IAEA), Department of Nuclear Safety and Security. He also served as Chief of Staff to NRC Commissioner Bill Ostendorff. He graduated from the U.S. Naval Nuclear Power School and holds a Bachelor of Engineering in

Marine Engineering from the State University of New York Maritime College and a Master of Business Administration from Johns Hopkins University.

- Office of Commission Appellate Adjudication: Effective June 24, 2018, Catherine Scott will become Director of OCAA. She most recently served in the Office of the General Counsel (OGC) in the position of Assistant General Counsel for Operating Reactors from 2016 to the present and for Materials Litigation and Enforcement from 2008 to 2016. She was appointed to the Committee to Review Generic Requirements in 2017. Scott also served as a legal assistant to NRC Commissioner Peter Lyons from 2005 to 2008. In 2001, she was assigned a detail position to the Committee on Energy and Commerce in the U.S. House of Representatives. Scott began her career as an attorney in the Reactor Programs division in OGC. She is a graduate of Boston University and Suffolk University Law School.

For additional information, please contact the NRC Office of Public Affairs at (301) 415-8200.

NRC to Perform Retrospective Review of Administrative Regulations

On May 3, 2018, the U.S. Nuclear Regulatory Commission (NRC) announced that the agency is soliciting public comments on its strategy for identifying administrative regulations that are outdated or duplicative and can be eliminated without an adverse effect on the agency mission. (See 83 *Federal Register* 19,464 dated May 3, 2018.)

The NRC anticipates this effort will improve how applicants and licensees submit information, keep records and report to the agency.

Overview

The goal of the retrospective review is to enhance the management and administration of regulatory activities, as well as to ensure that the agency's regulations remain current and effective. The effort is limited to identifying outdated or duplicative, non-substantive administrative regulations that may be eliminated without an adverse effect on public health or safety, common defense and security, protection of the environment, or regulatory efficiency and effectiveness.

In particular, the review is intended to identify regulatory changes that are administrative in nature and which will make information submittal, record keeping and reporting processes more efficient for the agency, applicants and licensees.

Discussion

The *Federal Register* notice includes a table that provides a detailed outline of the NRC's approved strategy for the retrospective review and seeks public comment on the criteria that the agency proposes to use to evaluate potential changes to the requirements. In summary, the retrospective review strategy involves the following seven steps:

- develop criteria to evaluate potential regulatory changes to administrative requirements;
- gather NRC staff input on administrative regulations that might fit the proposed criteria;
- review historical correspondence documents submitted to the NRC related to eliminating duplicative or outdated administrative regulations;

- include opportunities for public comment;
- interact with the public throughout the review process by conducting public meetings;
- review stakeholder input; and,
- develop rules or rulemaking plans to eliminate or modify administrative requirements, as appropriate.

For the purpose of this review, administrative regulations are those that impose recordkeeping or reporting requirements or address areas of agency organization, procedure or practice.

Draft Criteria for Selecting Changes to Administrative Requirements

The NRC developed the following draft criteria and goals to evaluate potential regulatory changes of this nature:

- Routine and periodic recordkeeping and reporting requirements, such as directives to submit recurring reports, which the NRC has not consulted or referenced in programmatic operations or policy development in the last 3 years: The goal of this criterion is to identify outdated requirements for information collection.
- Reports or records that contain information reasonably accessible to the agency from alternative resources or routine reporting requirements where less frequent reporting would meet programmatic needs: The goal of this criterion is to identify duplicative information or overused collection requirements.
- Record keeping and reporting requirements that result in significant burden – i.e., more than $100,000 overall per potential regulatory change; over 1,000 reporting hours for each affected individual or entity over a 3-year period; or, ten hours for each affected individual or entity each calendar year or per application: The goal of this criterion is to ensure that elimination or modification of outdated or duplicative recordkeeping and reporting requirements could result in appreciable reductions in burden for the NRC, licensees, or both. The criterion is not intended to be used as a stand-alone consideration, but rather as a tool to ensure that the retrospective review is focused on efforts that will in fact result in a reduction in burden.
- Reports or records that contain information used by other federal agencies, state and local governments, or federally recognized Tribes will be eliminated from the review: The goal of this criterion is to decrease the potential for unintended consequences. For example, the NRC collects certain information on behalf of other government agencies. It is not the intent of this effort to change that practice.

The evaluation criteria are intended to serve as factors of consideration to guide the staff's decision-making. The staff is not proposing to use the criteria to make stand-alone determinations. Instead, the criteria will be weighed against other activities outlined in the strategy, such as staff programmatic experience, comments received and the correspondence review.

The first three draft criteria are intended to "screen-in" regulations for inquiry for potential elimination or modification, as they address whether a regulation is outdated or duplicative. These screening-in criteria are not intended to be mutually exclusive. A given regulation may satisfy one or more of the criteria. The final draft criterion is intended to "screen-out" regulations from further inquiry or for potential elimination or modification so as to avoid unintended consequences.

Specific Questions

The NRC is providing an opportunity for the public to submit information and comments on the criteria that the NRC proposes to use to identify administrative requirements for potential modification or elimination. The NRC is particularly interested in gathering input in the following areas:

- Do the proposed evaluation criteria serve the purposes described in this notice? Why or why not?

- The NRC is considering whether the burden reduction minimum is appropriate. Is "significant burden" the appropriate measure? Are the examples given for the third identified criterion appropriate or useful? Should the NRC use different bases for measuring "significant burden" and, if so, what are these measures and how would they result in a more accurate or complete measurement of burden?

- The NRC is considering multiple thresholds for different classes of regulated entities, as a single threshold might not be useful to identify burden reductions for all licensee types. What is the appropriate threshold for your entity class (*e.g.*, operating reactor, industrial radiographer, fuel cycle facility)?

- Are there other evaluation criteria the NRC should consider using in its retrospective review of administrative regulations? What are those criteria and why?

Interested stakeholders may suggest other criteria. In such case, NRC requests that stakeholders provide supporting rationale for any alternative criteria.

Submitting Comments

The comment period deadline was July 2, 2018. Comments received after this date will be considered if deemed practical to do so. Due to the NRC's schedule for completing the retrospective review of administrative regulations, the agency will not prepare written responses to each individual comment.

Comments can be submitted through the following methods:

- federal Rulemaking website at http://www.regulations.gov by searching for Docket ID NRC-2017-0214;

- email to Rulemaking.Comments@nrc.gov;

- facsimile to (301) 415-1101;

- mail to Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Rulemakings and Adjudications Staff; or,

- hand deliver to 11555 Rockville Pike, Rockville, MD 20852 between 7:30 a.m. to 4:15 p.m. on federal workdays.

Interested stakeholders are requested to please include Docket ID NRC-2017-0214 in any submission.

Additional instructions related to submitting comments and contacts for further information are outlined in the Federal Register notice.

Public Meetings

Public input will be critical to identifying potential changes to administrative requirements as well as to provide data on the benefits and costs of existing NRC administrative regulations.

The NRC will conduct two public meetings to discuss the retrospective review process and recommendations. In addition, the NRC will seek input from the agency's existing committees — the Committee to Review Generic Requirements, Advisory Committee on Reactor Safeguards (ACRS) and the Advisory Committee on the

Medical Uses of Isotopes (ACMUI) — other federal agencies, state and local governments, federally recognized tribes and non-governmental organizations.

A notice of the location, time and agenda will be posted in the *Federal Register* and on the NRC's website at least ten (10) calendar days before the public meetings.

Background

On August 11, 2017, the NRC announced that the agency was initiating — beginning in the fall of the calendar year 2017 — a retrospective review of its administrative regulations to identify those rules that are outdated or duplicative. Once identified, the regulations will be evaluated to determine whether they can be eliminated without impacting the agency's mission.

On November 22, 2017, the NRC staff issued SECY–17–0119, "Retrospective Review of Administrative Regulations," which provided for Commission approval of the NRC staff's proposed strategy for the retrospective review of regulations. The staff requirements memorandum associated with SECY– 17–0119 approved the NRC staff's proposal and directed staff to implement the strategy.

Overall, the goal of the retrospective review is to enhance the management and administration of regulatory activities and to ensure that the agency's regulations remain current and effective. The review is intended to identify regulatory changes that are administrative in nature that will make the information submittal, record keeping and reporting processes more efficient for the staff, applicants and licensees.

The strategy takes into consideration the agency's overall statutory responsibilities, including mandates to issue new regulations, the number of regulations in Chapter I of title 10 of the *Code of Federal Regulations* and available resources. According to NRC, this effort will not impact the agency's mission, as it will be limited to identifying outdated or duplicative, non-substantive administrative regulations.

For additional information, please contact Margaret Ellenson of the NRC's Office of Nuclear Material Safety and Safeguards (NMSS) at (301) 415-0894 or at Margaret.Ellenson@nrc.gov or Andrew Carrera of NMSS at (301) 415-1078 or at Andrew.Carrera@nrc.gov.

NRC Issues Information Notices and Regulatory Issue Summaries

In May and June 2018, the U.S. Nuclear Regulatory Commission (NRC) released one new Regulatory Issue Summary (RIS) and a supplement to a 2002 RIS, as well as the two new Information Notice (IN) documents for calendar year 2018.

Regulatory Issue Summaries

NRC released the following RIS documents in May and June 2018:

- RIS 2002-22, Supplement 1, *Clarification on Endorsement of Nuclear Energy Institute Guidance in Designing Digital Upgrades in Instrumentation and Control Systems*, was issued on May 31, 2018 to clarify that it continues to endorse the Nuclear Energy Institute (NEI) guidance for designing, licensing and implementing digital upgrades and replacements to instrumentation and control (I&C) systems in a consistent and comprehensive manner; and,

- RIS 2018-03, *National Terrorism Advisory System and Protective Measures for the Physical Protection of Category 1 and*

Category 2 Quantities of Radioactive Material, was issued on June 1, 2018 to provide information on the U.S. Department of Homeland Security's (DHS's) National Terrorism Advisory System (NTAS) to licensees who are authorized to possess Category 1 and 2 quantities of radioactive material.

The above-referenced RIS documents do not require specific action or written responses on the part of addressees.

Information Notices

NRC released the following IN documents in June 2018:

- IN 2018-07, *Pump/Turbine Bearing Oil Sight Glass Problems,* was issued on June 13, 2018 to inform addressees of operating experience regarding pump or turbine bearing oil sight glass issues; and,

- IN 2018-08, *Failure to Enter the Required Technical Specifications Action Statement for Operation During Recent Surveillance Testing While Using a Reactor Protection System Test Bos,* was issued on June 13, 2018 to inform addressees of recent instances where operators of boiling water reactors (BWRs) allowed multiple instrument channels in the reactor protection system (RPS) circuitry to be bypassed without entering the appropriate action statement required by the licensee's technical specifications (TS).

Additional information can be found on the NRC's website at www.nrc.gov.

NRC Oversight Workshop re Focus on Vendor Inspection Activities

On June 14, 2018, the U.S. Nuclear Regulatory Commission (NRC) hosted its sixth Workshop on Vendor Oversight in Cleveland, Ohio.

The workshop, which was open to the public, ran from 8:00 a.m. - 5:30 p.m. at the Renaissance Cleveland Hotel. Workshop presenters included representatives from the NRC, the National Institute of Standards and Technology (NIST), the Electric Power Research Institute (EPRI), the Edison Welding Institute, Luminant Power, Paragon Energy Solutions and Westinghouse.

The workshop was structured to bring together members of the public, licensees, applicants and industry organizations, as well as vendors of safety-related parts, materials and services. Workshop sessions covered topics including counterfeit, fraudulent, or suspect items; supplier oversight challenges; commercial-grade dedication; reverse engineering; additive manufacturing (e.g., 3D printing); and, safety culture. NRC staff were available at the end of each workshop session for additional discussions.

For additional information, please contact Nicholas Savwoir of the NRC at Nicholas.Savwoir@nrc.gov or at (301) 415-0256.

NRC Issues Annual Report on Abnormal Occurrences for FY 2017

On June 11, 2018, the U.S. Nuclear Regulatory Commission (NRC) released its annual report to Congress on abnormal occurrences for fiscal year (FY) 2017. The report cites 11 medical events involving radioactive materials. It details the evaluation of each incident by the NRC, state agencies and licensees, as well as measures taken to ensure such incidents do not recur.

The report on abnormal occurrences for FY 2017 is published as NUREG-0090, Volume 40. It was transmitted to Congress on June 8, 2018.

Background

An accident or event is considered an abnormal occurrence if it involves a major reduction in the degree of protection of public health and safety. Abnormal occurrences can include, but are not necessarily limited to, the following:

- moderate exposure to or release of radioactive material licensed by the NRC or a state agency;
- major degradation of safety-related equipment; or,
- major deficiencies in design, construction, use of, or management controls for facilities or radioactive material.

Abnormal occurrences represent a very small fraction of the average number of nuclear medicine and radiation therapy procedures conducted annually.

Overview

For FY 2017, five reported abnormal occurrences happened at NRC licensees. All were medical events involving misadministration of radioactive material during cancer detection or treatment.

The NRC has agreements with 37 states under which the states regulate industrial and medical uses of radioactive materials. For FY 2017, six reported abnormal occurrences happened in Agreement States, all of which were medical events.

Two of the 11 events occurred in previous fiscal years and are included because the NRC completed its evaluation of these events in FY 2017.

The report includes a section on "other events of interest," which discusses one event that does not meet the abnormal occurrence criteria but attracted public interest. This was the human exposure event at the Department of Commerce's National Institute of Standards and Technology (NIST) in Gaithersburg, Maryland. In that event, a worker received a body dose after a broken ampoule resulted in radioactive contamination of the countertop and other surfaces of a laboratory.

For additional information, please contact Scott Burnell of the NRC at (301) 415-8200.

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 email (leave subject blank and type help in body of message). ..... **listserver@unixmail.rtpnc.epa.gov**

- EPA • (for program information, publications, laws and regulations) ..... **www.epa.gov**

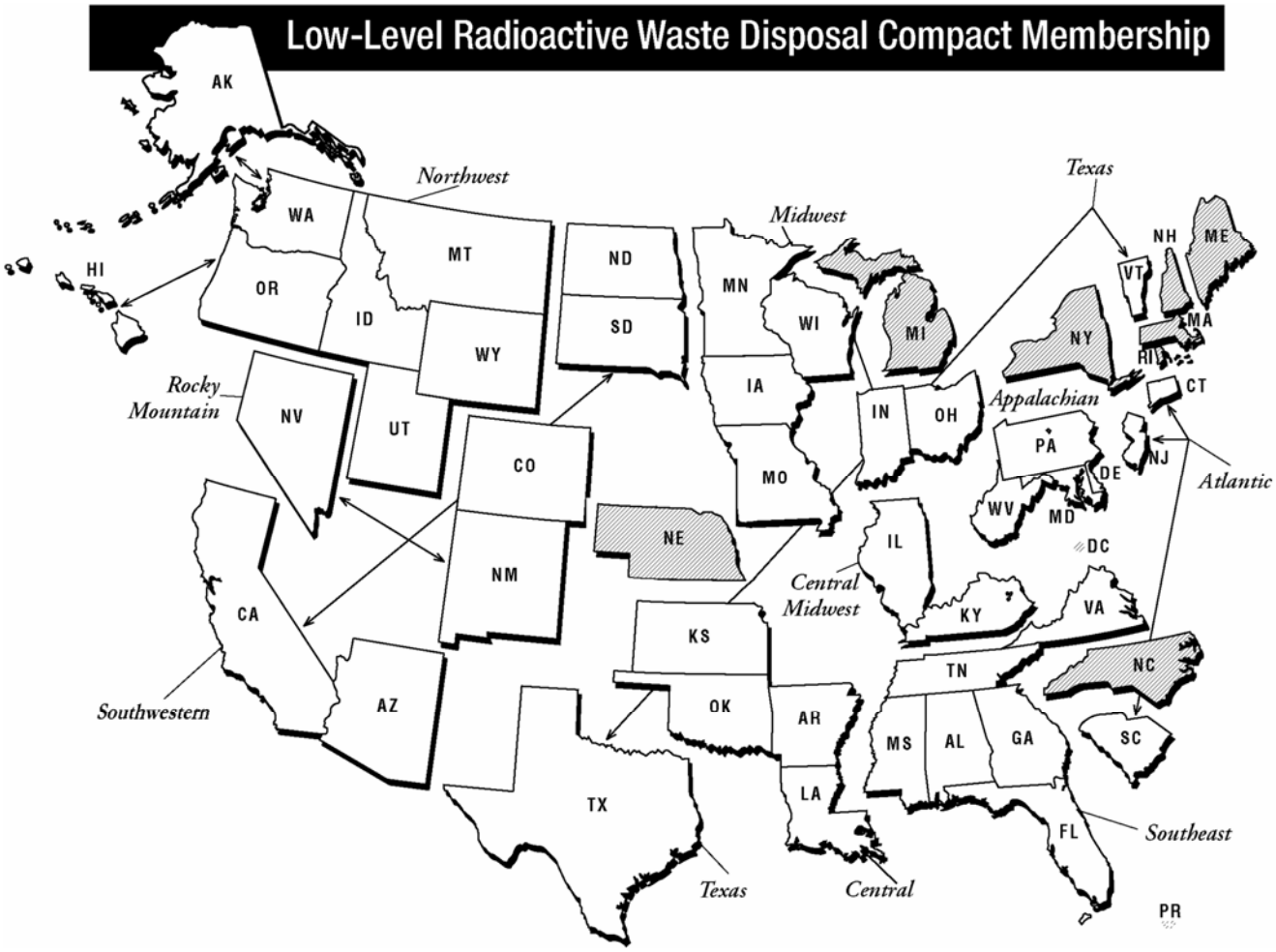
- U.S. Government Printing Office (GPO) (for the Congressional Record, *Federal Register*, congressional bills and other documents, and access to more than 70 government databases). ..... **www.access.gpo.gov**

- GAO homepage (access to reports and testimony) ..... **www.gao.gov**

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

Acknowledgement and Disclaimer

Acknowledgement: This material is based upon work supported in part by the U.S. Department of Energy under Award Numbers DE-EM0001364 and DE-em0003153.



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