

# LLW *notes*

Volume 32 Number 5 September/October 2017

## *U.S. Nuclear Regulatory Commission (NRC)*

# NRC Seeks Public Comment re Draft Regulatory Analysis for Final Part 61 Rule

## *Specific Cost and Benefit Information Requested*

On October 17, 2017, the U.S. Nuclear Regulatory Commission (NRC) published a *Federal Register* notice requesting comment on the draft regulatory analysis, “Draft Regulatory Analysis for Final Rule: Low-Level Radioactive Waste Disposal,” and seeking specific cost and benefit information to better inform the updated draft regulatory analysis. (See 82 *Federal Register* 48,283 dated October 17, 2017.)

The *Federal Register* notice regarding the draft regulatory analysis for the final Part 61 rule is available at <https://www.federalregister.gov/documents/2017/10/17/2017-22459/low-level-radioactive-waste-disposal>.

### **Obtaining Information**

Interested stakeholders may obtain publicly available information related to this action by any of the following methods:

- ◆ **Federal Rulemaking Website:** Go to <http://www.regulations.gov> and search for Docket ID NRC-2011-0012.
- ◆ **NRC’s Agencywide Documents Access and Management System (ADAMS):** Publicly-

available documents may be obtained online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>.

- ◆ **NRC’s Public Documents Room (PDR):** Copies of public documents may be obtained and purchased at the NRC’s PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

### **Submitting Comments**

Comments are due by November 16, 2017. Comments received after this date will be considered if it is practical to do so, but the NRC

*(Continued on page 21)*

### **In This Issue**

- DSWG Releases Report re Source Disposition Options—page 6
- Southeast Compact Commission Seeks Proposals for Compensation and Benefits Study—page 11
- News Briefs for Nuclear Power Plants Across the Country—page 15
- NRC Issues SRM re Final Rule for Low-Level Radioactive Disposal—page 23
- Comment Period Opens re Guidance Document for Alternative Disposal Requests—page 26

## 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.

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# Low-Level Radioactive Waste Forum, Inc.

## LLW Notes

Volume 32, Number 5 September/October 2017

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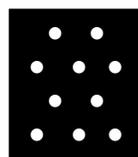
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## Table of Contents

<b>Federal Agencies and Committees (Cover Story)</b> .....	1
NRC Seeks Public Comment re Draft Regulatory Analysis for Final Part 61 Rule.....	1
<b>Low-Level Radioactive Waste Forum, Inc (continued)</b> .....	4
LLW Forum Holds Fall 2017 Meeting in Alexandria, Virginia.....	4
LLW Forum to Hold Spring 2018 Meeting in San Francisco, California.....	5
DSWG Releases Report re Source Disposition Options and Costs.....	6
DSWG Holds Fall 2017 Meeting in Alexandria, Virginia.....	7
<b>States and Compacts</b> .....	9
Central Midwest Compact Commission Holds Annual Meeting.....	9
Utah Waste Management and Radiation Control Board Meets.....	9
Southeast Compact Commission Seeks Proposals for Compensation and Benefits Study.....	11
Southwestern Compact Commission Hosts 76th Meeting.....	12
Texas Compact Commission Holds October 2017 Meeting.....	13
<b>Industry</b> .....	15
News Briefs for Nuclear Power Plants Across the Country.....	15
HPS to Hold 2018 Midyear Meeting in Denver, Colorado.....	18
Registration Open for 2018 Waste Management Conference.....	19
Managing Director Selected for Waste Management Symposia.....	19
Registration Open for Perma-Fix Nuclear Waste Management Forum.....	20
<b>Federal Agencies and Committees</b> .....	23
NRC Issues SRM re Final Rule for Low-Level Radioactive Waste Disposal (10 CFR Part 61).....	23
Comment Period Opens re Guidance Document for Alternative Disposal Requests.....	26
Public Meeting Held re Part 61 Regulatory Analysis Update and Alternate Disposal Request Guidance Revision.....	29
NRC Accepts Comments on Draft FY 2018-2022 Strategic Plan.....	31
NRC Issues Information Notices and Regulatory Issue Summaries.....	33
NRC Names Two Executives to Top Positions.....	35
New Edition of NRC Information Digest Now Available Online.....	36
NRC Scores High Marks in Federal Government Survey.....	36
<b>Obtaining Publications</b> .....	38



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## Key to Abbreviations

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

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

## LLW Forum Holds Fall 2017 Meeting in Alexandria, Virginia *October 16-17, 2017*

On October 16-17, 2017, the Low-Level Radioactive Waste Forum (LLW Forum) held its fall 2017 meeting at the Hilton Old Town Hotel in Alexandria, Virginia.

Following the conclusion of the regular LLW Forum meeting, there was a separate, closed-session meeting on Tuesday afternoon (October 17) for state and compact members of the organization's Board of Directors and their designated representatives. The purpose of the closed-session meeting was to discuss timely and relevant issues of common interest; coordinate greater involvement and outreach by states and compacts; and, address planning issues related to the future LLW Forum direction and funding.

The Disused Sources Working Group (DSWG)—including members, staff and invited guests—met at the same location on Wednesday (October 18) for a full day. (See related story, this issue.) Organizational liaisons from the Conference of Radiation Control Program Directors (CRCPD), Organization of Agreement States (OAS) and Health Physics Society (HPS) participated in the DSWG meeting.

The Southeast Compact Commission for Low-Level Radioactive Waste Management and the Central Interstate Low-Level Radioactive Waste Compact Commission co-sponsored the meeting.

*The LLW Forum meeting documents—including the meeting bulletin, registration form and final agenda—have been posted to the LLW Forum Meeting page of the organization's web site at [www.llwforum.org](http://www.llwforum.org).*

### Agenda Topics

The following is a list of agenda topics that were presented during the meeting:

- ◆ panel discussion/interactive dialogue re regulatory oversight of oil and gas operations—management and disposition of the resultant radiological byproduct material;
- ◆ panel session re decommissioning of nuclear power plants—regulatory requirements and updates, operator experiences and future planning considerations;
- ◆ development and implementation of a program re source reuse and reutilization;
- ◆ U.S. Nuclear Regulatory Commission (NRC) regulatory program emerging issues including rulemaking and guidance development; management of very low-level radioactive waste; and, program budget request;
- ◆ NRC's proposed revisions re guidance for alternative disposal of low-activity waste;
- ◆ IMPEP process and non-common indicator re low-level radioactive waste disposal program;
- ◆ U.S. Environmental Protection Agency (EPA) activities and updates including the development of new federal guidance for dose and risk assessment;
- ◆ addressing cybersecurity issues and concerns at U.S. nuclear power plants;
- ◆ emergency planning for radiological incidents and nuclear terrorism;

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

- ◆ U.S. Department of Energy (DOE) activities and updates including path forward for the Waste Isolation Pilot Plant (WIPP) and transuranic waste across the DOE complex; waste management forecasts, planning and prioritization; and, next steps re Greater-than-Class C environmental impact statement;
- ◆ Category 3 source security and accountability re-evaluation;
- ◆ Mount Sinai experience in reducing and removing the risk of malicious use of radioactive materials;
- ◆ pilot Source Collection and Threat Reduction (SCATR) project re disposal of high-activity cesium irradiator;
- ◆ preparation and submittal of report to Congress by the Radiation Source Protection and Security Task Force;
- ◆ reporting and tracking of commercial low-level radioactive waste disposal;
- ◆ NRC import and export waste and licensing activities;
- ◆ radium contamination at non-military sites across the country;
- ◆ updates and activities re the Waste Control Specialists commercial and federal low-level radioactive waste disposal facility in Andrews County, Texas; and,
- ◆ updates and activities re the Clive low-level radioactive waste disposal facility in Tooele County, Utah.

### **Attendance**

Officials from states, compacts, federal agencies, nuclear utilities, disposal operators, brokers/processors, industry, and other interested parties

were encouraged to attend the fall 2017 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.

*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](mailto:LLWForumInc@aol.com).*

## **LLW Forum to Hold Spring 2018 Meeting in San Francisco, California**

The spring 2018 meeting of the Low-Level Radioactive Waste Forum (LLW Forum) will be held at the Hyatt Regency San Francisco Airport in Burlingame, California on April 16-17, 2018. Please mark your calendars accordingly and save the date!

The Southwestern Low-Level Radioactive Waste Compact Commission is co-sponsoring the meeting with the LLW Forum.

### **Overview**

The spring 2018 LLW Forum meeting will be held on Monday, April 16 (9:00 am – 5:00 pm) and Tuesday, April 17 (9:00 am – 1:00 pm) at:

Hyatt Regency San Francisco Airport  
1333 Bayshore Highway  
Burlingame, California

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

### **Background**

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

*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.*

### ***LLW Forum/Disused Sources Working Group***

## **DSWG Releases Report re Source Disposition Options and Costs**

The Disused Sources Working Group (DSWG) of the Low-Level Radioactive Waste Forum (LLW Forum) is pleased to announce the release of its report titled, “Disposition Options and Costs for Certain Radioactive Sealed Sources and Devices.”

The report is intended to serve as a companion document to educational materials released by the DSWG earlier this year including educational brochures for current and prospective licensees of radioactive sealed sources and devices.

*The new report can be accessed via a link on the Resources Page of the DSWG website at <http://www.disusedsources.org/resources/#disposition>.*

### **Overview**

The DSWG report is intended to assist stakeholders in understanding the likely options and estimated costs related to the disposition of common radioactive sealed sources and devices. These include industrial radiography devices, fixed industrial gauges, well logging and brachytherapy sources, portable gauges, teletherapy devices, and both self-contained and panoramic irradiators. Common characteristics of these devices are summarized in Table 1 at the end of the document.

Readers are cautioned that the information contained in the report is intended as a guide only, providing general information about the most common types of sources and devices. The identified costs are provided as estimates only based on current information and guidance and

should not be relied upon as determinative of actual future disposal costs.

### Companion Documents

The new DSWG report on disposition options and costs is intended to serve as a companion document to educational brochures for current and prospective licensees of radioactive sealed sources and devices that were developed and released earlier this year by the DSWG in conjunction with the E-34 Committee of the Conference of Radiation Control Program Directors (CRCPD). The brochures provide information regarding the ownership and use of radioactive sealed sources and devices including:

- ◆ understanding the life-cycle costs including initial purchase price, regulatory license fees, financial assurance, operating expenses, security and end-of-life disposition;
- ◆ consideration of the use of alternative technologies;
- ◆ potential liabilities of using radioactive sealed sources or devices;
- ◆ proper management and disposition of disused sources including information about the Source Collection & Threat Reduction (SCATR) Program — including a chart documenting the diminishing cost share — and the Off-Site Source Recovery Project (OSRP); and,
- ◆ potential liabilities of storing disused sources.

Generic versions of the educational materials—which include fillable fields to incorporate individual office logos and contact information—are now available on the DSWG website to federal, state and industry stakeholders to modify and distribute as each deems appropriate.

### Background

The LLW Forum is a non-profit organization of representatives appointed by Governors and compact commissions that seeks to facilitate state and compact implementation of the Low-Level Radioactive Waste Policy Act of 1980 and its 1985 amendments, as well as to promote the objectives of regional low-level radioactive waste disposal compacts.

In September 2011, the LLW Forum formed the DSWG to develop recommendations from the states and compacts for improving the management and disposition of disused sources.

*For additional information about the LLW Forum and DSWG, please contact LLW Forum Executive Director and DSWG Project Director Todd D. Lovinger, Esq at (754) 779-7551 or at [LLWForumInc@aol.com](mailto:LLWForumInc@aol.com).*

## DSWG Holds Fall 2017 Meeting in Alexandria, Virginia

On October 18, 2017, the Disused Sources Working Group (DSWG) of the Low-Level Radioactive Waste Forum (LLW Forum) held its fall 2017 meeting at the Hilton Old Town Hotel in Alexandria, Virginia. The DSWG meeting was held after the conclusion of the fall 2017 LLW Forum, which occurred earlier in the week at the same location. (See related story, this issue.)

The fall 2017 DSWG meeting was attended by working group members, staff and invited guests. Organizational liaisons from the Conference of Radiation Control Program Directors (CRCPD), Organization of Agreement States (OAS) and Health Physics Society (HPS) also participated in the DSWG meeting.

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

## Agenda Topics

The following is a list of agenda topics that were discussed during the fall 2017 DSWG meeting:

- ◆ introductions;
  - ◆ review and approval of agenda items;
  - ◆ continued discussion re relevant agenda topics presented during the fall 2017 LLW Forum meeting including development and implementation of a program re source reuse and reutilization; re-evaluation by the U.S. Nuclear Regulatory Commission (NRC) re Category 3 source security and accountability; Mount Sinai Hospital's experience in reducing and removing the risk of malicious use of radioactive materials; Pilot Source Collection and Threat Reduction (SCATR) project re disposal of high-activity cesium irradiator; and, preparation and submittal of report to Congress by the Radiation Source Protection and Security Task Force (RSPSTF);
  - ◆ proposal for the creation of a secure source exchange program via the Conference of Radiation Control Program Directors (CRCPD) focusing on recycle and reuse or unwanted sources;
  - ◆ CRCPD's Part S Working Group on developing suggested state regulations;
  - ◆ DSWG work re NRC's proposed rulemaking on financial assurance;
  - ◆ National Nuclear Security Administration (NNSA) ongoing activities, projects, initiatives and updates including managing risk from high-activity irradiators, such as moving from risk management to permanent reduction; development and implementation of alternative technologies; background, overview and path forward re 2020 campaign;
- and, work on and contributions toward the 2018 RSPSTF report;
- ◆ completion of document re disposition costs for certain radioactive sealed sources and devices, as well as educational materials for current and prospective licensees;
  - ◆ development of regional workshops for stakeholders interested in management and disposition of sealed sources and radioactive devices;
  - ◆ other DSWG activities, projects and updates;
  - ◆ additional outreach to and coordination with other stakeholders;
  - ◆ other outstanding issues and considerations; and,
  - ◆ proposed action items and follow-up tasks; other DSWG meeting dates and locations; and, planning for spring 2018 meeting

## Background

The LLW Forum is a non-profit organization of representatives appointed by Governors and compact commissions that seeks to facilitate state and compact implementation of the Low-Level Radioactive Waste Policy Act of 1980 and its 1985 amendments, as well as to promote the objectives of regional low-level radioactive waste disposal compacts.

In September 2011, the LLW Forum formed the DSWG to develop recommendations from the states and compacts for improving the management and disposition of disused sources.

*For additional information about the LLW Forum and DSWG, please contact LLW Forum Executive Director and DSWG Project Director Todd D. Lovinger, Esq at (754) 779-7551 or at [LLWForumInc@aol.com](mailto:LLWForumInc@aol.com).*

### *Central Midwest Compact*

## Central Midwest Compact Commission Holds Annual Meeting

On September 12, 2017, the Central Midwest Interstate Low-Level Radioactive Waste Compact Commission (CMCC) held its annual meeting beginning at 1:00 p.m. EDT/12:00 p.m. CDT.

The following items were on the meeting agenda:

- ◆ Call to Order
- ◆ Adoption or Modification of the Agenda
- ◆ Election of Officers
  - Chair
  - Secretary/Treasurer
- ◆ Adoption of Minutes from the Previous Meeting
  - April 11, 2017
- ◆ Executive Session
- ◆ First Public Comment Period
- ◆ Reports
  - Chairman & Host State Report
  - Kentucky Commissioner Report
  - Executive Assistant Report
- ◆ Acceptance of Auditor's Report
- ◆ Adoption of Fiscal Year 18 Budget
- ◆ Review of Fiscal Year 17 Annual Report
- ◆ Investment Review

- ◆ Other Business
  - Unfinished Business
  - New Business
- ◆ Second Public Comment Period
- ◆ Next Scheduled Meeting or Announcement of Special Meeting
- ◆ Adjournment

Interested stakeholders were able to participate via videoconference at locations in both Kentucky and Illinois, as well as by teleconference.

*For additional information, please contact Joseph Klinger, Chairman of the Central Midwest Interstate Low-Level Radioactive Waste Compact Commission, at (217) 836-3018 or go to <http://www.cmcompact.org>.*

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### *Northwest Compact/State of Utah*

## Utah Waste Management and Radiation Control Board Meets

On October 12, 2017, the Utah Waste Management and Radiation Control Board held a regularly scheduled meeting beginning at 1:30 p.m. MT in Salt Lake City, Utah.

The meeting, which was open to the public, was held in Conference Room 1015, Department of Environmental Quality (DEQ) Board Room, on the first floor of 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 October 2017 Board meeting:

## States and Compacts *continued*

- I. Call to Order
- II. Approval of Meeting Minutes for the August 10, 2017 Board Meeting (*Board Action Item*)
- III. Underground Storage Tanks Update
- IV. Administrative Rules
  - A. Final adoption of rule changes to amend the appropriate sections of R313-12, *General Provisions*, R313-19, *Requirements of General Applicability to Licensing of Radioactive Material*, R313-21, *General Licenses*, and R313-22, *Specific Licenses*, by incorporating the federal regulatory changes promulgated by the U.S. Nuclear Regulatory Commission (NRC) in the *Federal Register* on May 29, 2013 (78 *Federal Register* 32,310) and updating selected rule citations and references. (*Board Action Item*)
  - B. Approval to proceed with formal rulemaking and public comment by filing with the Office of Administrative Rules and publishing in the Utah State Bulletin proposed changes to R313-25 that incorporate rule changes required by §19-3-104, as amended by S.B. 173 (2015 General Session) and S.B. 79 (2017 General Session), regarding (i) financial assurance for the closure and post-closure care of a low-level radioactive waste disposal facility and (ii) modifications to facility definitions. (*Board Action Item*)
- V. Hazardous Waste Section
  - A. Clean Harbors Grassy Mountain, LLC request for a site-specific treatment variance to stabilize a High Mercury-Inorganic Subcategory waste stream. (*Board Action Item*)
- VI. Low-Level Radioactive Waste Section
  - A. EnergySolutions, LLC request for a site-specific treatment variance from the Hazardous Waste Management Rules. EnergySolutions seeks authorization to treat by stabilization waste containing High-Subcategory Mercury. (*Information Item Only*)
  - B. EnergySolutions, LLC request for a site-specific treatment variance from the Hazardous Waste Management Rules. EnergySolutions seeks authorization to receive Cemented Uranium Extraction Process Residues for disposal. (*Information Item Only*)
  - C. EnergySolutions, LLC request for a site-specific treatment variance from the Hazardous Waste Management Rules. EnergySolutions seeks authorization to dispose of waste containing hazardous constituents and PCBs as Underlying Hazardous Constituent. (*Information Item Only*)
- VII. Other Business
  - A. Presentation on Low-Level Radioactive Waste Management Rules – EnergySolutions (*Information Item Only*)

- B. Miscellaneous Information Item
- C. Scheduling of Next Board Meeting

VIII. 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](mailto:rlundberg@utah.gov).*

*Southeast Compact Commission*

## Southeast Compact Commission Seeks Proposals for Compensation and Benefits Study

The Southeast Compact Commission for Low-Level Radioactive Waste Management (Commission) is seeking proposals from qualified consultants to perform a salary study and analysis of fringe benefits of the Commission employees, their respective positions and job classifications as it relates to the market.

The purpose of this study is to examine the base pay and employee benefits of current positions and perform a geographical and professional market comparison of those positions. The consultant will also recommend a five-year plan that will provide a methodology for evaluating and updating pay scales in accordance to the market.

The Commission asks that Low-Level Radioactive Waste Forum (LLW Forum) members and supporters please forward the Request for Proposals (RFP) to all firms and individuals that you are aware of who may have an interest in conducting the study and analysis described in the RFP.

*The Request for Proposals (RFP) may be found at the Commission's website at <http://www.secompact.org>.*

*For additional information, please contact Ted Buckner, the Commission's Executive Director, at [tedb@secompact.org](mailto:tedb@secompact.org) or at (919) 380-7780.*

## *Southwestern Compact*

### Southwestern Compact Commission Hosts 76<sup>th</sup> Meeting

On October 6, 2017, the Southwestern Low-Level Radioactive Waste Commission hosted its 76<sup>th</sup> meeting beginning at 9:00 a.m. PDT at the Hyatt Regency in Sacramento, California.

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

- ◆ call to order;
- ◆ roll call;
- ◆ welcome and introductions—announce retirement of Commissioner Godwin, introduce Brian Goretzki of Arizona;
- ◆ statement regarding due notice of meeting;
- ◆ reports, status and/or activity;
  - Commission Chair;
  - Executive Director;
  - licensing agency;
  - license designee; and,
  - party states;
- ◆ discuss and potential action on Low-Level Radioactive Waste Forum (LLW Forum) activities (i.e., sponsorship, membership, workshop, future agendas and participation);
- ◆ update and status of EnergySolutions, Waste Control Specialists (WCS) and SONGS;
- ◆ discuss activities and potential action on Reutilization and Reuse Program;
- ◆ exportation actions;
  - ratification of approved petitions;
  - amend “Policy of the Southwestern Low-Level Radioactive Waste Commission Regarding Exportation of Various Low-Level Radioactive Waste Streams” to extend effective date;
  - amend “Requirements for Exportation Petitions for Low-Level Radioactive Waste Disposal” to extend effective date; and,
  - review and amend petitions forms.
- ◆ financial audit report by Miers & Miers;
- ◆ Executive Session pursuant to CA Gov. Code §11126(a)(1) to discuss staff performance evaluations;
- ◆ review and approve Executive Director’s and Counsel’s contracts;
- ◆ review and approve Annual Governor’s Report;
- ◆ amend fiscal year 2017-18 budget;
- ◆ approve fiscal year 2018-19 budget;
- ◆ review and approve Office Procedures Manual;
- ◆ review and approve Southwestern By-Laws;
- ◆ adopt fee schedule;
- ◆ public comment;
- ◆ election of officers;

## States and Compacts *continued*

- ◆ future agenda items;
- ◆ next meetings; and,
- ◆ 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](mailto:swllrwcc@swllrwcc.org).*

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### ***Texas Low-Level Radioactive Waste Disposal Compact Commission***

## **Texas Compact Commission Holds October 2017 Meeting**

On October 5, 2017, the Texas Low-Level Radioactive Waste Disposal Compact Commission (Texas Compact Commission) held a regularly scheduled meeting in Montpelier, Vermont.

The meeting began at 9:30 a.m. EDT/8:30 a.m. CDT. It was held in Room 11 at the Vermont State House, which is located at 115 State Street in Montpelier Vermont.

*The formal meeting agenda is available on the Texas Compact Commission's web site at [www.tllrwacc.org](http://www.tllrwacc.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;
- ◆ welcome by Vermont Public Service Department Commissioner June Tierney;
- ◆ discussion by Entergy Vermont Yankee regarding the closure and decommissioning of the Vermont Yankee nuclear power plant;
- ◆ consideration of and possible action on applications for importation of low-level radioactive waste from Nextera Turkey Point; Dominion Kewaunee; Dominion Kewaunee IH; Philotechnics; Alaron Veolia; PGE Diablo Canyon; EnergySolutions; Energy Palisades; Energy Palisades IH; Thomas Gray; and, RAM Services;
- ◆ reconsideration of and possible action on an application for importation of low-level radioactive waste from Southern Nuclear Vogtle;
- ◆ consideration of and possible action to publish for public comment in the *Texas Register* a proposal to adopt a new §675.24 in TAC Title 31, Part 21, Chapter 675 relating to the requirement for certain entities to report on a quarterly basis the receipt of certain low-level radioactive waste that is not required to be disposed of in the Texas Compact Facility as recommended by the Texas Compact Commission's Rules Committee;

## States and Compacts *continued*

- ◆ 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 contingency planning and legislative affairs;
- ◆ report from Leigh Ing, Executive Director of the Texas Compact Commission, on her activities relating to future workshops, export reporting and Texas Compact Commission operations;
- ◆ discussion and possible changes of dates and locations of future Texas Compact Commission meetings in 2017 and 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](mailto:leigh.ing@tllrwdcc.org).*

## ***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.*

#### **Appalachian Compact/State of Maryland**

**National Institute of Standards and Technology Facility** On September 27, 2017, the U.S. Nuclear Regulatory Commission (NRC) announced that a five-member team had begun conducting a special inspection at a National Institute of Standards and Technology (NIST) facility in Gaithersburg, Maryland. The inspection, which began on September 26, 2017, was initiated after a recent incident in which a worker was potentially exposed to radioactive contamination. On the afternoon of August 18, 2017, a glass ampule holding americium-241, which is radioactive, broke in a laboratory at the facility. That breakage led to the contamination of a storage area and surfaces in the lab. Tests results indicated that one NIST employee who entered the lab potentially received a dose above NRC annual occupational limits. Additional testing is being performed on the individual to determine the actual dose. The NRC team is reviewing the circumstances surrounding the event, NIST's corrective actions and the testing done to determine if an overexposure occurred. The results of the inspection will be documented in a report to be issued within 45 of the days of the review's completion. NRC inspectors have been gathering information related to the event since it was reported to the agency on August 19,

2017. NRC previously sent two inspectors to the facility on September 13, 2017. *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 Plant** On September 7, 2017, NRC announced the opportunity to request a hearing on an application to renew the operating license of the River Bend nuclear power plant in St. Francisville, Louisiana. The agency's environmental review of the license renewal application included a public meeting that was subsequently held near the plant on September 19, 2017. River Bend Station, Unit 1, is located approximately 24 miles northwest of Baton Rouge, Louisiana. It is a boiling-water reactor currently licensed to operate through August 29, 2025. The operator, Entergy Operations Inc., submitted an application on May 31, 2017 to extend the license for an additional 20 years. The NRC staff has determined the application contains sufficient information to formally docket the application and begin its safety and environmental reviews. Docketing the application does not preclude requesting additional information as the reviews proceed, nor does it indicate whether the NRC will renew the license. The public meeting was but one method for filing public comments on the environmental review before the October 2017 deadline. The hearing opportunity notice included instructions for filing petitions to intervene. The deadline for filing hearing petitions was October 13, 2017. The River Bend license renewal application is available on the NRC website and at the West Feliciana Parish Library in St. Francisville, Louisiana. *For additional information, please contact Scott Burnell of the NRC at (301) 415-8200.*

#### **Midwest Compact/State of Indiana**

**Allen County Cardiology** On September 7, 2017, NRC announced that the agency has proposed a \$7,000 civil penalty against Allen

County Cardiology for the failure to perform daily surveys and weekly tests while handling licensed radioactive material for use in medical procedures. The company is based in Fort Wayne, Indiana. The violations were identified during an NRC inspection last year and a subsequent investigation. The NRC determined a medical technologist willfully failed to perform daily ambient radiation exposure rate surveys and weekly area radioactive contamination surveys. The technologist also willfully provided inaccurate and incomplete records to the agency. Allen County Cardiology took corrective actions, which included ensuring adequate time for completing the required tasks, conducting audits and committing to have an independent health physics service perform semi-annual audits. The NRC has concluded that the company's actions are effective and will prevent recurrence. Agency inspectors will conduct a follow-up inspection. A copy of the Notice of Violation has been posted on the Agencywide Documents Access and Management System (ADAMS) at the NRC website. *For additional information, please contact Viktoria Mitlyng at (630) 829-9662 or Prema Chandrathil at (630) 829-9663.*

### **Southeast Compact/States of Alabama and Tennessee**

**Browns Ferry Nuclear Plant** On October 3, 2017, the NRC announced that the agency has launched a special inspection into the failure of a high pressure coolant injection discharge valve on Unit 3 of the Browns Ferry nuclear plant, which is located approximately 32 miles west of Huntsville, Alabama. The plant, operated by the Tennessee Valley Authority, is located near Athens, Alabama. On September 24, 2017, during routine testing, the high pressure coolant injection system unexpectedly pumped water into the reactor vessel instead of a storage tank. TVA later determined that a failed nut on a valve allowed it to remain partially open. Other plant systems responded as expected, but the valve failure prompted the NRC to begin the special inspection. The inspection team will review the

valve failure and TVA's actions as well as maintenance practices and the history of such valves. 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.*

**Watts Bar Nuclear Plant** On November 2, 2017, the NRC will hold a public meeting with Tennessee Valley Authority (TVA) officials to be briefed on the current status and progress of actions to address the chilled work environment in the operations department at the Watts Bar nuclear power plant. The plant is located near Spring City—approximately 60 miles southwest of Knoxville, Tennessee. On March 23, 2016, the NRC staff issued a letter to TVA indicating that some of its operations employees may not have felt comfortable raising safety concerns at the plant. Specifically, the NRC expressed concern that some licensed operators may have been unduly influenced by TVA managers outside the control room, which could have caused what is described as a “chilling effect” on the plant's work environment, making it less likely for employees to raise safety issues. During the meeting, TVA is expected to provide an update on its corrective actions related to the work environment at the plant, enabling NRC officials to ask questions and discuss the agency's plans to continue to provide oversight regarding this issue. NRC staff will be available following the business portion of the meeting to answer questions from members of the public and the media. *For additional information, please contact Roger Hannah at (404) 997-4417 or Joey Ledford at (404) 997-4416.*

### **Texas Compact/State of Texas**

**South Texas Project Nuclear Plant** On September 28, 2017, NRC announced that the agency has renewed the operating licenses of the South Texas Project Unit 1 and Unit 2 reactors for an additional 20 years. Unit 1's license will now

expire on August 20, 2047. Unit 2's license will now expire on December 15, 2048. The South Texas Project pressurized-water reactors are located in Bay City, Texas—approximately 90 miles southwest of Houston. The operator, STP Nuclear Operating Co., submitted the renewal application on October 28, 2010. The NRC staff's review of the application proceeded on two tracks. First, a safety evaluation report was issued on June 8, 2017. Second, a supplemental environmental impact statement was issued in November 2013. These documents, as well as other information about the South Texas Project license renewal application, are available on the NRC website. The NRC's Advisory Committee on Reactor Safeguards also reviewed the staff's work. Renewal of the South Texas Project operating licenses brings to 89 the number of commercial nuclear power reactors with renewed licenses (three of those have since permanently shut down). Applications for an additional five renewals are currently under review. Information about these reviews can be found on the NRC website at [www.nrc.gov](http://www.nrc.gov). *For additional information, please contact Scott Burnell of the NRC at (301) 415-8200.*

### Nebraska

**Cooper Nuclear Station** On November 7, 2017, NRC will meet with Nebraska Public Power District officials to discuss a preliminary inspection finding regarding the licensee's failure to properly maintain electrical equipment at Cooper Nuclear Station, which is located in Brownville, Nebraska. The 8:30 a.m. meeting at the NRC's Region IV office at 1600 E. Lamar Boulevard in Arlington, Texas will be open to the public. NRC officials will answer questions following the business portion of the conference. A telephone bridge will be available for the meeting by calling (800) 593-9954 and using passcode 1393307. The public also can participate via an internet webinar at <https://attendee.gotowebinar.com/register/3232396346631106051>. In a written report, NRC inspectors stated that the licensee

failed to ensure insulation on electrical equipment was properly maintained. Degradation of the insulation resulted in a short circuit that led to the loss of one of two required off-site power supplies for the plant on January 17, 2017. The licensee has replaced the damaged equipment. No decision on the final safety significance of the finding or any additional NRC actions will be made at the conference. That decision will be announced at a later time. The NRC evaluates regulatory performance at commercial nuclear plants with a color-coded process that classifies inspection findings as green, white, yellow or red in order of increasing safety significance. The NRC has preliminarily determined that the inspection finding has low to moderate (white) safety significance, which may require additional inspections, regulatory actions and oversight. *For additional information, please contact Victor Dricks at (817) 200-1128.*

### New York

**Catawba Nuclear Plant** On October 17, 2017, NRC announced that the agency has determined that an inspection finding at Duke Energy's Catawba nuclear power plant has low to moderate safety significance. As a result, the plant will be under increased NRC oversight until the agency is satisfied that the issue has been appropriately addressed. The two-unit Catawba plant is near York, South Carolina—which is southwest of Charlotte, North Carolina. In April 2017, an electrical component on one of the Catawba Unit 2 emergency diesel generators failed during a scheduled test. NRC inspectors reviewed the event and determined that the plant staff had failed to adequately develop and adjust preventive maintenance activities using operating experience, maintenance history and performance records. The NRC preliminarily characterized the finding as white, or having low to moderate safety significance. After reviewing Duke Energy's response to the issue, the agency finalized the white finding. The increased oversight resulting from this finding will include a supplemental inspection to ensure Duke Energy fully

understands the issue and has taken appropriate corrective actions. On October 16, 2017, the NRC sent a letter to Duke with the final significance determination and the earlier NRC inspection report addressed the finding in more detail. *For additional information, please contact Roger Hannah at (404) 997-4417 or Joey Ledford at (404) 997-4416.*

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### *Health Physics Society (HPS)*

## HPS to Hold 2018 Midyear Meeting in Denver, Colorado

Recently, the Health Physics Society (HPS) announced that the organization was soliciting abstracts, including for special sessions, for the organization's upcoming mid-year meeting.

The deadline for submitting abstracts was October 6, 2017.

### **Meeting Information**

The 2018 mid-year HPS meeting will be held at the Marriott Hotel in the mile-high city of Denver, Colorado on February 4-7, 2018. HPS group rates start at \$203 per night.

Denver is located on the high rolling plains of the Rocky Mountains with panoramic views of 14,000 feet snowcapped mountains. Downtown Denver offers a variety of activities as well as easy access to nearby ski resorts.

The mid-year meeting will not be a topical conference so HPS strongly solicited the full spectrum of radiation protection specialties.

*HPS meeting attendees may book room reservations at <https://aws.passkey.com/>*

*event/49128173/owner/3135/home?utm\_campaign=274573209.*

### **Abstract Topics**

HPS requested contributed abstracts are for sessions on the following topics:

- ◆ accelerator;
- ◆ biokinetics/bioeffects;
- ◆ decommissioning;
- ◆ emergency planning/response;
- ◆ environmental;
- ◆ external dosimetry;
- ◆ homeland security;
- ◆ instrumentation;
- ◆ internal dosimetry and bioassay;
- ◆ medical physics;
- ◆ military health physics;
- ◆ non-ionizing;
- ◆ operational health physics;
- ◆ reactor health physics;
- ◆ regulatory/legal issues;
- ◆ risk analysis; and
- ◆ other special session (please specify).

*For additional information, please go to the Meetings Page on the HPS website at <http://hps.org/meetings/>.*

## *Waste Management 2018 Conference*

# Registration Open for 2018 Waste Management Conference

Registration is now open for the Waste Management 2018 Conference, which will be held at the Phoenix Convention Center in Phoenix, Arizona on March 18-22, 2018. This year's conference theme is Nuclear and Industrial Robotics, Remote Systems and Other Emerging Technologies.

*Logistical information and registration forms for the Waste Management 2018 conference are available at [www.wmsym.org](http://www.wmsym.org).*

### **Background**

The annual Waste Management Conference, presented by WM Symposia (WMS), is an international symposium concerning the safe and secure management of radioactive wastes arising from nuclear operations, facility decommissioning and environmental remediation, as well as storage, transportation and disposal and associated activities. WMS was founded to provide a forum for discussing and seeking cost-effective and environmentally responsible solutions for the safe management and disposition of radioactive waste and radioactive materials.

Waste Management 2018 marks the 44th year of the conference and is expected to attract over 2,000 nuclear specialists from over 35 countries, presenting more than 500 papers in over 130 technical sessions.

### **Supporting Organizations**

Supporting organizations include the American Nuclear Society (ANS), the International Atomic Energy Agency (IAEA), the International

Framework for Nuclear Energy Cooperation (IFNEC) and the Organization for Economic Co-operation and Development/Nuclear Energy Agency (OECD/NEA).

The conference is also organized in cooperation with the U.S. Department of Energy (DOE), the U.S. Nuclear Regulatory Commission (NRC), the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Defense (DoD).

*For additional information on the Waste Management Conference, please call (480) 557-0263 or email to [shelley@wmarizona.org](mailto:shelley@wmarizona.org).*

## Managing Director Selected for Waste Management Symposia

On September 12, 2017, the Board of Directors of Waste Management Symposia (WMS) announced that Jan Carlin has been selected to be the Managing Director of WMS. Carlin has extensive technical and business-development experience across both the the U.S. Department of Energy (DOE) complex and the commercial nuclear industry.

In announcing the selection, WMS Board Chair Jim Gallagher stated, "we are extremely pleased that Jan has accepted our offer. She brings an in-depth knowledge of the radioactive waste management industry as well as extensive experience in large and small commercial businesses to this position. Jan's diverse background gives her a unique perspective for forwarding and expanding our organization's vision and mission."

WMS Board President Jim Fiore agreed with Gallagher, stating that "Carlin was selected from a group of candidates with extremely impressive resumes and achievements. However, the

combination of Jan's technical background, business acumen, respect within the industry, and personal commitment to WMS really made our decision easy. She is highly qualified for this position."

Carlin will continue to represent Wälischmiller Engineering GmbH as Director of Business Development. She was also instrumental in Carr's Group acquiring Pittsburgh-based NuVision Engineering.

"I am looking forward to making a great organization of even more value to the industry, and a more significant voice in the public and policymaker discussions taking place around the world," said Carlin.

WMS is the premier non-profit organization dedicated to providing education and information exchange on global radioactive waste management. The annual WMS international conference provides an open forum for sharing safe, environmentally responsible, technically sound and cost-effective approaches and solutions to managing and dispositioning radioactive waste and decommissioning nuclear facilities to enhance the transparency and credibility of the global radioactive waste industry.

### *Nuclear Waste Management Forum*

## Registration Open for Perma-Fix Nuclear Waste Management Forum

Registration is now open for the 15<sup>th</sup> annual Perma-Fix Nuclear Waste Management Forum. The conference will be held at the Gaylord Opryland Resort and Convention Center in Nashville, Tennessee on November 27-29, 2017. Perma-Fix Environmental Services, Inc sponsors the event.

Nuclear industry leaders that focus on the area of radioactive waste management are encouraged to attend this event. Attendees learn information about the latest technologies and applications regarding waste characterization, packaging, treatment, transportation and disposition while sharing lessons learned that improve safety and efficiency for their projects.

According to the event notice, this is an opportunity to network with experts from a variety of U.S. and international waste generator sites, government officials and other companies focused on waste management objectives.

*For additional information, please go to [www.perma-fix.com](http://www.perma-fix.com) or contact Autumn Bogus of Perma-Fix Environmental Services at [abogus@perma-fix.com](mailto:abogus@perma-fix.com) or at (865) 251-2088.*

## Federal Agencies and Committees *continued*

(Continued from page 1)

is able to assure consideration only for comments received on or before this date.

Interested stakeholders may submit comments by any of the following methods:

- ◆ **Federal Rulemaking Website:** Go to <http://www.regulations.gov> and search for Docket ID NRC-2011-0012.
- ◆ **E-mail comments to:** [Rulemaking.Comments@nrc.gov](mailto:Rulemaking.Comments@nrc.gov). If you do not receive an automatic e-mail reply confirming receipt, then contact us at (301) 415-1677.
- ◆ **Fax comments to:** Secretary, U.S. Nuclear Regulatory Commission at (301) 415-1101.
- ◆ **Mail comments to:** Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Rulemakings and Adjudications Staff.
- ◆ **Hand deliver comments to:** 11555 Rockville Pike, Rockville, Maryland 20852, between 7:30 a.m. and 4:15 p.m. (Eastern Time) Federal workdays; telephone: (301) 415-1677.

Docket ID NRC-2011-0012 should be referenced when submitting comments.

### Background

The NRC's licensing requirements for the disposal of commercial low-level radioactive waste in near-surface disposal facilities can be found in Part 61 of Title 10 of the *Code of Federal Regulations* (10 CFR), "Licensing Requirements for Land Disposal of Radioactive Waste." The NRC originally adopted 10 CFR Part 61 on December 27, 1982 (47 *Federal Register* 57,446). The existing low-level radioactive waste disposal facilities are located in and licensed by Agreement States, and those Agreement States have incorporated many of the

requirements in 10 CFR Part 61 into their corresponding regulations and as license conditions for their licensees.

On March 26, 2015, the NRC published a proposed rule, "Low-level Radioactive Waste Disposal," for an initial 120-day comment period in the *Federal Register* (80 *Federal Register* 16,082). The 2015 proposed rule would have implemented changes to require new and revised site specific technical analyses and other requirements that would have permitted the development of site-specific waste acceptance criteria (WAC) based on the results of these analyses. In the 2015 proposed rule, the NRC explained that the changes would better align the requirements with current health and safety standards (i.e., 10 CFR Part 20) and identify any additional measures that would be prudent to implement for continued disposal of radioactive low-level radioactive waste at a particular land disposal facility. In summary, the 2015 proposed rule would have specified requirements for:

- ◆ technical analyses for demonstrating compliance with the public dose limits;
- ◆ technical analyses for demonstrating compliance with dose limits for protection of inadvertent intruders;
- ◆ identification and description of defense-in-depth protections that, taken together with the technical analyses, constitute the safety case;
- ◆ development of site-specific WAC; and,
- ◆ implementation of current dosimetry in the technical analyses.

As a result of the comments received on the proposed rule, the NRC staff drafted a final rule package for Commission review, "SECY-16-0106, FINAL RULE: Low-Level Radioactive Waste Disposal (10 CFR Part 61) (RIN 3150-AI92)," dated September 15, 2016. The draft final rule package is available for review under

## Federal Agencies and Committees *continued*

ADAMS Accession No. ML16188A290 and includes a draft *Federal Register* notice (ADAMS Accession No. ML16188A371) and a draft final regulatory analysis (ADAMS Accession No. ML16189A050).

In response to SECY-16-0106, the Commission issued a Staff Requirements Memorandum (SRM), SRM-SECY-16-0106 (ADAMS Accession No. ML17251B147), dated September 8, 2017, which directed the NRC staff to publish a supplemental proposed rule for public comment that is revised to include Commission-directed rule changes. The Commission directed the following changes that are pertinent to this public comment request:

- ◆ compliance period of 1,000 years, independent of radionuclide content;
- ◆ new requirements applicable to all future low-level radioactive waste disposal facilities; and,
- ◆ the regulator may use a case-by-case basis (i.e., "grandfather provision") for applying new requirements to only those sites that plan to accept large quantities of depleted uranium for disposal.

### Discussion

In addition to specified rule language changes, the Commission, in SRM-SECY-16-0106, also directed the NRC staff to "be informed by broader and more fully integrated, but reasonably foreseeable costs and benefits to the U.S. waste disposal system resulting from the proposed rule changes, including pass-through costs to waste generators and processors." To support development of the new supplemental proposed rule as directed by the Commission in SRM-SECY-16-0106, the NRC staff is seeking comment on how to improve the approach/methodology and actual cost data currently used in the draft final rule regulatory analysis to provide more accurate cost and benefit data in the final regulatory analysis. In particular, the NRC

is seeking information on any cost changes that should be incorporated into the regulatory analysis in light of the Commission's changes to the draft final rule.

All comments provided will be considered in improving the regulatory analysis to ensure that it is sufficiently informed by broader and more fully integrated, but reasonably foreseeable, costs and benefits to the U.S. waste disposal system; however, the NRC staff does not plan to provide responses to these comments. In addition, the NRC staff is requesting that comments be limited to focus on the regulatory analysis itself—the NRC plans to issue a separate notice and comment period on the changes being proposed in the supplemental proposed rule in 2018. At that time, members of the public will also be provided another opportunity to provide comments on the revised regulatory analysis, which will be updated based on comments from this action.

During the comment period for this action, the NRC will conduct a public meeting at the NRC's headquarters that will explain the cost and benefit information it is seeking in the notice and to address questions. Information regarding the public meeting is posted on the NRC's public meeting website. The NRC's public meeting website is located at <https://www.nrc.gov/public-involve.html>.

The NRC has also posted the meeting notice on the federal rulemaking website at <http://www.regulations.gov> under Docket ID NRC-2011-0012. The NRC will post additional materials related to this document, including any public comments received, on the Federal rulemaking website. The federal rulemaking website allows interested stakeholders to receive alerts when changes or additions occur in a docket folder.

### Requested Information and Comments

NRC is providing the below specific questions associated with the draft regulatory analysis (ADAMS Accession No. ML16189A050). The

## Federal Agencies and Committees *continued*

questions will also be discussed at the public meeting. The NRC staff will consider the responses to the questions as it revises the regulatory analysis.

- ◆ **Question 1:** Is the NRC considering appropriate alternatives for the regulatory action described in the draft regulatory analysis?
- ◆ **Question 2:** Are there additional factors that the NRC should consider in the regulatory action? What are these factors?
- ◆ **Question 3:** Is there additional information concerning regulatory impacts that the NRC should include in its regulatory analysis for this rulemaking?
- ◆ **Question 4:** Are all costs and benefits properly addressed to determine the economic impact of the rulemaking alternatives? What cost differences would be expected from moving from the discussed 1,000 year and 10,000 year compliance periods to a single 1,000 year compliance period? Are there any unintended consequences of making this revision?
- ◆ **Question 5:** Are there any costs that should be assigned to those sites not planning to accept large quantities of depleted uranium for disposal in the future?
- ◆ **Question 6:** Is NRC's assumption that only two existing low-level radioactive waste sites (i.e., EnergySolutions' Clive Utah disposal facility and Waste Control Specialists' Texas disposal facility) plan to accept large quantities of depleted uranium for disposal in the future reasonable?
- ◆ **Question 7:** What additional costs or cost savings, not already considered in the draft regulatory analysis, will the supplemental proposed rulemaking or alternatives cause to society, industry, and government? What are

the potential transfer ("pass-through") costs to the waste generators and processors?

*For additional information, please contact Gregory Trussell, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, at (301) 415-6445 or at [Gregory.Trussell@nrc.gov](mailto:Gregory.Trussell@nrc.gov).*

## NRC Issues SRM re Final Rule for Low-Level Radioactive Waste Disposal (10 CFR Part 61)

On September 8, 2017, the U.S. Nuclear Regulatory Commission (NRC) issued a Staff Requirements Memorandum (SRM) in response to SECY-16-0106, which sought Commission approval to publish a final rule in the *Federal Register* that would amend Title 10 of the Code of Federal Regulations (10 CFR) Parts 20, "Standards for Protection Against Radiation," and Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste."

*The SRM can be found online at <https://www.nrc.gov/docs/ML1725/ML17251B147.pdf>.*

### SRM Direction

In the SRM, the Commission approved certain substantive revisions to the draft final rule and its subsequent publication as a supplemental proposed rule for a 90-day public comment period. Specifically, prior to its publication as a supplemental proposed rule, the SRM states that the draft final rule should be revised to incorporate the following changes:

1. reinstate the use of a case-by-case basis (i.e., "grandfather provision") for applying new

## Federal Agencies and Committees *continued*

requirements to only those sites that plan to accept large quantities of depleted uranium for disposal;

2. reinstate the 1,000 year compliance period from the proposed rule with a specific dose limit of 25 mrem/year and adopt a longer period of performance assessment—the period of which would be based on site-specific considerations and a "reasonable analysis," as defined in SRM-SECY-13-0075, "Proposed Rule: Low-Level Radioactive Waste Disposal (10 CFR Part 61) (RIN 3150-AI92)—and apply the 1,000 year compliance period to the inadvertent intruder performance objective in 10 CFR 61.42 and the site stability performance objective in 10 CFR 61.44;
3. clarify that the safety case consists of the quantitative performance assessment, as supplemented by consideration of defense-in-depth measures;
4. modify the draft final rule text addressing defense-in-depth to narrow its consideration solely to providing additional assurance in mitigating the effects of large uncertainties that are identified during the performance assessment; and,
5. be informed by broader and more fully integrated, but reasonably foreseeable, costs and benefits to the United States waste disposal system resulting from the proposed rule changes, including pass-through costs to waste generators and processors.

The SRM states that the associated guidance documents should be revised and should be made publicly available, concurrent with the comment period on the supplemental proposed rule.

The Commission also directed that the revised *Federal Register* notice prepared as a result of the direction in the SRM should be provided to the Commission for its information no later than

10 business days prior to its transmittal for publication.

Finally, the SRM notes that the timing for the staff to prepare a regulatory basis for the disposal of Greater-than- Class C (GTCC) waste as directed in SRM-SECY-15-0094, "Historical and Current Issues Related to Disposal of Greater-Than-Class C Low-Level Radioactive Waste," should be changed from the previous direction of within six (6) months of the completion of the ongoing 10 CFR Part 61 rulemaking to six (6) months after the publication of the supplemental proposed rule.

### **SECY-16-0106 Overview**

On October 3, 2016, NRC published SECY-16-0106. (See *LLW Notes*, September/October 2016, pp. 1, 32-38.) Subsequently, at the request of the Subcommittee on Radiation Protection and Nuclear Materials of the Advisory Committee on Reactor Safeguards (ACRS), the agency published the staff's draft final Part 61 guidance document (Guidance for Conducting Technical Analyses for 10 CFR Part 61) to support a public meeting with the full ACRS that was held on November 3, 2016. (See *LLW Notes*, September/October 2016, p. 27) In addition, NRC published a redline/strikeout version of the draft final rule language.

In releasing the documents, NRC stressed that the comment period on the rulemaking was closed and that the staff was not soliciting comments on the draft final guidance and the draft final rule language.

*The proposed final Part 61 final rule and associated documents are available on the NRC website at <http://www.nrc.gov/about-nrc/regulatory/rulemaking/potential-rulemaking/uw-streams.html>.*

**Summary** As issued in October 2017, SECY-16-0106 recommended that the final 10 CFR Part 61 rule would do the following:

## Federal Agencies and Committees *continued*

- ◆ revise the existing technical analysis for protection of the general public to include either a 1,000-year compliance period or a 10,000-year compliance period depending on the quantities of long-lived radionuclides that have been or plan to be disposed at the site;
  - ◆ add a new technical analysis for the protection of inadvertent intruders that would include a compliance period and a dose limit;
  - ◆ add a new post-10,000-year performance period analysis for disposal sites that have low-level radioactive waste containing significant quantities of long-lived radionuclides;
  - ◆ add a new requirement to update the technical analyses at site closure;
  - ◆ add a new requirement to develop site-specific criteria for the future acceptance of low-level radioactive waste for disposal based on the results of the technical analyses, the existing low-level radioactive waste classification requirements, or a combination of both;
  - ◆ add a new description of safety case and a new requirement to identify defense-in-depth protections and describe their capabilities; and,
  - ◆ facilitate implementation and better align the requirements with current safety standards.
- ◆ require low-level radioactive waste disposal licensees and license applicants to conduct updated and new technical analyses, as well as develop site-specific low-level radioactive waste acceptance criteria;
  - ◆ add new definitions and concepts; and,
  - ◆ introduce amendments to facilitate implementation and better align the requirements with current health and safety standards (i.e., 10 CFR Part 20 requirements).

The technical analyses required by the amendments would include:

- ◆ an updated analysis to demonstrate protection of the general population (i.e., performance assessment), which would use a defined compliance period;
- ◆ a new analysis to demonstrate protection of inadvertent intruders (i.e., inadvertent intruder assessment), which would also use a defined compliance period; and,
- ◆ a new performance period analysis, to evaluate how the disposal system could mitigate the risk from the disposal of significant quantities of long-lived radionuclides after the compliance period.

The technical analyses would also need to be periodically reviewed and updated (e.g., at each renewal, with any application to amend the license for closure, and as necessary to update waste acceptance criteria). In addition, the rule would add a new description of safety case and incorporate a new requirement to identify defense-in-depth protections and describe their capabilities.

SECY-16-01016 states that “[t]hese amendments ensure that the ... [low-level radioactive waste] streams that are significantly different from those considered during the development of the existing 10 CFR Part 61 regulations will be disposed of safely and meet the performance objectives for land disposal of ... [low-level radioactive waste].”

**Discussion** In SECY-16-0106, NRC staff proposed amendments to 10 CFR Part 61 to:

## Federal Agencies and Committees *continued*

*For detailed information regarding the contents and provisions of SECY-16-0106, please see LLW Notes, September/October 2016, pp. 1, 32-38.*

### **Background**

The regulations for the disposal of commercial low-level radioactive waste in land disposal facilities are set forth in 10 CFR Part 61. NRC originally adopted these regulations in 1982. Although the NRC has never licensed any land disposal facilities under this part, the Agreement States that currently or plan to license low-level radioactive waste land disposal facilities must adopt compatible versions of these regulations.

In SECY-13-0075, dated July 18, 2013, the NRC staff provided the Commission with a proposed rule to amend 10 CFR Part 61. The Commission approved publication of the proposed rule in SRM-SECY-13-0075, dated February 12, 2014. After making Commission directed changes, the NRC published the proposed rule for an initial 120-day comment period in the *Federal Register* on March 26, 2015. The public comment period closed on July 24, 2015. After receiving extension requests, the staff reopened the comment period, which then closed on September 21, 2015.

The NRC received 2,401 comment letters (including approximately 2,300 form letters) representing individuals, public interest groups, Native American Tribal Governments, industry groups, licensees, and state and federal agencies. The comments encompassed a wide variety of viewpoints that are summarized and responded to in Section IV, “Public Comment Analysis,” of the *Federal Register* notice for the final rule (Enclosure 1).

The NRC staff briefed the ACRS Radiation Protection and Nuclear Materials Subcommittee and full committee eight times before publication of the proposed rule. The staff is scheduled to brief the ACRS subcommittee in October 2016

and the full committee in November 2016 on the final rule. (The ACRS requested that the meetings occur after the draft final rule would be publicly available in order to keep the meetings open to the public.) Shortly after the November 2016 meeting, the ACRS provided a letter report with recommendations and conclusions directly to the Commission.

*For additional information on the Part 61 final rule and associated documents, please contact either Gary Comfort at (301) 415-8106 or at [Gary.Comfort@nrc.gov](mailto:Gary.Comfort@nrc.gov) or Stephen Dembeck at (301) 415-2342 or at [Stephen.Dembek@nrc.gov](mailto:Stephen.Dembek@nrc.gov).*

## **Comment Period Opens re Guidance Document for Alternative Disposal Requests**

On October 19, 2017, the U.S. Nuclear Regulatory Commission (NRC) published a notice in the *Federal Register* requesting comment on the draft revision to its guidance document for alternative disposal requests entitled, “Guidance for the Reviews of Proposed Disposal Procedures and Transfers of Radioactive Material Under 10 CFR 20.2002 and 10 CFR 40.13(a).” (See 82 *Federal Register* 48,727 dated October 19, 2017.)

*The Federal Register notice regarding the draft revision to the NRC guidance document for alternative disposal requests is available at <https://www.gpo.gov/fdsys/pkg/FR-2017-10-19/pdf/2017-22694.pdf>.*

### **Purpose**

The purpose of the referenced document and associated procedure is to provide guidance for NRC staff and describe the process for documenting, reviewing, and approving (on a

## Federal Agencies and Committees *continued*

case-by- case basis) requests received from licensees, license applicants and other entities for alternative disposal of licensed material. The staff may authorize these requests under the provisions of Title 10 of the Code of Federal Regulations (10 CFR) 20.2002 and 10 CFR 40.13(a).

### Scope

The procedure covers the steps that NRC staff need to take in order to review, document, and approve a request for alternative disposal of licensed material, including:

- ◆ entering documents into the NRC public document system, which is known as the Agency-Wide Documents Access and Management System (ADAMS);
- ◆ establishing an Enterprise Project Identifier (EPID) and/or Cost Activity Code (CAC) for monitoring time charged to the project;
- ◆ conducting a technical review of the disposal request, including performing dose assessments;
- ◆ preparing a Safety Evaluation Report (SER) or Technical Evaluation Report (TER);
- ◆ preparing an Environmental Assessment (EA);
- ◆ coordinating with state regulatory agencies and disposal site operators;
- ◆ implementing a Communications Plan, where applicable, including conducting public meetings; and,
- ◆ implementing the approaches included within the All Agreement States Letter.

The NRC's Office of Federal and State Materials and Environmental Management Programs (FSME) Division of Waste Management and Environmental Protection (DWMEP) staff prepared the original version of the guidance

document (ADAMS Accession No. ML092460058, dated August 31, 2009) for use. Following the merger of FSME and the Office of Nuclear Material Safety and Safeguards (NMSS), the corresponding division is the NMSS Division of Decommissioning, Uranium Recovery and Waste Programs (DUWP).

This document is being revised in order to update the guidance as well as provide more clarity, consistency, and transparency to the process. Within the NRC, the NMSS Performance Assessment Branch staff within NMSS DUWP is often requested to perform these technical reviews. Accordingly, the guidance has been prepared for use primarily by NMSS DUWP staff. However, since disposal requests are also received by the Regions, the Office of Nuclear Reactor Regulation (NRR) and Agreement States, the procedure has been developed to support those reviews as well.

Although § 20.2002 and § 40.13(a) reviews are similar in most respects, there are a few differences that are described in the document. Where there are differences between the procedures for handling the different types of requests, a sub-section for each type of request is provided. Otherwise, they will be referred to collectively as ADRs.

The procedure does not cover all releases of solid materials from a licensee's control, only those that are submitted for NRC approval under 10 CFR 20.2002 and 10 CFR 40.13(a). The NRC's procedures for release of solid materials are described in NUREG-1757, Volume 1, Rev. 2, Section 15.11.

### Obtaining Information

Interested stakeholders may obtain publicly available information related to this action by any of the following methods:

## Federal Agencies and Committees *continued*

- ◆ **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID NRC-2017-0198.
- ◆ **NRC's Agencywide Documents Access and Management System (ADAMS):** Publicly-available documents may be obtained online in the ADAMS Public Documents collection at <http://www.nrc.gov/reading-rm/adams.html>.
- ◆ **NRC's Public Documents Room (PDR):** Copies of public documents may be obtained and purchased at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

### Submitting Comments

Comments are due by December 18, 2017. Comments received after this date will be considered if it is practical to do so, but the NRC is able to assure consideration only for comments received on or before this date.

Interested stakeholders may submit comments by any of the following methods:

- ◆ **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID NRC-2017-0198.
- ◆ **Mail comments to:** May Ma, Office of Administration, Mail Stop: OWFN-2-A13, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

Docket ID NRC-2017-0198 should be referenced when submitting comments.

### Background

In 2007, following developments in the national program for low-level radioactive waste disposal, as well as changes in the regulatory environment, the NRC conducted a Strategic Assessment of the NRC's regulatory program for low-level radioactive waste. The results of this assessment

were published in late 2007 in SECY-07-0180, "Strategic Assessment of Low-Level Radioactive Waste Regulatory Program" (ADAMS Accession No. ML071350299). The goal of the 2007 assessment was to identify and prioritize staff activities that: (1) ensure safe and secure low-level radioactive waste disposal; (2) improve the effectiveness, efficiency, and adaptability of the NRC's low-level radioactive waste regulatory program; and, (3) ensure regulatory stability and predictability, while allowing flexibility in disposal options.

One high priority task (Task 2) in the Strategic Assessment was to address the challenge of alternative disposal of very low-level radioactive waste, in accordance with 10 CFR § 20.2002 in non-traditional low-level radioactive waste facilities such as Resource Conservation and Recovery Act (RCRA) facilities, as well as the regulatory review and approval needed for such disposal. In response to stakeholder input regarding the 2007 assessment, the NRC determined that the process for authorizing these disposals needed more consistency and clarity. The NRC committed to addressing these concerns through the development of new regulatory guidance.

On August 31, 2009, the NRC issued interim staff procedure, "Review, Approval, and Documentation of Low-Activity Waste Disposals in Accordance with 10 CFR 20.2002 and 10 CFR 40.13(a)" (ADAMS Accession No. ML092460058). Prior to its issuance, there had been no single procedure covering safety and security reviews, the preparation of an environmental assessment, and coordination with internal and external stakeholders for alternative disposal requests. Accordingly, this document was developed and issued to provide consistency and guidance for NRC staff's review of alternative disposal requests received from licensees, applicants and other entities for alternative disposal of licensed material. In addition, the NRC determined that this guidance

## Federal Agencies and Committees *continued*

would be finalized after it had been implemented and used for more alternative disposal requests.

In order to set the direction for the NRC's low-level radioactive waste regulatory program in the next several years, including the alternative disposal request review process, the NRC decided to conduct a new evaluation of the NRC's low-level radioactive waste program (referred to as a Programmatic Assessment). The results of this assessment were published in October 2016, in SECY-16-0118, "Programmatic Assessment of Low-Level Radioactive Waste Regulatory Program" (ADAMS Accession No. ML15243A192). The objectives of the 2016 assessment were similar to the objectives of the 2007 Strategic Assessment. Both assessments also have considered future needs and changes that may occur in the nation's commercial low-level radioactive waste management system. One of the high priority tasks (Task 5) included within Enclosure 1 (ADAMS Accession No. ML15243A205) of the Programmatic Assessment was to address the challenge of alternative disposal of very low-level radioactive waste by finalizing the draft guidance document. Per the Programmatic Assessment, this final draft would be published for public comment and then issued as a final document.

Accordingly, the purpose of this draft revision to the guidance is to improve the alternative disposal process by providing more clarity, consistency and transparency to the process. In addition, this draft revision to the guidance also clarifies the meaning of disposal relative to 10 CFR 20.2002 authorizations to include recycling and reuse of materials. The draft revision to the guidance is available for public comment as ADAMS Accession No. ML16326A063. The NRC is interested in receiving comments related to the draft revision to the guidance from stakeholders, including professional organizations, licensees, Agreement States and members of the public. Comments will be considered to determine if additional changes to the draft revision to the

guidance and the alternative disposal request process are needed.

During the comment period, the NRC will conduct a public meeting at the NRC's headquarters that will explain the draft revision to the guidance and address questions. Information regarding the public meeting will be posted on the NRC's public meeting website at least ten (10) calendar days before the meeting. The NRC's public meeting website is located at <https://www.nrc.gov/public-involve.html>.

The NRC will also post the meeting notice on the federal rulemaking website at <http://www.regulations.gov> under Docket ID NRC-2017-0198. The NRC may post additional materials related to this document, including public comments, on the federal rulemaking website. The federal rulemaking website allows interested stakeholders to receive alerts when changes or additions occur in a docket folder.

*For additional information, please contact Robert Lee Gladney, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, at (301) 415-1022 or [Robert.Gladney@nrc.gov](mailto:Robert.Gladney@nrc.gov).*

## Public Meeting Held re Part 61 Regulatory Analysis Update and Alternative Disposal Request Guidance Revision

On October 19, 2017, the U.S. Nuclear Regulatory Commission (NRC) held a public meeting to discuss the regulatory analysis for the 10 CFR Part 61 final rule entitled, "Low-Level Radioactive Waste Disposal" and the revised guidance for alternative disposal requests entitled, "Guidance for the Reviews of Proposed Disposal

## Federal Agencies and Committees *continued*

Procedures and Transfers of Radioactive Material Under 10 CFR 20.2002 and 10 CFR 40.13(a).”

The meeting, which was scheduled from 2:00 to 5:00 p.m. EDT, was held at the agency’s headquarters in the auditorium of NRC Two White Flint North in Rockville, Maryland.

The public was invited to participate in the NRC meeting by discussing regulatory issues with the agency at designated points identified on the agenda. Interested stakeholders were also able to participate via conference call or webinar.

*For additional information on the NRC public meeting, please contact Gregory Suber, Chief of the Low-Level Waste Branch in the NRC’s Division of Decommissioning, Uranium Recovery and Waste Programs, at (301) 415-8748 or at [gregory.suber@nrc.gov](mailto:gregory.suber@nrc.gov).*

*A link to the meeting details, which is filed under ADAMS Accession Number ML17269A347, can be found at <https://www.nrc.gov/pmns/mtg?do=details&Code=20171203>.*

### **Public Meeting Agenda**

The following is the published agenda for the NRC public meeting:

- ◆ 1:45 – 2:00 pm: Registration
- ◆ 2:00 – 2:10 pm: Facilitator Opening Comments (NRC)
- ◆ 2:10 – 2:20 pm: NRC Welcome/Opening Remarks (NRC)
- ◆ 2:20 – 3:30 pm: Part 61 Regulatory Analysis Update and public comments/questions (NRC/Public)
- ◆ 3:30 – 5:00 pm: Alternative Disposal Request Guidance and public comments/questions (NRC/Public)
- ◆ 5:00 pm: Closing Remarks/Adjourn (NRC)

### **Background**

On September 8, 2017, NRC issued a Staff Requirements Memorandum (SRM) in response to SECY-16-0106, which sought Commission approval to publish a final rule in the *Federal Register* that would amend Title 10 of the Code of Federal Regulations (10 CFR) Parts 20, “Standards for Protection Against Radiation,” and Part 61, “Licensing Requirements for Land Disposal of Radioactive Waste.” (See related story, this issue.)

In the SRM, the Commission approved certain substantive revisions to the draft final rule and its subsequent publication as a supplemental proposed rule for a 90-day public comment period. Specifically, prior to its publication as a supplemental proposed rule, the SRM states that the draft final rule should be revised to incorporate the following changes:

1. reinstate the use of a case-by-case basis (i.e., "grandfather provision") for applying new requirements to only those sites that plan to accept large quantities of depleted uranium for disposal;
2. reinstate the 1,000 year compliance period from the proposed rule with a specific dose limit of 25 mrem/year and adopt a longer period of performance assessment—the period of which would be based on site-specific considerations and a "reasonable analysis," as defined in SRM-SECY-13-0075, “Proposed Rule: Low-Level Radioactive Waste Disposal (10 CFR Part 61) (RIN 3150-AI92)”—and apply the 1,000 year compliance period to the inadvertent intruder performance objective in 10 CFR 61.42 and the site stability performance objective in 10 CFR 61.44;
3. clarify that the safety case consists of the quantitative performance assessment, as supplemented by consideration of defense-in-depth measures;

4. modify the draft final rule text addressing defense-in-depth to narrow its consideration solely to providing additional assurance in mitigating the effects of large uncertainties that are identified during the performance assessment; and,
5. be informed by broader and more fully integrated, but reasonably foreseeable, costs and benefits to the United States waste disposal system resulting from the proposed rule changes, including pass-through costs to waste generators and processors.

The SRM states that the associated guidance documents should be revised and should be made publicly available, concurrent with the comment period on the supplemental proposed rule.

The Commission also directed that the revised *Federal Register* notice prepared as a result of the direction in the SRM should be provided to the Commission for its information no later than 10 business days prior to its transmittal for publication.

Finally, the SRM notes that the timing for the staff to prepare a regulatory basis for the disposal of Greater-than-Class C (GTCC) waste as directed in SRM-SECY-15-0094, “Historical and Current Issues Related to Disposal of Greater-Than-Class C Low-Level Radioactive Waste,” should be changed from the previous direction of within six (6) months of the completion of the ongoing 10 CFR Part 61 rulemaking to six (6) months after the publication of the supplemental proposed rule.

*The SRM can be found online at <https://www.nrc.gov/docs/ML1725/ML17251B147.pdf>.*

*For additional information on the Part 61 final rule and associated documents, please contact either Gary Comfort at (301) 415-8106 or at [Gary.Comfort@nrc.gov](mailto:Gary.Comfort@nrc.gov) or Stephen Dembeck at (301) 415-2342 or at [Stephen.Dembek@nrc.gov](mailto:Stephen.Dembek@nrc.gov).*

## NRC Accepts Comments on Draft FY 2018-2022 Strategic Plan

On September 27, 2017, the U.S. Nuclear Regulatory Commission (NRC) announced that the agency was seeking public comments on draft NUREG-1614, Volume 7, “Draft Strategic Plan: Fiscal Years 2018–2022.” The draft Strategic Plan provides the agency’s strategic goals and objectives and proposed strategies for achieving them.

In the *Federal Register* notice, NRC states that the agency “encourages and welcomes public comments that can help it respond to challenges and shape its strategic direction over the next four years, particularly comments on the plan’s goals, objectives, and strategies.” (See 82 *Federal Register* 44,858 dated September 26, 2017.)

Interested stakeholders were instructed to submit comments by October 26, 2017. Comments received after this date will be considered if it is practical to do so, but the NRC is only able to ensure consideration of comments received on or before this date.

*The Federal Register notice regarding the Draft FY 2018-2022 Strategic Plan can be found at <https://www.gpo.gov/fdsys/pkg/FR-2017-09-26/pdf/2017-20538.pdf>.*

*The draft Strategic Plan is available in NRC’s Agencywide Documents Access and Management System (ADAMS) under Accession No. ML17254A104.*

### Overview

The NRC is an independent agency established by the Energy Reorganization Act of 1974 that began operations in 1975 as a successor to the Atomic Energy Commission. The NRC’s mission is to

## Federal Agencies and Committees *continued*

license and regulate the nation's civilian use of radioactive materials to provide reasonable assurance of adequate protection of public health and safety, as well as to promote the common defense and security and to protect the environment.

The draft Strategic Plan, covering the period Fiscal Years (FY) 2018–2022, describes how the NRC plans to achieve its two strategic goals:

- ◆ ensure the safe use of radioactive materials; and
- ◆ ensure the secure use of radioactive materials.

The draft establishes a framework for the next four years for the NRC to achieve its mission. It also provides an overview of the NRC's responsibilities, key challenges and management priorities, and it outlines the objectives and key activities to achieve the agency's goals.

The draft plan is largely consistent with the previous plan (FY 2014–2022) with continued focus and commitment to the NRC's mission and strategic goals of safety and security. The most notable change is a new vision statement, which highlights the agency's commitment to the Principles of Good Regulation. It also includes minor updates and editorial enhancements.

### **Comments**

The NRC encouraged all interested parties to comment on the draft Strategic Plan, particularly on the plan's goals, objectives, and strategies. Stakeholder feedback will be valuable in helping the Commission develop a final Strategic Plan that has the benefit of the many views of the public and the regulated civilian nuclear industry. The NRC will consider the comments submitted and may use them, as appropriate, in the preparation of the final Strategic Plan; however, the NRC does not anticipate preparing explicit responses to each comment.

Comments on the draft Strategic Plan were due October 26, 2017. Comments will be summarized and provided to the Commission for consideration in its finalization of the plan.

The draft Strategic Plan is available on the NRC's website at [www.nrc.gov](http://www.nrc.gov) under NUREG-1614.

### **Background**

In accordance with the Government Performance and Results (GPRA) Modernization Act of 2010, agencies are required to submit their strategic plans to Congress the year following the start of a Presidential term. The Commission has approved a draft Strategic Plan and is now seeking comments from the public so that the agency may benefit from a wide range of stakeholder input to help shape the NRC's strategic direction for the upcoming planning period.

The NRC issued its first Strategic Plan in September 1997 and, as required, it has been updated every four years since then.

The 2018–2022 edition is due to Congress and the President by February 5, 2018.

*For additional information, please contact Holly Harrington of the NRC at (301) 415-8200.*

## NRC Issues Information Notices and Regulatory Issue Summaries

Throughout calendar year 2017, the U.S. Nuclear Regulatory Commission (NRC) has released Information Notice (IN) documents and Regulatory Issue Summaries (RIS) on a variety of topics.

### Information Notices

To date, NRC has released the following IN documents during calendar year 2017:

- ◆ IN 2017-06, *Battery and Battery Charger Short-Circuit Current Contributions to a Fault on the Direct Current Distribution System*, was issued on September 26, 2017 to inform addressees of the results of a recent NRC-led battery testing program. The testing program evaluated the magnitude of direct current (DC) fault current contributions from batteries and battery chargers to a downstream short-circuit fault on the DC distribution system. The detailed test results, conclusions and recommendations are provided in NUREG/CR-7229, "Testing to Evaluate Battery and Battery Charger Short-Circuit Current Contributions to a Fault on the DC Distribution System" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML17039A869). The NRC expects that recipients will review the information for applicability to their facilities and consider actions, as appropriate, for potential impacts on DC fault studies and other related calculations.
- ◆ IN 2017-05, *Potential Binding of Schneider Electric/Square-D Masterpact NT and NW 480-VAC Circuit Breaker Anti-Pump Feature*, was issued on September 1, 2017 to inform addressees about recent issues related to the operation of Schneider Electric/Square-D Masterpact 480-volt NT and NW circuit breakers. The design of the breaker results in a susceptibility to internal binding in certain circumstances that can prevent the breaker from closing on demand. The NRC expects that recipients will review the information for applicability to their facilities and consider actions, as appropriate, to avoid similar problems.
- ◆ IN 2017-04, *High Energy Arcing Faults in Electrical Equipment Containing Aluminum Components*, was issued on August 21, 2017 to inform addressees of operating experience and recent NRC testing results pertaining to the magnitude of arc fault hazards in electrical equipment containing aluminum components. The NRC expects that recipients will review the information for applicability to their facilities and consider actions, as appropriate.
- ◆ IN 2017-03, *Anchor/Darling Double Disc Gate Valve Wedge Pin and Stem-Disc Separation Failures*, was issued on June 15, 2017 to inform addressees of operating experience regarding Anchor/Darling (a subsidiary of Flowserve) double disc gate valve (DDGV) failures. IN 2017-03 provides a discussion of the recent LaSalle County Station Unit 2 Anchor/Darling DDGV failure, events at Browns Ferry that led to Part 21 reporting, and other operating experience that resulted in stem-disc separations. The document contains information available to NRC staff as of May 2017.
- ◆ IN 2017-02, *Best Practice Concepts for Patient Release*, was issued on May 17, 2017 to provide addressees with best practices to consider for patients treated with Sodium Iodine-131 (NaI-131) and released in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 35.75, "Release of Individuals Containing Unsealed Byproduct Material or Implants Containing Byproduct Material." The included best

## Federal Agencies and Committees *continued*

practice concepts are intended to provide information to licensees to consider and individualize for their patients in regards to maximizing radiation safety and minimizing unnecessary radiation exposure.

- ◆ IN 2017-01, *Reactor Coolant System Leakage from a Control Rod Drive Threaded Connection*, was issued on May 3, 2017 to inform addressees of operating experience regarding reactor coolant system (RCS) leakage through a control rod drive threaded connection. It is expected that recipients will review the information for applicability to their facilities and consider actions, as appropriate, to avoid similar problems.

Suggestions contained in these IN's are not NRC requirements; therefore, no specific action or written response is required.

### Regulatory Issue Summaries

To date, NRC has released the following RIS documents during calendar year 2017:

- ◆ RIS 2017-06, *NRC Policy on Use of Combination Dosimetry Devices During Industrial Radiographic Operations*, was issued on September 19, 2017 to provide a clarification of the regulation on the use of combined dosimetry devices during industrial radiographic operations under Title 10 of the Code of Federal Regulations (10 CFR) Part 34, "Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations." Specifically, RIS 2017-06 provides clarification on the use of combination dosimetry devices to simultaneously satisfy multiple functions required by 10 CFR 34.47, "Personnel monitoring."
- ◆ RIS 2017-05, *Administration of 10 CFR Part 72 Certificate of Compliance Corrections and Revisions*, was issued on September 13, 2017 to inform addressees of the processes used to revise initial Certificates of Compliance (CoC) and subsequent amendments (hereafter referred to as CoC's, whether initial CoC's or subsequent amendments) to make administrative corrections and technical changes using the existing regulatory framework in 10 CFR Part 72. RIS 2017-05 does not address or propose any changes to 10 CFR Part 72.
- ◆ RIS 2017-04, *Clarification on the Implementation of Compensatory Measures for Protective Strategy Deficiencies or Degraded or Inoperable Security Systems, Equipment or Components*, was issued on August 30, 2017 to remind addressees of the requirements for implementation of compensatory measures to ensure their physical protection program maintains, at all times, the capability to detect, assess, interdict and neutralize threats up to and including the design basis threat of radiological sabotage, as identified in 10 CFR 73.55(b)(3)(i), "General performance objective and requirements." Additionally, RIS 2017-04 reminds licensees that protective strategy deficiencies identified during performance evaluation exercises and drills should be assessed to determine if these deficiencies meet the criteria identified in 10 CFR 73.55(o) for implementation of compensatory measures.
- ◆ RIS 2017-03, *Preparation and Scheduling of Operator Licensing Examinations*, was issued on April 5, 2017 to inform addressees of the NRC staff's need for updated information on projected site-specific operator licensing examination schedules, as well as on the estimated number of applicants planning to take operator licensing examinations.
- ◆ RIS 2017-02, *Applicability of Title 10 CFR Part 37 to Non-Manufacturing and Distribution Service Provider Licensees*, was issued on February 8, 2017 to inform licensees of the applicability of Title 10 of the Code of Federal Regulations (10 CFR) Part 37,

“Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material,” to non-manufacturing and distribution (non-M&D) service provider licensees.

- ◆ RIS 2017-01, *Human Reliability and Human Performance Database*, was issued on February 2, 2017 to inform addressees about the Scenario, Authoring, Characterization, and Debriefing Application (SACADA) system.

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

*Additional information can be found on the NRC’s website at [www.nrc.gov](http://www.nrc.gov).*

## NRC Names Two Executives to Top Positions

On September 20, 2017, the U.S. Nuclear Regulatory Commission (NRC) announced the appointment of two office directors.

The new office Director changes became effective on October 29, 2017.

### Appointments

Mary Muessle has been appointed Director of the Office of Administration. In this position, she will oversee a variety of support functions—including acquisitions, facilities and security, property management, publications and printing.

Anne Boland has been appointed Director of the Office of Enforcement. In this position, she will oversee the development and implementation of policies and programs for enforcement of NRC

requirements, including the agency’s allegations and safety culture programs.

“We are pleased to announce the promotions of these experienced, talented individuals who will make significant contributions to the agency in their new positions,” said Victor McCree, Executive Director for Operations.

### Background

Muessle joined the NRC in 2003 as a Budget Analyst. Since that time, she has served in positions of increasing responsibility and became a member of the Senior Executive Service in 2008. Most recently, she was the agency’s Deputy Chief Financial Officer. Prior to joining the NRC, Muessle worked for the U.S. Information Agency, for a global nonprofit organization and for a wireless telecommunications venture. Muessle received a Bachelor’s Degree in Human Development and Education from Syracuse University and a Master of Business Administration from the George Washington University.

Boland joined the NRC in 1985, directly out of graduate school. She joined the Senior Executive Service in 2006 and has served in a variety of increasingly senior positions in the agency’s Region II in Atlanta, Georgia and Region III in Lisle, Illinois. Most recently, she worked in the agency’s headquarters as the Director of the Division of Operating Reactor Licensing, in the Office of Nuclear Reactor Regulation. Boland holds a Bachelor’s Degree in Chemistry from Augusta College and a Master’s Degree in Health Physics from the Georgia Institute of Technology.

*For additional information, please contact Holly Harrington of the NRC at (301) 415-8200.*

## New Edition of NRC Information Digest Now Available Online

On September 6, 2017, the U.S. Nuclear Regulatory Commission (NRC) announced that the agency has published its 2017-2018 edition of the Information Digest, which describes the agency's responsibilities and activities and provides general information on nuclear-related topics. This edition, NUREG-1350, Volume 29, is intended to serve as a quick reference to major facts about the agency and the industry it regulates, in an easy-to-use format that includes visual aids.

The Information Digest is published annually and is available electronically on the NRC website at [www.nrc.gov](http://www.nrc.gov). The electronic version of the Digest has embedded hyperlinks for easy access to more information on major topics. The NRC graphics, figures, maps, and data sets are also available online.

In addition, a print or CD copy will be available in November 2017, upon written request to the U.S. Nuclear Regulatory Commission, Office of Administration, Publications Branch, Washington, D.C. 20555-0001. Requests can also be sent by email to [distribution.resource@nrc.gov](mailto:distribution.resource@nrc.gov) or by fax to (301) 415-2289.

*For additional information, please contact Ivonne Couret of the NRC at (301) 415-8200.*

## NRC Scores High Marks in Federal Government Survey

The U. S. Nuclear Regulatory Commission remains a top place to work in the federal government, according to the recently released U.S. Office of Personnel Management 2017 Federal Employee Viewpoint Survey.

The 2017 results reflect a slight increase in overall NRC employee engagement, diversity/inclusion and global satisfaction, which indicate a noticeable improvement in the agency culture and employee perceptions attributable, in part, to efforts the agency has taken in response to previous surveys.

The NRC ranked in the top 10 government agencies in all major indices OPM measures, including: employee engagement, diversity/inclusion (also referred to as the new Inclusion Quotient), and global satisfaction. NRC staff provided positive responses to the majority of questions, consistently scoring well above government averages. The agency's overall "new IQ" score was 70 percent, compared to the government average of 60 percent. The NRC employee engagement score was 75 percent, compared to 67 percent government wide, with the agency ranking sixth overall. Employee engagement summarizes the results of several key questions, measuring areas where agencies can focus to promote an engaged workforce.

The agency score in global satisfaction was 72 percent, compared to a 64 percent government average. Global satisfaction measures employee satisfaction in job, organization and pay, as well as willingness to recommend their agency to others as a good place to work.

"The FEVS is an effective and useful feedback tool," said Victor McCree. "I am pleased that NRC employees continue to participate in the FEVS process. We will carefully evaluate each

## Federal Agencies and Committees *continued*

category identified in the survey for opportunities to continue to improve our work environment.”

Overall, NRC employees remain highly committed to participating in the survey with a 76 percent response rate (30 percent higher than the government average) and the highest rate of participation ever at the agency. The NRC uses these survey results to identify improvement opportunities, while helping to build a stronger agency culture.

The FEVS is conducted annually by OPM and evaluates management leadership, employee satisfaction and organizational culture of federal agencies. Specifically, it measures employees’ perception of whether, and to what extent, their organizations have the characteristics typically associated with high-performing, successful organizations.

*For additional information, please contact David Castelveter of the NRC at (301) 415-8200 or David McIntyre at (301) 415-8200.*

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- NRC Reference Library (NRC regulations, technical reports, information digests, and regulatory guides)..... [www.nrc.gov](http://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)..... [listserv@unixmail.rtpnc.epa.gov](mailto:listserv@unixmail.rtpnc.epa.gov)
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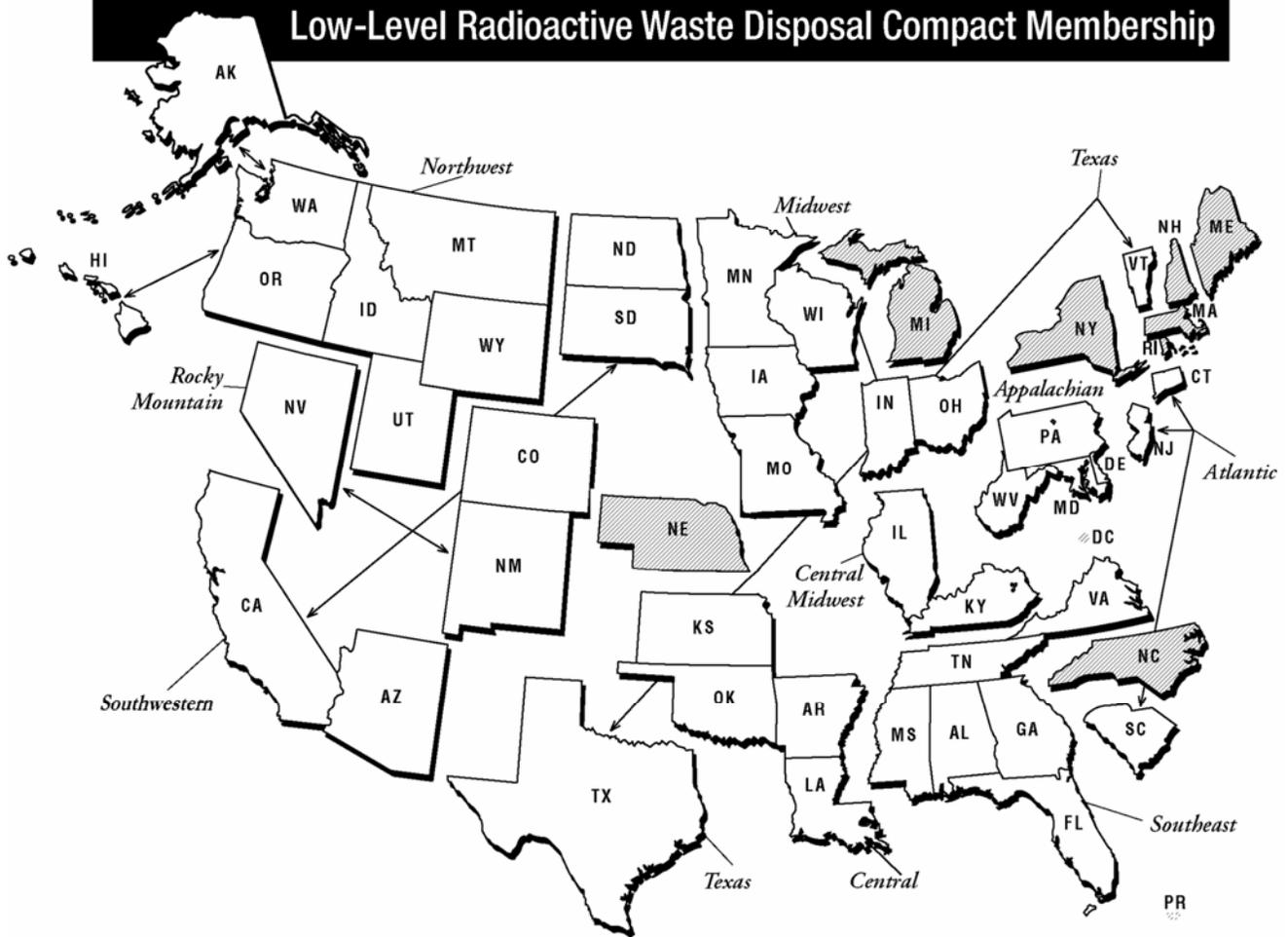
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# Low-Level Radioactive Waste Disposal Compact Membership



## Appalachian Compact

Delaware  
Maryland  
Pennsylvania  
West Virginia

## Atlantic Compact

Connecticut  
New Jersey  
South Carolina

## Central Compact

Arkansas  
Kansas  
Louisiana  
Oklahoma

## Central Midwest Compact

Illinois  
Kentucky

## Northwest Compact

Alaska  
Hawaii  
Idaho  
Montana  
Oregon  
Utah  
Washington  
Wyoming

## Midwest Compact

Indiana  
Iowa  
Minnesota  
Missouri  
Ohio  
Wisconsin

## Rocky Mountain Compact

Colorado  
Nevada  
New Mexico

*Northwest accepts Rocky Mountain waste as agreed between compacts*

## Southeast Compact

Alabama  
Florida  
Georgia  
Mississippi  
Tennessee  
Virginia

## Southwestern Compact

Arizona  
California  
North Dakota  
South Dakota

## Texas Compact

Texas  
Vermont

## Unaffiliated States

District of Columbia  
Maine  
Massachusetts  
Michigan  
Nebraska  
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Puerto Rico  
Rhode Island