

LLW *notes*

Volume 32 Number 4 July/August 2017

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

Draft Agenda Released for Fall 2017 LLW Forum Meeting *Hilton Alexandria Old Town Hotel in Alexandria, Virginia* *October 16-17, 2017*

The draft agenda for the upcoming Low-Level Radioactive Waste Forum (LLW Forum) meeting has been released and posted to the organization's website at www.llwforum.org. The meeting will be held at the Hilton Old Town Alexandria Hotel in Alexandria, Virginia on October 16-17, 2017.

As a reminder, the discount rate hotel room block for the meeting closes in just four weeks on September 29, 2017, unless the block reaches capacity in advance of the deadline. Currently, there is only very limited space remaining in the discount room block. Accordingly, interested stakeholders are encouraged to register and make hotel reservations for the meeting at your earliest convenience.

In terms of planning and making travel arrangements, please note that the U.S. Nuclear Regulatory Commission (NRC) stated at the recent Organization of Agreement States (OAS) annual meeting that the *Federal Register* notice on proposed revisions to the 20.2002 alternative disposal guidance is expected to be issued in late August or early September 2017. NRC staff stated that a public meeting is *tentatively* planned at agency headquarters for October 18, 2017—the

day after the conclusion of the LLW Forum meeting.

State and compact officials should also note that there will be a separate, closed-session meeting only for state and compact members of the LLW Forum's Board of Directors and their designated representatives on Tuesday afternoon (October 17, 2017) from 2:30 – 5:00 p.m. The purpose of the meeting is 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 direction and funding of the LLW Forum. All state and compact Directors, Alternates and their designated representatives are invited and

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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 4 July/August 2017

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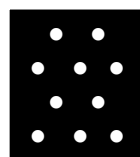
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Directors that serve on the Board of the Low-Level Radioactive Waste Forum, Inc. are appointed by governors and compact commissions. The LLW Forum, Inc. was established to facilitate state and compact implementation of the Low-Level Radioactive Waste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

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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 |

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(Continued from page 1)

encouraged to attend the Tuesday afternoon planning meeting.

The Disused Sources Working Group (DSWG)—including members, staff, organizational liaisons and invited guests—will meet on Wednesday (October 18) from 9:00 a.m. – 5:00 p.m.

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

The LLW Forum meeting documents—including a meeting bulletin, registration form and draft agenda—have been posted to the LLW Forum Meeting page of the organization's web site at www.llwforum.org.

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

Agenda Topics

The following is a list of agenda topics for 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;
- ◆ 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;

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

- ◆ 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 are 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.

Location and Dates

The fall 2017 LLW Forum meeting will be held on Monday, October 16 (9:00 am – 6:00 p.m.) and Tuesday, October 17 (8:30 a.m. – 1:00 p.m.) at the Hilton Alexandria Old Town Hotel, which is located at 1767 King Street in Alexandria, Virginia.

Located in the historic, vibrant King Street neighborhood, the Hilton Alexandria Old Town hotel is one of the most convenient hotels in Alexandria, VA for business and leisure travelers

visiting Washington, DC. The hotel is just steps away from King Street Metro station and close to Reagan National Airport. Downtown DC attractions and government buildings are minutes away by Metro.

Registration

All persons must pre-register for the meeting and pay any associated registration fees in order to be allowed entry. Registration forms are needed in order to ensure that you receive a meeting packet and name badge. Accordingly, interested attendees are asked to please take a moment to complete the registration form at your earliest convenience and return it to the Southeast Compact Commission at the mailing or e-mail address listed at the bottom of the form.

The meeting is free for up to two individuals representing members of the LLW Forum. Additional and non-member registration is \$500, payable by check only to the "LLW Forum, Inc." (Credit card payments are not accepted.)

Reservations

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

A limited block of hotel rooms has been reserved for Sunday, October 15th and Monday, October 16th at the rate of \$231.00 plus tax per night (for single/double occupancy), \$239 plus tax (king), \$251 (triple) and \$271 (quad). The same rates have been extended to three days prior and three days post the meeting dates.

To make a reservation, please call (703) 647-2035 (Group Code is OLW). Reservations may also be made at the website at:

<http://www.hilton.com/en/hi/groups/personalized/D/DCAOTHF-OLW-20171015/index.jhtml>.

The deadline for reserving a room at the discounted rate is September 29, 2017.

Transportation and Directions

From Reagan National Airport via the Metro, the hotel is located next to the King Street Metro Station, accessible by the Blue and Yellow lines and only two stops from Reagan National Airport. Directions from other airports are given on the Hilton website, www.hiltonalexandria.com. Taxi fares are typically around \$20.00.

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 to Hold Spring 2018 Meeting in San Francisco, California

The Low-Level Radioactive Waste Forum (LLW Forum) is pleased to announce that our spring 2018 meeting 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.

Atlantic Compact/State of South Carolina

SCE&G to Cease New V.C. Summer Nuclear Project

On July 31, 2017, South Carolina Electric & Gas Company (SCE&G) announced that it would cease construction of two new nuclear reactors at the V.C. Summer Nuclear Station in Jenkinsville, South Carolina. SCE&G, which is a principal subsidiary of SCANA Corporation (SCANA), further announced that the company intends to promptly file a petition with the Public Service Commission of South Carolina seeking approval of its abandonment plan.

According to the company's press release, this decision was reached by SCE&G after considering the additional costs to complete the new nuclear reactors, the uncertainty regarding the availability of production tax credits for the project and the amount of anticipated guaranty settlement payments from Toshiba Corporation (Toshiba). SCE&G's decision was also influenced by other matters associated with continuing construction including the decision of the co-owner of the project, the South Carolina Public Service Authority (Santee Cooper), the state owned electric utility, to suspend construction of the project.

Based on these factors, SCE&G concluded that it would not be in the best interest of its customers and other stakeholders to continue construction of the project.

Overview and Analysis

Following the bankruptcy filing of Westinghouse Electric Company, LLC (WEC), SCE&G and Santee Cooper each began a comprehensive process of evaluating the most prudent path forward for the new nuclear reactors. The project owners worked with WEC and Fluor Corporation,

as well as other technical and industry experts, to evaluate the project costs and schedules.

Based on this evaluation and analysis, SCE&G concluded that completion of both new nuclear reactors would be prohibitively expensive. According to SCE&G's analysis, the additional cost to complete both reactors beyond the amounts payable in connection with the engineering, procurement, and construction contract would materially exceed prior WEC estimates, as well as the anticipated guaranty settlement payments from Toshiba. Moreover, in order to qualify for production tax credits under current tax rules, the new reactors would need to be online before January 1, 2021. SCE&G's analysis concluded that the new reactors could not be brought online until after this date.

SCE&G also considered the feasibility of completing the construction of Unit 2 and abandoning Unit 3 under the existing ownership structure and using natural gas generation to fulfill any remaining generation needs. This option provided a potentially achievable path forward that may have delivered SCE&G a similar megawatt capacity as its 55% interest in the two reactors and provided a long-term hedge against carbon legislation/regulation and against gas price volatility. SCE&G had not reached a final decision regarding this alternative when Santee Cooper determined that it would be unwilling to proceed with continued construction. Consequently, SCE&G determined that it is not in the best interest of customers and other stakeholders for it to continue construction of one reactor.

Based on the evaluation and analysis, and Santee Cooper's decision, SCE&G has concluded that the only remaining prudent course of action will be to abandon the construction of both Unit 2 and Unit 3 under the terms of the Base Load Review Act (BLRA). Accordingly, normal construction activities at the site will cease immediately and efforts will be shifted toward an orderly transition of winding down and securing the project

States and Compacts *continued*

property. SCE&G plans to use the anticipated payments resulting from the settlement of Toshiba's guaranty to mitigate cost impacts to SCE&G electric customers.

Abandonment Proceeding

On August 1, 2017, SCE&G fully briefed the Public Service Commission of South Carolina and will thereafter initiate the abandonment proceeding. In accordance with the BLRA, SCE&G intends to seek an amortization of the project costs and a return at the weighted average cost of capital on the unamortized balance until fully recovered. SCE&G plans to use the anticipated proceeds from the Toshiba settlement and benefits derived from tax deductions to mitigate rate increases and lessen the impact on its customers for several years.

Company Statement

In announcing the decision, SCANA Chairman and CEO Kevin Marsh issued the following statement:

We arrived at this very difficult but necessary decision following months of evaluating the project from all perspectives to determine the most prudent path forward. Many factors outside our control have changed since inception of this project. Chief among them, the bankruptcy of our primary construction contractor, Westinghouse, eliminated the benefits of the fixed-price contract to our customers, investors, and other stakeholders. Ultimately, our project co-owner Santee Cooper's decision to suspend construction made clear that proceeding on our own would not be economically feasible. Ceasing work on the project was our least desired option, but this is the right thing to do at this time.

Many of our employees have worked extremely hard over the years to build these

new units. That's one of the factors that makes this decision particularly difficult. We are deeply grateful for all their contributions and will do our best to support those affected by these changes. We also recognize the impact that our path forward will have on customers, communities, shareholders, and the nuclear industry as a whole.

Our belief in the benefits of nuclear generation—not just for the state, but for the nation—hasn't changed. As we have been doing for more than 30 years, we will continue providing customers with a valuable low-cost, non-emitting source of generation through our operating nuclear unit at V.C. Summer.

Background

SCANA Corporation—which is headquartered in Cayce, South Carolina—is an energy-based holding company principally engaged, through subsidiaries, in electric and natural gas utility operations and other energy-related businesses. The Company serves approximately 718,000 electric customers in South Carolina and approximately 1.3 million natural gas customers in South Carolina, North Carolina and Georgia.

SCE&G is a regulated public utility engaged in the generation, transmission, distribution and sale of electricity to approximately 718,000 customers in South Carolina. The company also provides natural gas service to approximately 362,000 customers throughout the state.

Additional information about SCANA and its businesses is available on the Company's website at www.scana.com. Additional information about SCE&G is available at www.sceg.com.

Central Interstate Compact

Central Interstate Commission Passes Resolution Authorizing Waste Exports

On June 20, 2017, the Central Interstate Low-Level Radioactive Waste Commission held its annual meeting at the Capital Hotel in Little Rock, Arkansas.

During the meeting, the Commission passed a resolution granting approval for all low-level radioactive waste generators in the compact region (Arkansas, Kansas, Louisiana, and Oklahoma) to export their low-level radioactive waste without first making application to the Commission.

The text of the resolution is as follows:

WHEREAS, the Central Interstate Low-Level Radioactive Waste Commission (“Commission”) was established in 1984 pursuant to the Central Interstate Low-Level Radioactive Waste Compact (“Compact”) (Public Law 99-240) and has, as current member states, Arkansas, Kansas, Louisiana, and Oklahoma, and

WHEREAS, Article III.g. of the Compact provides that, unless authorized by the Commission, it shall be unlawful after January 1, 1986 for any person to export from the region, low-level radioactive waste (“LLRW”) generated within the region, and to transport LLRW from the site at which it is generated except to a regional facility, and

WHEREAS, in 2006, the Commission adopted a resolution to not actively pursue siting a regional facility in one of the member states, and

WHEREAS, by not having a regional facility in one of the member states, all LLRW generators in the member states have exported their LLRW wastes from the region to a non-Compact disposal facility after having applied to, and obtained authorization from, the Commission, as required by Article III.g., and

WHEREAS, the Commission has determined there is no further need to require each LLRW generator to apply to the Commission for export authorization,

BE IT NOW THEREFORE RESOLVED THAT:

- A. This Resolution shall take effect July 1, 2017 and shall serve as authorization for export required under Article III.g. of the Compact.
- B. The Commission authorizes all LLRW generators within the member states to export LLRW generated at their facilities to any duly authorized and permitted disposal facility outside of the Compact, without application to the Commission or payment of any application fee, provided the export is done in compliance with all applicable state and federal laws and regulations and any terms or conditions required of both the disposal facility to receive the LLRW and the regional Compact in which the disposal facility is located.
- C. Within 30 days of the date this Resolution is adopted, the Administrator shall ensure a copy of this Resolution is posted on the Commission’s webpage and is provided to:
 1. all LLRW generators who have filed Export Applications with the

- Commission during Fiscal Years 2015 to the present; and
2. the following LLRW disposal facilities and their associated Compact:
 - a. EnergySolutions in Barnwell, South Carolina (Atlantic Compact);
 - b. EnergySolutions in Clive, Utah (Northwest Compact);
 - c. U S Ecology in Richland, Washington (Northwest Compact); and
 - d. Waste Control Specialists in Andrews, Texas (Texas-Vermont Compact).

This resolution shall remain in effect until modified, suspended, or revoked by the Commission.

The resolution was adopted by a 4 to 0 vote of the Central Interstate Low-Level Radioactive Waste Commission. The effective date of the resolution, which was signed by Commission Chair Jon Roberts, is July 1, 2017.

For additional information, please contact Kristie Valtierra, Administrator of the Central Interstate Low-Level Radioactive Waste Compact

State of New York

New York State LLW Status Report Now Available

On July 10, 2017, the New York State Energy and Research Development Authority (NYSERDA) announced the availability of the thirty-first annual *New York State Low-Level Radioactive Waste Status Report*. The report covers calendar year 2016.

The 2016 Status Report provides data on the volume and activity of low-level radioactive waste shipped to out-of-state disposal sites and data on low-level radioactive waste stored at the end of the year pending disposal.

The 2016 Status Report is available on NYSERDA's website at www.nyserda.ny.gov/llrw-reporting.

Overview

The New York State Low-Level Radioactive Waste Management Act (Chapter 673 of the Laws of 1986) requires low-level radioactive waste generators in New York State to submit annual reports regarding such waste to NYSERDA.

If a licensee generated, stored (on- or off-site) or disposed of low-level radioactive waste, the licensee is probably required to submit a report. The licensee is also probably required to submit a report if, during the next five years, the licensee plans to generate low-level radioactive waste that will require eventual disposal.

The report requires information regarding waste as it was received by licensed low-level radioactive waste disposal facilities during each calendar year. This data may be gathered from disposal facility manifests. The interval between the date the waste leaves a licensee's facility and the date that it is received by the disposal facility

States and Compacts *continued*

may affect the licensee's reporting data. If the licensee uses the services of a low-level radioactive waste broker or processor, that firm should be able to assist the licensee in compiling the data. The report also requires information regarding low-level radioactive waste stored on, or off, the licensee's site.

Completed report forms should be submitted to:

Alyse Peterson
Senior Project Manager
Radioactive Waste Policy and Nuclear
Coordination
NYSERDA
17 Columbia Circle
Albany, New York 12203-6399

Background

The New York State Low-Level Radioactive Waste Management Act (1986) charged NYSERDA with acquiring lands for, designing, obtaining necessary regulatory approvals for, constructing and operating facilities for the disposal of low-level radioactive waste generated in New York State. These actions are predicated on the selection of a site and disposal methods by an ad hoc siting commission. The siting process has been suspended while the State reexamines its low-level radioactive waste management alternatives and program strategy.

In the interim, NYSERDA will continue to play an important role by:

- ◆ monitoring generation and management of low-level radioactive waste in the State, including collection of annual reports from generators and preparing an annual status report;
- ◆ managing the annual assessment on nuclear power plants that supports low-level radioactive waste facility-development activities, and the low-level radioactive waste surcharge rebate account; and,
- ◆ maintaining technical files and records from the former Siting Commission for potential future application in meeting the State's LLRW management needs.

Additionally, Chapter 83 of the Laws of 1995 transferred certain responsibilities from the former New York State Energy Office to NYSERDA, including responsibility for serving as the State's principal coordinator for activities related to nuclear energy and radioactive materials control. Accordingly, NYSERDA's President serves as the designated State Liaison Officer (SLO) with the U.S. Nuclear Regulatory Commission (NRC).

For additional information, please go to www.nyserda.ny.gov or contact Alyse Peterson at (518) 862-1090, extension 3274.

Northwest Compact/State of Utah

Utah Issues Licensing and Rulemaking Actions for Public Comment

Byproduct License Renewal and Source Material Distribution

During the last week of August 2017, the Utah Department of Environmental Quality (DEQ), Division of Waste Management and Radiation Control (DWMRC), announced that it is currently accepting public comment on the following licensing and rulemaking actions:

- ◆ renewal of the EnergySolutions' 11e.(2) byproduct radioactive materials license (UT2300478) for the licensee's site near Clive (Tooele County), Utah; and,

States and Compacts *continued*

- ◆ changes to the state's radiation control rules to incorporate the federal regulatory changes promulgated by the U.S. Nuclear Regulatory Commission (NRC) related to 10 CFR Parts 30, 40 and 70.

In addition, on August 18, 2017, the DWMRC notified stakeholders that it had approved the final adoption of rule changes to incorporate the following into Title R315 of the Utah Administrative Code (UAC):

- ◆ the U.S. Environmental Protection Agency (EPA) final Hazardous Waste Generator Improvements Rule (HWGIR) as published on November 28, 2016 at 81 *Federal Register* 85,732;
- ◆ addition of a used oil generator as defined under Mixed Mode Transit System (NAICS code of 485111) to the list of used oil transporters considered to have a permit by rule to transport their own used oil to a permitted used oil recycler; and,
- ◆ selected corrections and clarifications.

Renewal of EnergySolutions' 11e.(2) Byproduct Radioactive Materials License

On May 3, 2012, EnergySolutions submitted an application to the DWMRC Director to renew the Clive facility's 11e.(2) byproduct radioactive materials license. On August 16, 2017, the DWMRC commenced a forty-five day public comment period for the proposed licensing action. The public comment period will end on October 2, 2017.

Public Hearing Opportunity A public hearing will be scheduled if requested, by any citizen, by September 5, 2017. If requested, the hearing will be held from 1:00 p.m. to 4:00 p.m. on September 26, 2017. The purpose of the public hearing, if held, will be to take comments from the public and to provide an opportunity for questions and answers relating to the renewal of the 11e.(2) license.

A Hearing Officer will manage the hearing and the hearing will be recorded and transcribed. A purpose of this hearing is to meet the requirements of 42 U.S.C. § 2021(o)(3)(A)(i)(ii). Interested persons must submit their questions to the DWMRC Director at least 10 calendar days before the hearing (September 15, 2017). If a question that an interested person would like to ask relies on information that is not in the record, that information should also be provided with the question. Those who submitted questions will be allowed to follow up with additional questions based on the response provided. All questions submitted will be considered part of the record.

The public hearing, if held, will be in the DEQ Conference Room 1015 at the Multi Agency State Office Building located at 195 North 1950 West in Salt Lake City, Utah. All comments received within the comment period will be considered for inclusion in the final Licensing Action.

Submitting Comments Written comments will be accepted if received by 5:00 p.m. on October 2, 2017. Comments should be submitted to the following address:

Scott T. Anderson
Director
Division of Waste Management and Radiation Control
Department of Environmental Quality
P.O. Box 144880
Salt Lake City, Utah 84114-4880

Comments can also be sent by electronic mail to dwmrcpublic@utah.gov. Comments sent in electronic format should be identified by putting the following in the subject line: Public Comment on EnergySolutions' 11e.(2) license UT2300478 Renewal. All documents included in comments should be submitted as ASCII (text) files or in pdf format.

Under Utah Code Section 19-1-301.5, a person who wishes to challenge a licensing action may only raise an issue or argument during an

States and Compacts *continued*

adjudicatory proceeding that was raised during the public comment period and was supported with sufficient information or documentation to enable the DWMRC Director to fully consider the substance and significance of the issue.

The draft license and Technical Review and Environmental Assessment Report are available on the Division website at <https://deq.utah.gov/NewsNotices/notices/waste/index.htm#phacp> or by using EZ Records Search <http://eqedocs.utah.gov/>.

For further information, please contact David Esser of the Division of Waste Management and Radiation Control at (801) 536-0079.

Changes to the State's Radiation Control Rules to Incorporate Federal Regulatory Changes re 10 CFR Parts 30, 40 and 70

On May 29, 2013, the NRC adopted changes to 10 CFR Parts 30, 40, and 70. These rule changes require the initial distribution of source material to exempt persons or to general licensees be explicitly authorized by a specific license, including new reporting requirements. Changes to corresponding Utah radiation control rules are required to maintain regulatory compatibility with NRC rules and Utah's status as an Agreement State with the NRC.

Intended Purpose The rule is intended to provide timely information on the types and quantities of source material distributed for use either under exemption or by general licensees. In addition, the rule modifies the existing possession and use requirements of the general license for small quantities of source material to better align the requirements with current health and safety standards.

The rule also revises, clarifies, or deletes certain source material exemptions from licensing to make the exemptions more risk informed. This rule affects manufacturers and distributors of certain products and materials containing source

material and certain persons using source material under a general license and under exemptions from licensing.

Submitting Comments Comments may be submitted by email to dwmrcpublic@utah.gov or via standard mail delivery to:

Scott T. Anderson
Director
Division of Waste Management and Radiation Control
Department of Environmental Quality
P.O. Box 144880
Salt Lake City, UT 84114-4880

The public comment period will end on September 15, 2017.

For additional information and the specific proposed rule changes, please see the August 15, 2017 issue (Volume 2017, Number 16) of the Utah State Bulletin at <https://rules.utah.gov/publications/utah-state-bull/>.

Final Adoption of Rule Changes to Incorporate Hazard Waste Generators Improvements Rule

The effective date for the final adoption of rule changes to, amongst other things, incorporate HWGIR became effective on August 31, 2017.

For additional information and the specific proposed rule changes, please see the June 1, 2017 issue (Volume 2017, Number 11) of the Utah State Bulletin at <https://rules.utah.gov/publications/utah-state-bull/> or the DWMRC Board meeting packet for August 10, 2017 at <https://utah.gov/pmn/files/319799.pdf>.

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.

Modifications Approved to EnergySolutions' State-Issued Part B Permit

On June 29, 2017, EnergySolutions announced the approval of the modifications to the Clive, Utah site's state-issued Part B Permit. The modifications involved the following changes:

- ◆ 2017-001394: Approval of a Class 1 modification to Attachment II-7, *Closure Plan*; Attachment II-7-1, *Overall Facility Closure Cost Summary*; Attachment II-7-2, *Closure Cost Estimate- Mixed Waste Details*; and, Attachment II-7-3, *Reserve Capacity Calculations*.
- ◆ 2017-002785: Approval of a Class 1 modification to Attachment VI-1, *Groundwater Field Sampling Plan*.
- ◆ 2017-000709: Approval of a Class 2 modification to Attachment II-6, *Contingency Plan* and Attachment II-5, *Preparedness and Prevention Plan*.

EnergySolutions' compliance history is available from the facility contact person at the Utah Division of Waste Management and Radiation Control (DWMRC).

Questions regarding these modifications or requests for review of the modification applications and related documents may be directed to Tim Orton of EnergySolutions at (801) 649-2000 or to Otis Willoughby of the Utah Division of Waste Management and Radiation Control at (801) 536-0200.

Utah Waste Management and Radiation Control Board Meets

In July and August 2017, the Utah Waste Management and Radiation Control Board (Board) held regularly scheduled meetings in Salt Lake City, Utah.

The meetings, which were open to the public, were held in Conference Room 1015 of the Department of Environmental Quality (DEQ) Board Room on the first floor of the Multi Agency State Office Building in Salt Lake City, Utah.

July 2017 Meeting

The following items, among others, were on the agenda for the July 13, 2017 Board meeting:

- I. Call to Order
- II. Approval of Meeting Minutes for the May 11, 2017 Board Meeting (*Board Action Item*)
- III. Underground Storage Tanks Update
- IV. Administrative Rules
 - A. Solid Waste Rules: Final adoption of Solid Waste Rules, Section R315-302-1, *Location Standards for Disposal Facilities*. This change removes paragraph R315-302-1(2)(a) (iii) that prohibits a new solid waste facility from being located within certain farmland classified by the U.S. Department of Agriculture. (*Board Action Item*)
 - B. Radiation Control Rules: Approval to proceed with formal rulemaking and

States and Compacts *continued*

public comment 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*)

V. Director's Report

VI. Other Business

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

VII. Adjourn

August 2017 Meeting

The following items, among others, were on the agenda for the August 10, 2017 Board meeting:

- I. Call to Order
- II. Approval of Meeting Minutes for the July 13, 2017 Board Meeting (*Board Action Item*)
- III. Underground Storage Tanks Update
- IV. Administrative Rules
 - C. Final adoption of rule changes to incorporate the U.S. Environmental Protection Agency's (EPA's)

hazardous waste generator improvement rule (promulgated on November 28, 2016 at 81 *Federal Register* 85,732) into R315-15, R315-260, R315-261, R315-262, R315-263, R315-264, R315-265, R315-266, R315-268, R315-270, R315-273, R315-301, R315-304-3 and R315-305-3 and other miscellaneous rule changes as published in the June 1, 2017 issue (Volume 2017, No. 11) of the Utah State Bulletin. (*Board Action Item*)

- V. Clean Harbors Grassy Mountain, LLC request for a site-specific treatment variance to stabilize a High Mercury-Inorganic Subcategory waste stream. (*Information Item Only*)

VI. Hazardous Waste Generation and Management Summary Report for 2015

VII. Other Business

- C. Miscellaneous Information Item
- D. 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.

States and Compacts *continued*

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.

Texas Low-Level Radioactive Waste Disposal Compact Commission

Texas Compact Commission Holds August 2017 Meeting

On August 10, 2017, the Texas Low-Level Radioactive Waste Disposal Compact Commission (Texas Compact Commission) held a regularly scheduled meeting in Austin, Texas.

The meeting began at 9:00 a.m. CT. It was held in the Room E201S at the offices of the Texas Commission on Environmental Quality (TCEQ), which is located at 12100 Park 35 Circle in Austin, Texas.

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

Agenda

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

- ◆ call to order;
- ◆ roll call and determination of quorum;
- ◆ introduction of Commissioners, elected officials and press;
- ◆ public comment;
- ◆ consideration of and possible action on applications for importation of low-level radioactive waste from Alaron Veolia, U.S. Army, Bionomics, Perkin Elmer, Dominion Kewaunee, Duke Brunswick, Duke Brunswick (irradiated hardware), Exelon, Fort Calhoun, Southern Nuclear Vogtle, Tennessee Valley Authority, and Xcel Prairie Island;
- ◆ consideration of and possible action on an application for exportation of low-level radioactive waste from Luminant Comanche Peak, Entergy Vermont Yankee, STP, University of Houston, Midland, Trinity, UTHSC Houston and UTMB;
- ◆ receive reports from Waste Control Specialists LLC (WCS) about recent site operations and any other matter WCS wishes to bring to the attention of the Texas Compact Commission;
- ◆ receive reports from Texas Compact Commission committees including the Rules Committee (as Chaired by Commissioner Morris) and the Capacity Committee (as Chaired by Commissioner Weber);
- ◆ consideration and possible action to adopt the Commission's annual budget for FY 2018 pursuant to Article VI, Section Two of the Commission's Bylaws and approve the budget estimates for FY 2019 and FY 2020;
- ◆ consideration, evaluation and possible action with respect to the renewal, extension, modification of terms or dismissal of contract employees including Leigh Ing, Andrew Tachovsky and Diane Fulmer;

- ◆ Chairman's report on Texas Compact Commission activities including reporting on fiscal matters to be taken by the compact and addressing personnel matters;
- ◆ report from Leigh Ing, Executive Director of the Texas Compact Commission, on her activities and questions related to 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.

United States of America v. EnergySolutions, Inc. et. al.

District Court Prohibits Proposed Acquisition of Waste Control Specialists by EnergySolutions

On June 21, 2017, the United States District Court for the District of Delaware issued a Judgment and Order in a civil antitrust lawsuit seeking to block the proposed \$367 million acquisition of Waste Control Specialists LLC by EnergySolutions.

The United States of America is the plaintiff in the case. The listed defendants include EnergySolutions, Inc.; Rockwell Holdco, Inc.; Andrews County Holdings, Inc.; and, Waste Control Specialists LLC.

In its order, the district court entered judgment in favor of the plaintiffs and against the defendants, specifically enjoining and restraining the defendants “from carrying out the acquisition of Waste Control Specialists LLC by EnergySolutions, Inc. as memorialized in the merger agreement between Rockwell Holdco, Inc. and Andrews County Holding, Inc. dated November 18, 2015 and any amendments thereto.”

The case—which is listed as United States of America v. EnergySolutions, Inc.; Rockwell Holdco, Inc.; Andrews Country Holdings, Inc.; and, Waste Control Specialists—can be found under civil docket number 16-1056-SLR in the United States District Court for the District of Delaware.

EnergySolutions' Press Release

Following release of the district court's decision, EnergySolutions issued a press release that states as follows:

EnergySolutions, Inc., a wholly owned subsidiary of Energy Capital Partners, LLC (ECP) today announced that the U.S. District Court for the District of Delaware issued a decision prohibiting the sale of Waste Control Specialists (WCS) to EnergySolutions.

"We believe this acquisition was in the best interest of the long-term waste disposal needs for the nuclear industry, so we are disappointed with today's decision that prevents EnergySolutions from acquiring Waste Control Specialists," said David Lockwood, President and CEO of EnergySolutions.

The judge's decision follows a two-week trial that resulted from the U.S. Department of Justice filing a lawsuit to prevent the acquisition.

Lockwood added, "While this acquisition would have added a Class B and C Low-Level Radioactive Waste disposal facility to our portfolio, we remain confident in our capability as a company to lead the industry in radioactive waste management and decommissioning. We look forward to working with WCS to best serve the interests of our customers."

For additional information, please contact Mark Walker at mwalker@energysolutions.com or at (801) 231-9194.

Department of Justice's Press Release

Following release of the district court's decision, the U.S. Department of Justice (DOJ) issued a press release that states as follows:

Senior Judge Sue L. Robinson of the U.S. District Court for the District of Delaware today ruled in favor of the Justice Department's civil antitrust lawsuit to block radioactive waste disposal provider EnergySolutions' \$367 million acquisition of rival Waste Control Specialists. Judge Robinson entered an order ruling in favor of the United States and enjoining the merger.

"Substantial evidence showed that head-to-head competition between EnergySolutions and Waste Control Specialists led to better disposal services at lower prices," said Acting Assistant Attorney General Andrew Finch of the Justice Department's Antitrust Division. "Today's decision protects competition in an industry that is incredibly difficult to enter. While EnergySolutions' preference was to buy its main rival rather than continue to compete to win business, today's decision ensures that customers will benefit from the competitive process."

The Court's decision follows a 10-day trial that concluded in May 2017. The Justice Department filed suit in November 2016, alleging that the proposed acquisition would combine the two most significant competitors for the disposal of low-level radioactive waste available to commercial customers in 36 states, the District of Columbia and Puerto Rico.

Background

Proposed Acquisition On November 19, 2015, in separate press releases, it was announced that Rockwell Holdco had signed a definitive agreement to acquire Waste Control Specialists—a wholly owned subsidiary of Valhi, Inc. and operator of a low-level radioactive waste disposal facility located in Andrews County, Texas. (See *LLW Notes*, November/December 2015, pp. 20-21.) Rockwell Holdco is the parent company of EnergySolutions—which operates low-level radioactive waste disposal facilities in Tooele County, Utah and Barnwell, South Carolina. Rockwell Holdco is owned by Energy Capital Partners, a private equity firm focused on investing in North America's energy infrastructure.

According to the companies' press releases, upon closing, Rockwell Holdco would pay \$270 million in cash and \$20 million face amount in Series A Preferred Stock. In addition, Rockwell Holdco would assume approximately \$77 million of Waste Control Specialists' debt, as well as all financial assurance obligations related to the Waste Control Specialists' business.

The Valhi Board of Directors and the Rockwell Holdco Board of Directors previously approved the purchase agreement. However, completion of the sale—which was originally expected to close in the first half of 2016—was subject to certain customary closing conditions as outlined in the transaction agreement. In the meantime, EnergySolutions and Waste Control Specialists continued to operate as independent companies.

Antitrust Lawsuit On November 16, 2016, the DOJ filed a civil antitrust lawsuit in the U.S. District Court for the District of Delaware seeking to block the proposed \$367 million acquisition of Waste Control Specialists by EnergySolutions. (See *LLW Notes*, November/December 2016, pp. 25-26.) DOJ argued that the proposed transaction “would combine the two most significant competitors for the disposal of

low level radioactive waste ... available to commercial customers in 36 states, the District of Columbia and Puerto Rico.”

DOJ asserted that the proposed transaction “would deny commercial generators of ... [low-level radioactive waste]—from universities and hospitals working on life-saving treatments to nuclear facilities producing 20 percent of the electricity in the United States—the benefits of vigorous competition that has led to significantly lower prices, better service and innovation in recent years.”

“Since opening its ... [low-level radioactive waste] disposal facility in 2012, Waste Control Specialists has provided EnergySolutions the only real competition it has ever faced,” said Acting Assistant Attorney General Renata Hesse of the DOJ's Antitrust Division. “This competition has allowed customers to extract better prices and to receive better and more innovative service in the ... [low-level radioactive waste] disposal industry. If consummated, EnergySolutions' proposed acquisition of Waste Control Specialists would make EnergySolutions the only option for customers in nearly 40 states. And this at a time when projects worth billions of dollars are set to be awarded in the coming years.”

At the time of the filing of the lawsuit, DOJ contended that Waste Control Specialists provides the “only true competition” for EnergySolutions. “That competition has led to increased innovation and lower prices for customers,” contended DOJ. “EnergySolutions' acquisition of Waste Control Specialists would eliminate that competition, with no likelihood of new entry to fill the void.”

Low-Level Radioactive Waste Low-level radioactive waste is the radioactive byproduct of nuclear power generation, scientific research and certain medical treatments. Low-level radioactive waste includes such items as personal protective clothing, tools, water purification filters and resins, hardware from nuclear power plants, and equipment from medical and research

institutions. Low-level radioactive waste may only be disposed of in a facility licensed by, or pursuant to an exemption provided by, the U.S. Nuclear Regulatory Commission (NRC) or a state acting under an agreement with the NRC. Low-level radioactive waste disposal is an essential service for operating nuclear reactors, research laboratories and medical facilities. Additionally, low-level radioactive waste disposal is a requirement for the safe decommissioning of such facilities when they reach the end of their useful lives.

EnergySolutions offers customers a full range of integrated services and solutions, including nuclear operations, characterization, decommissioning, decontamination, site closure, transportation, nuclear materials management, processing, recycling, and disposition of nuclear waste, and research and engineering services across the nuclear fuel cycle.

Waste Control Specialists operates a West Texas facility for the processing, treatment, storage and disposal of a broad range of low-level radioactive and hazardous wastes.

For additional information about EnergySolutions, please contact Dan Shrum at (801) 649-2000 or at dshrum@energysolutions.com or go to the company's web site at www.energysolutions.com.

For additional information about Waste Control Specialists, please contact Rodney Baltzer at (972) 450-4235 or at rbaltzer@valhi.net or visit the company's web site at www.valhi.net.

Nuclear Power Plants and Other NRC Licensees

News Briefs for Nuclear Power Plants Across the Country

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

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

Atlantic Compact/State of South Carolina

Westinghouse Fuel Facility On August 11, 2017, the U.S. Nuclear Regulatory Commission (NRC) issued a confirmatory order to Westinghouse Electric Company that addresses issues stemming from a 2016 event at the company's fuel fabrication facility in Columbia, South Carolina. In May 2016, plant employees discovered an accumulation of uranium-bearing material in a scrubber system, which is designed to remove unwanted material from a number of plant processes. After an analysis showed the amount of uranium exceeded safety limits, the NRC launched an inspection and later issued a confirmatory action letter (CAL) that outlined a series of corrective actions. Some of those actions have been completed and others have been incorporated into the new confirmatory order. The NRC conducted additional inspections last fall and identified several violations of NRC requirements. Westinghouse officials chose to participate in the NRC Alternative Dispute Resolution (ADR) process. The order is the result of a settlement under that process. The ADR process is facilitated by a neutral third party with no decision-making authority who assists the NRC and the licensee in reaching an agreement when there are differences regarding an enforcement action. On May 19, 2017, a

mediation session was held between the NRC staff and Westinghouse. Discussions between the two parties continued until early August 2017. The order captures the details of the settlement reached during those discussions. Under the order, Westinghouse has taken and agreed to take a number of corrective actions including a survey of the safety culture among employees at the site; improvements and modifications to scrubbers and other systems to minimize the likelihood of a similar accumulation; and, development of additional methods to provide early indications of abnormal accumulations. In consideration of the commitments contained in the order, the NRC will not issue a civil penalty or cite the company for the violations, although Westinghouse officials acknowledged that the violations occurred. The company has also agreed to provide the NRC with a notification letter once it has completed the terms of the order and the basis for concluding that the order has been satisfied. *For additional information, please contact Roger Hannah at (404) 997-4417 or Joey Ledford at (404) 997-4416.*

Central Interstate Compact/State of Louisiana

Waterford 3 Nuclear Plant On August 7, 2017, NRC announced that agency staff had begun a special inspection at the Waterford 3 nuclear power plant to review events that led to and occurred following an unplanned shutdown on July 17. The plant, operated by Entergy Operations, is located near Killona, Louisiana. The plant was operating at full power during a rain and lightning storm when operators decided to shut it down as a precautionary measure. All safety systems responded as expected and the reactor was safely shut down. However, the NRC wants to better understand why some equipment failures occurred. The two-member NRC team spent about a week on site developing a chronology of the event, evaluating the licensee's cause analysis and the adequacy of corrective actions. An inspection report documenting the team's findings will be publicly available within 45 days of the end of the inspection. *For*

additional information, please contact Victor Dricks at (817) 200-1128.

Southeast Compact/States of Alabama and Tennessee

Browns Ferry Nuclear Plant On August 16, 2017, NRC announced that the agency had approved Tennessee Valley Authority's request for a 14.3 percent increase in the generating capacity of Units 1, 2 and 3 of the Browns Ferry Nuclear Plant. The plant is located in Athens, Alabama. The NRC staff determined that TVA could safely increase the reactors' output primarily by upgrading certain plant systems and components. NRC staff also reviewed TVA's evaluations showing the plant's design can handle the increased power level. The NRC's safety evaluation of the proposed uprate focused on areas such as the nuclear steam supply systems; instrumentation and control systems; and, accident evaluations. For added confidence in the analysis, the NRC staff also conducted independent confirmatory calculations and audits of selected areas. The power uprate for Browns Ferry authorizes an increase of each reactor's maximum power level from 3458 to 3952 megawatts thermal. This represents a gross output increase of approximately 155 megawatts electric for each unit. TVA plans to implement the extended power uprate during the spring 2018 refueling outage for Unit 3; during the fall 2018 refueling outage for Unit 1; and, during the spring 2019 refueling outage for Unit 2. The NRC published a notice for the power uprate application in the *Federal Register* on July 5, 2016. *For additional information, please contact Scott Burnell at (301) 415-8200.*

Sequoyah Nuclear Plant From August 14-31, 2017, an international team of nuclear safety experts visited the Tennessee Valley Authority's (TVA's) Sequoyah nuclear power plant to review operational safety practices at the facility. The Sequoyah plant is located near Soddy-Daisy, approximately 16 miles northeast of Chattanooga, Tennessee. The voluntary peer review— known

as an Operational Safety Review Team (OSART) visit—is coordinated by the International Atomic Energy Agency (IAEA), which is based in Vienna, Austria. The team’s 16 members came from Canada, Sweden, the United Kingdom, Slovakia, Belgium, Brazil, Spain, South Korea, France, Romania, Germany and China. Established by the IAEA in 1982, the OSART program is designed to assist member states in promoting operational safety of nuclear power plants through the dissemination of good practices. This will be the ninth OSART review of a U.S. nuclear power plant since the program began. Areas to be covered during the review include, but are not limited to, operational experience, training and qualifications, radiation protection, emergency planning and preparedness, chemistry and maintenance. Once the OSART reviewers have completed their work, they will produce a report identifying best practices and suggesting possible safety improvements. This report will be provided to the TVA and the U.S. government. *For additional information, please contact Roger Hannah at (404) 997-4417 or Joey Ledford at (404) 997-4416.*

Watts Bar Nuclear Plant On July 28, 2017, NRC announced that the agency had issued a confirmatory order to the Tennessee Valley Authority (TVA) Watts Bar nuclear power plant, which has agreed to an extensive list of corrective actions to address safety conscious work environment issues. The plant is located near Spring City, Tennessee. An NRC inspection last fall found that, from November 2014 to August 2016, the utility failed to properly implement a process to ensure that adverse employment actions at the plant complied with employee protection regulations and that the actions would not negatively impact the safety conscious work environment. The NRC determined that TVA’s failure was a violation of a previous confirmatory order issued in 2009 on similar issues. The order issued to TVA stems from a settlement achieved under the ADR process, which was initiated at the request of TVA. On June 9, 2017, a mediation

session between NRC staff and TVA was held, during which a settlement was reached. The NRC and TVA agreed that the matter was a significant violation of regulatory requirements, but no violation or civil penalty would be issued because of the detailed corrective actions and enhancements required by the confirmatory order. The order outlines the corrective actions and steps TVA has already taken and agreed to take going forward. Although the issues were identified at the Watts Bar plant, TVA has also agreed to implement actions at its Browns Ferry and Sequoyah nuclear plants, as well as at its corporate offices. “The ability to raise safety issues without fear of reprisal is very important to ensuring the safety of any plant,” said NRC Region II Administrator Cathy Haney. “We were disappointed that the 2009 order had not been followed completely but we believe this new order gives TVA a well-defined path to ensuring the existence of a safety conscious work environment at all its nuclear sites.” Among the steps already taken are an analysis of the causes of the violation and inserting specific corrective actions from that analysis into TVA’s corrective action program. TVA has also initiated direct communications to employees and contractors about work environment requirements; established an executive review process to ensure personnel actions do not constitute retaliation; and, hired advisors and consultants to focus on safety culture. Additional actions planned by TVA under the order include: more communications, such as a video briefing for all employees and contractors who perform NRC-regulated activities and an all-hands meeting at every site; further training on NRC employee protection, nuclear safety culture and work environment policies; changes in work processes to ensure a safety conscious work environment is established and maintained; and, independent audits and assessments to monitor the implementation and effectiveness of the actions. Many of the corrective actions in the order also have specific completion dates and require periodic reports to the NRC. *For additional*

information, please contact Roger Hannah at (404) 997-4417 or Joey Ledford at (404) 997-4416.

Massachusetts

Pilgrim Nuclear Plant On August 2, 2017, NRC announced that the agency had issued a CAL documenting actions committed to by Entergy in response to safety performance concerns identified at the Pilgrim nuclear power plant that is located in Plymouth, Massachusetts. The letter points out that if the actions described are effectively implemented, Pilgrim's performance deficiencies will be substantially addressed. The NRC will independently validate the progress being achieved through quarterly follow-up inspections. Entergy, the plant's owner and operator, has submitted a recovery plan to the NRC that details planned performance improvement activities. The plan responds to a series of earlier NRC inspections and reviews carried out after the plant came under heightened oversight in 2015. Issuance of the letter does not preclude the NRC from taking additional steps, including the issuance of orders or enforcement actions for any violations of agency requirements that are found in subsequent inspections. Entergy must notify the NRC in writing upon completion of all the actions addressed in the letter. In addition, the company is required to notify the agency if it cannot complete the actions within the specified schedule or if there are any changes or deviations. Pilgrim began receiving heightened NRC oversight in September 2015 after transitioning to Column 4 of the agency Action Matrix, which dictates the level of scrutiny at plants. *For additional information, please contact Diane Screnci at (610) 337-5330 or Neil Sheehan at (610) 337-5331.*

Waste Management 2018 Conference

Registration Open for 2018 Waste Management Conference

Registration is now open for the Waste Management 2018 Conference. This year's conference theme is Nuclear and Industrial Robotics, Remote Systems and Other Emerging Technologies.

The Waste Management 2018 conference will be held at the Phoenix Convention Center in Phoenix, Arizona on March 18-22, 2018.

An early bird discount registration rate is available until September 30, 2017.

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.

WM 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 Cooperation 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.

US Ecology, Inc.

US Ecology Announces Appointment of Ronald Keating

By press release dated July 17, 2017, US Ecology, Inc. announced the appointment of Ronald Keating to the company's Board of Directors (Board). Keating was also appointed to the Board's Compensation Committee.

Overview

"We are pleased to have Ron join our Board," commented Jerry Feeler, US Ecology's Chair and Chief Executive Officer. "His significant operational and leadership experience will be a welcome addition to our Board, complementing the extensive experience of our existing Board members. We welcome Ron's immediate contributions to position US Ecology as the premier North American service provider of environmental and field services."

Keating brings more than 25 years of operations and leadership experience with companies providing solutions to municipal, industrial and infrastructure customers. He is currently the Chief Executive Officer and a Director at Evoqua Water Technologies LLC, a global provider of water and wastewater treatment solutions and services. Keating previously served as President and Chief Executive Officer at Contech Engineered Solutions and held senior leadership positions at Kennametal Inc. and Ingersoll-Rand Inc.

Keating holds an MBA from the Kellogg School of Management at Northwestern University and a BS in Industrial Distribution from Texas A&M.

Background

US Ecology is a leading North American provider of environmental services to commercial and government entities. The company addresses the complex waste management needs of its customers, offering treatment, disposal and recycling of hazardous, non-hazardous and radioactive waste, as well as a wide range of complementary field and industrial services.

Headquartered in Boise, Idaho, with operations in the United States, Canada and Mexico, US Ecology has been operating since 1952.

For additional information, please go to www.usecology.com.

U.S. Nuclear Regulatory Commission (NRC) and U.S. Department of Energy (DOE)

Further Actions Approved re Yucca Mountain Licensing Process

The U.S. Nuclear Regulatory Commission (NRC) has approved further actions related to its review of the U.S. Department of Energy's (DOE's) application for authorization to construct a high-level radioactive waste repository at Yucca Mountain in Nevada.

In particular, the next steps involve information-gathering activities related to the suspended adjudication on the application. The activities are intended to enable efficient, informed decisions in support of executing any further appropriations of funds for the High-Level Waste Program.

Overview

The Commission has directed agency staff to hold a virtual meeting of the Licensing Support Network Advisory Review Panel to provide information to, and gather input from, advisory panel members and the public regarding reconstitution of the Licensing Support Network (LSN) or a suitable replacement system. Agency staff will also gather preliminary information regarding potential hearing venues.

The Commission limited expenditures for the information-gathering activities to \$110,000 from the Nuclear Waste Fund. As of June 30, 2017, NRC had approximately \$634,000 in remaining unobligated Nuclear Waste Fund appropriations.

Background

The LSN was an online database of nearly 4 million documents created to allow various parties and the public access to information needed for the hearing on DOE's request for a construction authorization for the Yucca Mountain repository. The NRC's Atomic Safety and Licensing Boards (ASLB) had admitted nearly 300 contentions from various parties challenging aspects of DOE's application.

In September 2011, the Yucca Mountain hearing was suspended and the LSN was decommissioned after Congress reduced funding. At the time, the Commission directed agency staff to preserve the documents from the LSN within ADAMS

Subsequently, in August 2013, the U.S. Court of Appeals for the District of Columbia Circuit ordered the NRC to resume its review of the application using the remaining previously appropriated funds. In response, NRC staff completed the Safety Evaluation Report (SER) in January 2015 and a supplement to DOE's Environmental Impact Statement (EIS) in May 2016.

The Commission's Staff Requirements Memorandum (SRM), Commission voting records and the staff's proposal (COMSECY-17-0019) are available on the NRC website at www.nrc.gov.

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

U.S. Nuclear Regulatory Commission (NRC)

NRC Finalizes Guidance for Subsequent License Renewals

On July 11, 2017, the U.S. Nuclear Regulatory Commission (NRC) published guidance documents for both submitting and reviewing applications to renew operating licenses of plants that have already renewed their licenses, a process referred to as subsequent license renewal.

Overview

The newly released guidance documents include the Generic Aging Lessons Learned for Subsequent License Renewal Report and the Standard Review Plan for Review of Subsequent License Renewal Applications for Nuclear Power Plants. The aging lessons learned report outlines an acceptable approach for applicants to demonstrate adequate management of plant aging effects. The standard review plan guides the NRC staff on performing safety reviews of these applications.

Next Steps

The NRC staff plans to publish two more documents before the end of 2017. These additional documents lay out the technical bases for changes to the guidance documents and the staff's response to public comments received during the public comment period.

Background

The NRC developed these guidance documents over several years in preparation for reviewing subsequent license renewal applications. NRC staff held more than 25 public meetings to gather stakeholders' perspectives. The guidance documents also include significant input from the License Renewal Subcommittee of the Advisory

Committee on Reactor Safeguards (ACRS), as well as from the full committee.

Guidance documents are available at the Guidance for License Renewal and Subsequent License Renewal page on the NRC website.

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

NRC to Amend Rules on Medical Uses of Radioactive Materials

The U.S. Nuclear Regulatory Commission (NRC) has approved amendments to its requirements for medical uses of radioactive materials. A final rule—approved on August 17, 2017—modifies 10 CFR Part 35 and makes conforming changes to Parts 30 and 32. The rule will be published in the coming months in the *Federal Register* after NRC staff makes certain revisions directed by the Commission.

Overview

According to an NRC press release issued in mid-August 2017, the changes will:

- ◆ amend the definition of medical events associated with permanent implant brachytherapy;
- ◆ update training and experience requirements for authorized users, medical physicists, radiation safety officers and nuclear pharmacists;
- ◆ address a petition the NRC received seeking to recognize the qualifications of board

Federal Agencies and Committees *continued*

certified physicists and radiation safety officers not specifically named on a license;

- ◆ change requirements for measuring molybdenum contamination and reporting generator tests that exceed allowed concentration levels;
- ◆ allow associate radiation safety officers to be named on a medical license; and,
- ◆ make several minor clarifications.

Background

While implementing the current regulations, the need for the revisions was identified by NRC staff, stakeholders, and the NRC's Advisory Committee on the Medical Uses of Isotopes (ACMUI). On July 21, 2014, a proposed rule appeared in the *Federal Register* for 120 days of public comment. The final rule takes those comments into consideration and provides responses to them.

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

NRC Amends Licensing, Inspection and Annual Fees for FY 2017

On June 30, 2017, the U.S. Nuclear Regulatory Commission announced that the agency has amended its existing regulations to reflect the licensing, inspection, special project and annual fees it will charge applicants and licensees for fiscal year 2017.

The amended regulations reduce annual fees for most licensees, primarily due to a decrease in the agency's budget.

Overview

Annual fees for FY 2017 decrease by 7.5 percent over last year for operating reactors; 2 to 11 percent for most fuel facilities; less than 1 percent for research and test reactors; and, 4.6 percent for spent fuel storage and reactor decommissioning licensees. Fees increase by 13 percent for U.S. Department of Energy (DOE) uranium recovery activities, while other uranium recovery licensees remain flat.

For the final rule, the NRC has lowered the hourly rate of staff review time from \$265 to \$263 for FY 2017. Fees charged under 10 CFR Part 170 have been updated accordingly.

The NRC estimates the FY 2017 annual fees will be paid by licensees of 99 operating commercial power reactors, four research and test reactors, 122 spent nuclear fuel storage and decommissioning reactor facilities, nine fuel cycle facilities, 10 uranium recovery facilities and approximately 2,700 nuclear materials licensees.

The final rule implements several process improvements approved by the Commission in FY 2016 aimed at making the NRC's fees process more efficient and transparent. Of 14 process improvements, 10 have been fully implemented, with the remainder due to be completed by September 30, 2017.

Background

A proposed fee rule was published for public comment on January 30, 2017. The final rule was published in the *Federal Register* on June 30, 2017. (See 82 *Federal Register* 30,682.) The rule includes fees required by law to recover approximately 90 percent of the NRC's budget.

For FY 2017, the NRC received total budget authority of \$940.1 million, including \$23 million in prior year carryover funds. The carryover funds are not included in the calculation of fees for FY 2017.

Federal Agencies and Committees *continued*

The NRC's required fee recovery amount for FY 2017, after billing and collection adjustments, is \$805.9 million. Approximately 37 percent, or \$297.3 million, of the fees will recover the cost of specific services to applicants and licensees under 10 CFR Part 170. The remaining 63 percent, \$508.6 million, will be billed as annual fees to licensees under 10 CFR Part 171.

For additional information, please contact David McIntyre at (301) 415-8200.

NRC Issues Regulatory Issue Summaries

To date, the U.S. Nuclear Regulatory Commission (NRC) has released the following Regulatory Issue Summary (RIS) documents during calendar year 2017:

- ◆ 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.

NRC To Review Its Administrative Regulations

On August 11, 2017, the U.S. Nuclear Regulatory Commission (NRC) announced plans to initiate a retrospective review of its administrative regulations to identify those that are outdated or duplicative. The review is scheduled to begin in the fall of 2017.

Overview

Any regulations that are identified during the review will be evaluated to determine if they can be eliminated without impacting the agency's safety and security mission. NRC anticipates that the review will result in improvements with regard to how applicants and licensees submit information, keep records, and report to the agency.

Process

NRC plans to develop a strategy to accomplish its retrospective review and will seek input from stakeholders through public meetings and a *Federal Register* notice. In particular, the NRC plans to encourage its staff, its applicants, licensees and the public to provide input.

Background

Efficiency is one of five NRC principles of good regulation. The retrospective review is an effort to improve the management and administration of regulatory activities and to ensure that the agency's regulations remain current, appropriate, and effective.

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

NRC Details Withdrawn Communications

On June 13, 2017, the U.S. Nuclear Regulatory Commission (NRC) published Docket NRC-2017-0126 in the *Federal Register* detailing superseded or outdated generic communications that have been withdrawn.

The withdrawals include selected generic communications that contain guidance that no longer provides useful information; has been superseded by updated guidance; or, the information can be more effectively made available to interested stakeholders by other means.

The withdrawn generic communications have been noted on the agency's website at <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/>.

For additional information, please see the notice that NRC issued at 82 Federal Register 27,085 (June 13, 2017).

NRC Awards FY 2017 Grants

By press release dated July 11, 2017, the U.S. Nuclear Regulatory Commission (NRC) announced that the agency had awarded 46 individual grants totaling \$15 million to 35 academic institutions in fiscal year 2017. The grants are used for scholarships, fellowships and faculty development. They were awarded to institutions in 22 states and Puerto Rico including minority-serving institutions, which are a federally recognized category of educational establishments.

Congress authorized the NRC to provide federal funding opportunities to qualified academic institutions to encourage careers and research in nuclear, mechanical and electrical engineering, health physics and related fields to meet expected future workforce needs.

The NRC announces grant opportunities on www.grants.gov, which helps the public find and apply for federal funding opportunities. A panel of expert reviewers from academia and the NRC evaluates all of the grant proposals.

The panel composition is diverse, with most reviewers having both experience reviewing proposals for government agencies and advanced credentials in nuclear engineering, health physics, radiochemistry or related disciplines. Each panelist has to certify that they do not have any conflict of interest for the proposals they evaluate.

The complete list of grants awarded and general information about the grant program are posted on the NRC's website at www.nrc.gov.

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

Obtaining Publications

To Obtain Federal Government Information

by telephone

- DOE Public Affairs/Press Office (202) 586-5806
- DOE Distribution Center (202) 586-9642
- EPA Information Resources Center (202) 260-5922
- GAO Document Room (202) 512-6000
- Government Printing Office (to order entire *Federal Register* notices) (202) 512-1800
- NRC Public Document Room (202) 634-3273
- Legislative Resource Center (to order U.S. House of Representatives documents) (202) 226-5200
- U.S. Senate Document Room (202) 224-7860

by internet

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

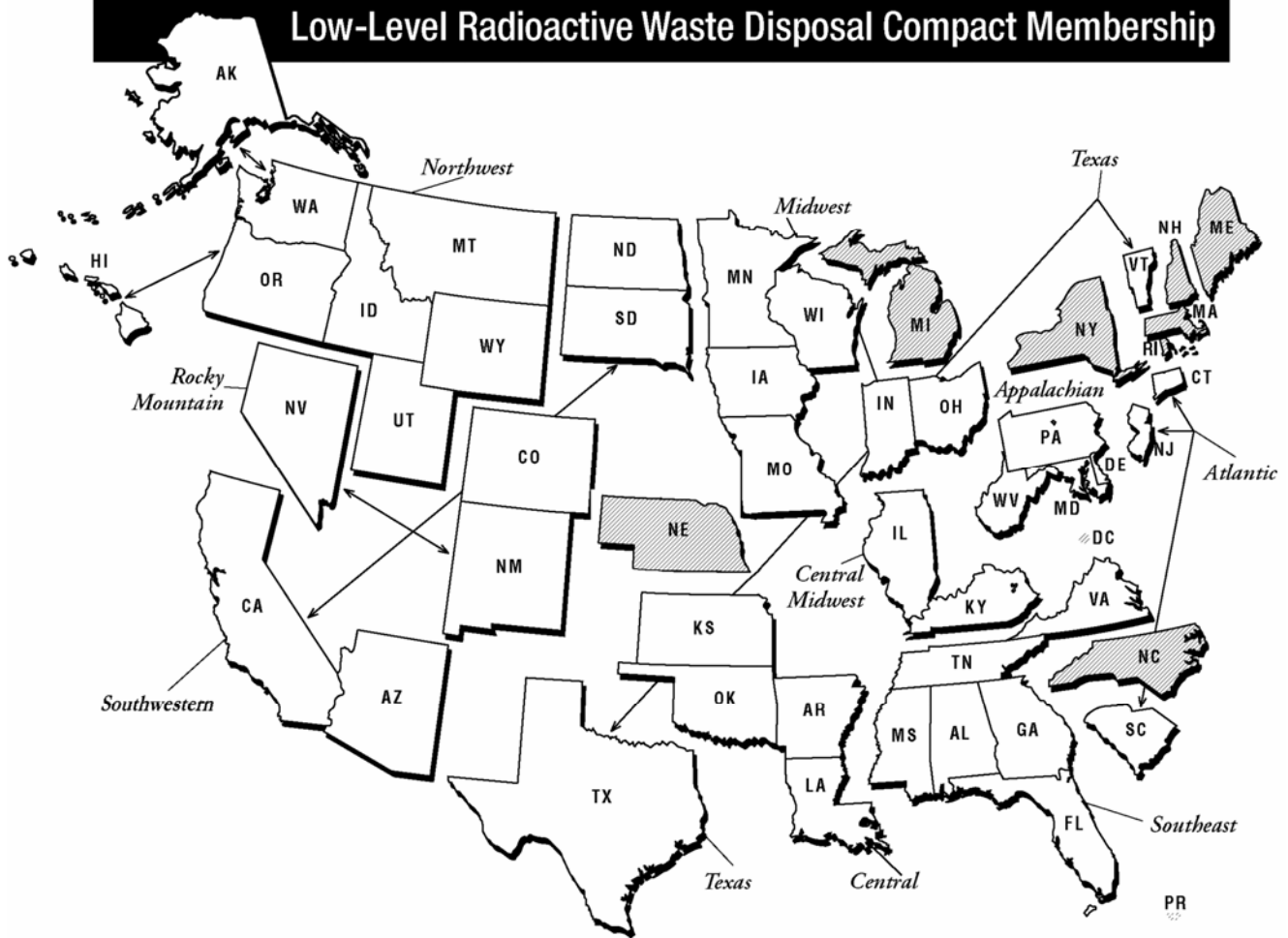
To access a variety of documents through numerous links, visit the website for the LLW Forum, Inc. at www.llwforum.org

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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
New Hampshire
New York
North Carolina
Puerto Rico
Rhode Island