LLW notes

Volume 31 Number 1 January/February 2016

U.S. Department of Energy (DOE)

DOE Issues Final EIS for Disposal of GTCC and GTCC-Like Waste

On February 25, 2015, the U.S. Department of Energy (DOE) issued a Final *Environmental Impact Statement for the Disposal of Greater-Than-Class C (GTCC) Low-Level Radioactive Waste and GTCC-Like Waste* (Final EIS) that evaluates the potential environmental impacts associated with the proposed development, operation, and long-term management of one or more disposal facilities for GTCC low-level radioactive waste and DOE GTCC-like waste.

GTCC low-level radioactive waste has radionuclide concentrations exceeding the limits for Class C low-level radioactive waste established by the U.S. Nuclear Regulatory Commission (NRC). These wastes are generated by activities licensed by the NRC or Agreement States and cannot be disposed of in currently licensed commercial low-level radioactive waste disposal facilities.

DOE prepared and issued the Final EIS in accordance with the National Environmental Policy Act, Section 631 of the Energy Policy Act of 2005 (Public Law 109-58), and Section 3 (b) of the Low-Level Radioactive Waste Policy Amendments Act of 1985 (Public Law 99-240).

Overview

The Department evaluated five alternatives in the Final EIS for the disposal of the GTCC low-level radioactive waste and DOE-owned GTCC-like waste. The preferred alternative for the disposal is the Department's Waste Isolation Pilot Plant (WIPP) facility that is located near Carlsbad, New Mexico and/or land disposal at generic commercial facilities. According to DOE, "[t]he land disposal conceptual designs could be altered to provide the optimal application at a given location."

The Final EIS is not a decision on GTCC low-level radioactive waste disposal. Prior to making a final decision on which disposal alternative(s) to implement, which will be included in a Record of

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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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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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LLW FORUM, INC.

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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

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

Registration Now Open for Spring 2016 LLW Forum Meeting

Marriott Hotel in Park City, Utah: April 13-14, 2016
Optional Site Tour of Clive Facility on April 12, 2016

The Low-Level Radioactive Waste Forum (LLW Forum) is pleased to announce that registration is now open for our spring 2016 meeting, which will be held at the Park City Marriott Hotel on April 13-14, 2016. Please mark your calendars accordingly and save the date!

The meeting will include an optional site tour of the Energy*Solutions'* Clive low-level radioactive waste disposal facility for interested stakeholders on the afternoon of April 12, 2016.

There will also be a meeting of the Disused Sources Working Group (DSWG) for members and invited guests from 2:00 p.m. – 6:00 p.m. on Thursday, April 14, 2016, and from 9:00 a.m. – 1:00 p.m. on Friday, April 15, 2016.

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

The meeting is being co-sponsored by the State of Utah's Division of Waste Management and Radiation Control (DWMRC) and Energy*Solutions*.

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

Attendance

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

Location and Dates

The spring 2016 LLW Forum meeting will be held on Wednesday, April 13 (approx. 9:00 am – 5:00 pm) and Thursday, April 14 (approx. 9:00 am – 1:00 pm) at:

Park City Marriott Hotel
1895 Sidewinder Drive
Park City, Utah 84060

The Park City Marriott Hotel is located in the Prospector Square area of Park City amid the scenic backdrop of a mountain community. A complimentary local shuttle to the Utah Olympic Park, Factory Stores at Park City or Old Town Main Street services the hotel.

Optional Site Tour

Meeting attendees are invited to participate in an optional tour of the Energy*Solutions* Clive facility on the afternoon of Tuesday, April 12. The Clive facility is located approximately 80 miles west of Salt Lake City, just south of I-80.

A bus will be provided by Energy*Solutions* and will leave from the Park City Marriott at noon.

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 Cecilia Snyder of the LLW Forum at the address, e-mail or fax number 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 at a discount rate of $118 per night plus tax, for Monday, April 11, for meeting attendees participating on the optional tour of Clive. A larger block of rooms at the same rate has been reserved for Tuesday, April 12, and Wednesday, April 13, for regular meeting attendees. A limited number of rooms are available at the discounted rate for 3 days prior to and after the meeting, subject to availability.

To make a reservation, please go to www.parkcitymarriott.com and enter special group code "LLWLLWA" or call 1-800-228-9290 and ask for a room in the Low-Level Waste block.

In order to receive the discounted rate, please make your reservation by March 20, 2016. Please note that there is a seven (7) day advanced notice requirement for cancellation of reservations to avoid a penalty.

Transportation and Directions

The Park City Marriott is located approximately 35 miles from the Salt Lake International Airport. The hotel does not provide shuttle service from and to the airport.

Shuttle service is available by reservation from Park City Shuttle (435-649-2227 or www.parkcityshuttle.com), Park City Transportation (800-637-3803 or www.parkcitytransportation.com), or All Resort Express (1-800-457-9457 or www.allresort.com).

For additional information, please contact Todd D. Lovinger, the LLW Forum's Executive Director, at (754) 779-7551 or go to www.llwforum.org.

LLW Forum/Disused Sources Working Group

DSWG Meets in February 2016

The following is a brief update on activities of the Low-Level Radioactive Waste Forum's (LLW Forum's) Disused Sources Working Group (DSWG).

For additional information and ongoing updates, interested stakeholders are encouraged to go to the DSWG web site at www.disusedsources.org.

DSWG Holds Winter 2016 Meeting

The DSWG held its winter meeting in Orange County, California from February 11-12, 2016. During the meeting, among other things, the DSWG:

- reviewed the outstanding recommendations from the March 2014 DSWG report;
- continued evaluating responses to the the U.S. Nuclear Regulatory Commission's (NRC's) byproduct material financial scoping study public meeting/webinar and submittal of comments by the DSWG and others;
- received an update and path forward re the Conference of Radiation Control Program Directors (CRCPD) working group on developing suggested state regulations concerning financial assurance for disused sources;
- provided a status update and potential further action re joint DSWG-CRCPD survey about the management and disposition of disused sources;
- considered the development and distribution of materials to educate licensees about the life-cycle costs related to source management prior to purchase;
- charted a path forward to enhance outreach to and coordination with other stakeholders; and,
- continued the discussion from the brokers and processors scoping session at the fall 2015 LLW Forum meeting including the proposal for creation of a central source processing facility and allowing brokers to receive sources on a bill of laden.

The winter 2016 DSWG meeting was open only to DSWG members and invited guests.

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 DSWG, please contact Project Director Todd D. Lovinger, Esq at (754) 779-7551 or at LLWForumInc@aol.com.

Atlantic Compact/State of Connecticut

Civil Penalty Proposed for Connecticut Firm Over Nuclear Gauge Security Control Deficiencies

By press release dated January 25, 2016, the U.S. Nuclear Regulatory Commission (NRC) announced that agency staff is proposing a $3,500 fine for a Connecticut firm for a violation of agency requirements involving the security of portable nuclear gauges.

Background

Megan LLC, of Bridgeport, Connecticut—which operates Fairfield Testing Laboratory—is licensed by the NRC for the use of portable nuclear gauges that contain radioactive material and are used for industrial purposes that include measuring the density of soil at construction sites. NRC regulations require the use of two independent controls to secure portable nuclear gauges from unauthorized removal whenever they are not under the control or constant surveillance of company personnel.

During an inspection on August 12, 2015, an NRC inspector was at a temporary jobsite in Connecticut with a company technician when he observed that a portable nuclear gauge was stored in the trunk of a car. The device was in a locked transportation case secured to the vehicle. However, the vehicle's doors were unlocked, allowing access to the trunk. The gauge user was temporarily away from the vehicle and therefore, according to NRC, ongoing control and surveillance were not maintained.

The company initiated prompt and comprehensive corrective actions after being notified of the issue, including increased auditing of temporary jobsites by its Radiation Safety Officer; employee retraining; and, a discussion of the event during annual radiation training for all employees.

Enforcement Action

Based on the violation, the NRC is proposing a $3,500 civil penalty and Severity Level III Notice of Violation for the company. One of the determining factors is that Megan LLC was cited by the agency for a similar violation last February.

"This enforcement action re-emphasizes to this license-holder and others that they must be vigilant when it comes to the security of portable nuclear gauges," said NRC Region I Administrator Dan Dorman. "In this case, because the locked transportation case remained in the vehicle's trunk, there were no impacts on public health and safety."

The company was required to respond to the violation and civil penalty within 30 days.

For additional information, please contact Diane Screnci at (610) 337-5330 or Neil Sheehan at (610) 337-5331.

Atlantic Compact/State of South Carolina

Special Inspection Conducted at Oconee Nuclear Plant

On January 5, 2016, the U.S. Nuclear Regulatory Commission (NRC) began a special inspection at Duke Energy's Oconee nuclear power plant to assess the degradation of power cables on start-up transformers for two of the plant's three units. The plant is located near Seneca, South Carolina—approximately 30 miles west of Greenville.

Overview

The on-site inspectors for the special inspection are the Senior Resident Inspector from the Oconee plant and an Inspector from the NRC's Region II office in Atlanta. Another NRC expert from Atlanta did not travel to the site, but assisted in reviewing the data gathered.

The team's work included a review of the circumstances surrounding the degradation and failure of the cables and the utility's actions after the degraded conditions were identified. It will develop a timeline on when the cables were damaged and/or failed, and review Duke's testing and maintenance practices.

The on-site portion of the inspection took several days. A report documenting the results should be issued within 45 days of the completion of the inspection.

Background

On December 7, 2015, a plant operator making routine inspections discovered a disconnected cable that should have been connected to the Unit 3 startup transformer. Upon further inspection, it was determined that other cables linked to the Unit 1 startup transformer were in a degraded condition. All of the cables have been repaired and the transformers are available for use if needed.

"There was not an event in which the startup transformers were needed, but they play a very important role in some circumstances by providing electrical power to plant safety equipment," said Leonard Wert, acting NRC Region II Administrator. "We felt a special inspection was warranted to gather more information about Duke's response and also determine if there are generic issues that may apply to other plants."

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

Central Interstate Compact/State of Arkansas

NRC Conducts Comprehensive Inspection at Arkansas Nuclear One

In late January 2016, the U.S. Nuclear Regulatory Commission (NRC) began a comprehensive inspection to assess the depth and breadth of the problems affecting performance at Arkansas Nuclear One, which is receiving the highest level of NRC scrutiny. The plant—which is located in Russellville, Arkansas—is operated by Entergy Operations.

Overview

A team of 25 inspectors will devote about 3,600 hours of effort to independently assess and document the adequacy of Entergy programs and processes used to identify, evaluate and correct performance issues; provide insights into the causes of performance deficiencies; and, evaluate the adequacy of a third-party safety culture assessment conducted at the site.

Any deficiencies identified by the team will be discussed with Entergy officials at a public meeting and documented in a written report that will be made publicly available this spring. The NRC will then issue a Confirmatory Action Letter that documents commitments made by the licensee to address any identified deficiencies.

"This inspection is a very important element of our increased regulatory oversight of Arkansas Nuclear One as it provides for an independent evaluation of the extent of the performance problems at the site," said NRC Region IV Administrator Marc Dapas. "It also includes an assessment of how thorough the licensee has been in identifying the extent of its problems and whether we think the planned corrective actions

are of sufficient scope and depth to maintain performance improvement."

Background

The NRC uses color-coded inspection findings and performance indicators to assess nuclear plant performance. The colors start with green and then increase to white, yellow, or red—commensurate with the safety significance of the issues involved. Performance indicators are statistical measurements of plant and equipment performance. The NRC's action matrix reflects overall plant performance and agency response. There are five columns in the matrix with Column 1 requiring a baseline level of inspections. Plants in Column 5 are not permitted to operate. The NRC increases the level of oversight and inspection in a graded manner as plant performance declines.

In June 2014, the NRC issued yellow findings to Arkansas Nuclear One in connection with a 2013 heavy equipment-handling incident at the plant. In January 2015, the NRC issued yellow findings associated with flood protection at the plant. The cumulative effect of these violations moved the plant into Column 4. Arkansas Nuclear One is receiving the highest level of NRC oversight of operating plants.

Information about the plant's current performance is available on the NRC web site at www.nrc.gov. For additional information, please contact Victor Dricks at (817) 200-1128.

Central Interstate Compact/State of Louisiana

NRC Conducts Special Inspection at River Bend Station

In early February 2016, the U.S. Nuclear Regulatory Commission (NRC) began a special inspection at the River Bend Station nuclear power plant to review circumstances surrounding events that occurred following an unplanned reactor shutdown on January 9, 2016.

The plant—which is operated by Entergy Operations, Inc.—is located in St. Francisville, Louisiana.

Overview

Several NRC inspectors spent approximately one week on site evaluating the licensee's root cause analysis, maintenance of some plant systems and 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.

Background

The River Bend Station plant was operating at full power when a lightening strike caused a momentary surge in the plant's off-site power supply, triggering an unplanned shutdown. Operators subsequently took appropriate actions to place the plant in a safe shutdown condition. The following day, operational errors led to a one-hour loss of shutdown cooling.

"The purpose of this special inspection is to better understand the circumstances surrounding the loss of shutdown cooling, determine if operator response was appropriate, and review the

licensee's corrective actions to ensure that the cause of the event, including associated equipment problems and any contributing operator actions, have been effectively addressed," said NRC Region IV Administrator Marc Dapas.

Information about the plant's current performance is available on the NRC web site at www.nrc.gov. For additional information, please contact Victor Dricks at (817) 200-1128.

Central Midwest Compact/State of Illinois

Comment Sought re LaSalle Plant License Renewal

On February 11, 2016, the U.S. Nuclear Regulatory Commission (NRC) announced that the agency is seeking public comment on a draft report on the environmental impacts of renewing the operating license of the LaSalle nuclear power plant in Illinois.

The draft report contains the NRC staff's preliminary conclusion that the environmental impacts would not preclude renewing the license for an additional 20 years of operation.

Overview

In a *Federal Register* notice published on February 11, 2016, the NRC provided detailed instructions on how to submit written comments on the draft supplemental Environmental Impact Statement (EIS). Comments will be accepted through April 4, 2016.

On March 22, 2016, NRC staff will hold a public meeting from 7:00 – 9:00 p.m. in Ottawa, Illinois to present the draft report's findings and accept public comment. The meeting will be at the LaSalle County Emergency Operations Center, which is located at 711 E. Etna Rd.

Background

LaSalle County Station—which is located 11 miles southeast of Ottawa—has two boiling-water reactors. The operator, Exelon Generation Co. Inc., submitted the renewal application on December 9, 2014.

The NRC's review of the application consists of a technical safety review and the environmental review. The draft supplemental EIS is Supplement 57 to NUREG-1437, *Generic Environmental Impact Statement for License Renewal of Nuclear Plants.*

The LaSalle license renewal application, draft supplemental EIS, and general information about reactor license renewal are available on the NRC website at www.nrc.gov. For additional information, please contact Eric Stahl of the NRC at (301) 415-8200.

NRC Renews Operating Licenses for Braidwood Plant

By press release dated January 27, 2016, the U.S. Nuclear Regulatory Commission (NRC) announced that the agency has renewed the operating licenses of the Braidwood nuclear plant, Units 1 and 2, for an additional 20 years.

Overview

The Braidwood plant has two pressurized-water reactors, located in Braceville, Illinois—approximately 20 miles southwest of Joliet. The renewed licenses authorize the reactors to operate through October 17, 2046 for Unit 1 and December 18, 2047 for Unit 2. The operator, Exelon Generation Co., submitted its renewal application on May 29, 2013.

The NRC staff's review of the application proceeded on two tracks. A Safety Evaluation Report (also covering Exelon's Byron plant in Illinois) was issued on July 6, 2015. A supplemental Environmental Impact Statement (EIS) on Braidwood was issued on November 12, 2015. These documents, as well as other information about the Braidwood license renewal, are available on the NRC website at www.nrc.gov.

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

Background

Renewal of Braidwood's operating licenses brings to 83 the number of commercial nuclear power reactors with renewed licenses, although two of those have since permanently shut down.

Applications for an additional 11 renewals are currently under review. Information about these reviews can be found on the NRC web site at www.nrc.gov.

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

Commonwealth of Massachusetts

Web Page Created on Increased Oversight of Pilgrim Nuclear Power Plant

In mid-February 2016, the U.S. Nuclear Regulatory Commission (NRC) established a web page on the agency's website containing information about the agency's increased oversight of the Pilgrim nuclear power plant.

Web Page

Among the items on the web page are background information, schedules, and NRC correspondence related to the increased oversight, inspection reports and other key documents. As the oversight process moves forward, newly released documents will be added to the page.

The web page can be found at http://www.nrc.gov/info-finder/reactors/pilg/special-oversight.html.

Background

In September 2015, the NRC announced that Pilgrim had moved to Column 4 of the Action Matrix used to determine the level and types of inspections to be performed at any given plant. Pilgrim—which is located in Plymouth, Massachusetts—made that transition after an inspection finding designated as "White," or of low to moderate safety significance, was finalized for the facility.

The finding overlapped with two earlier findings that were also of low to moderate safety significance, resulting in an NRC determination that the plant should be in Column 4, also known as the Multiple/Repetitive Degraded Cornerstone Column, and therefore subject to additional oversight.

Pending Shut Down

In mid-October 2015, Entergy Corporation announced plans to shut down Pilgrim by June 1, 2019. (See *LLW Notes*, September/October 2015, pp. 24-25.) Entergy Corporation, which is one of the largest energy companies in the United States, cited economic factors in making the decision to close the plant.

Pilgrim 1 is a General Electric Type 3 boiling water reactor with an operating license that is set to expire on June 8, 2032. However, according to Entergy, the nuclear power station's revenues have been significantly impacted by low wholesale energy prices driven by record low natural gas prices and shale gas production. The company also cited a decrease in power prices of approximately $10 per megawatt hour, which represents an annual loss of more than $40 million in revenues for Pilgrim.

In terms of decommissioning, the plant's trust is reported to have excess financial assurance for license termination activities above NRC-required assurance levels. Filings with the NRC for planned shutdown activities will determine whether any other financial assurance may be required and will specifically address funding for spent fuel management. According to Entergy officials, however, no additional funding is currently anticipated.

For additional information, please contact Diane Screnci at (610) 337-5330 or Neil Sheehan at (610) 337-5331.

Midwest Compact/State of Wisconsin

Wisconsin State Senate Approves Bill re Nuclear Plant Construction

In January 2016, by a vote of 23 to 9, Wisconsin's state Senate approved a bill that could pave the way for new nuclear power plants in the state. Wisconsin Governor Scott Walker, however, has not stated whether or not he will sign the bill.

In the 1980's, Wisconsin stipulated that no new nuclear power plants could be built unless there is a federal repository for spent fuel and there would be no negative impact on Wisconsin ratepayers.

Northwest Compact/State of Utah

Comments Sought re Utah's Proposed New Hazardous Waste Rules

At its January 2016 meeting, the Utah Waste Management and Radiation Control Board (Board) authorized the following Hazardous Waste rules: R315-103, R315-124, R315-260, R315-261, R315-262, R315-263, R315-264, R315-265, R315-266, R315-268, R315-270, and R315-273 to be published in the Utah Bulletin and to commence a 30 day comment period.

The Board also approved the publication and commencement of public comment on the repeal of following rules: R315-1, R315-2, R315-3, R315-4, R315-5, R315-6, R315-7, R315-8, R315-9, R315-12, R315-13, R315-14, R315-16, and R315-50.

Overview

The proposed rules R315-124, 260, 261, 262, 263, 264, 265, 266, 268, 270 and 273 will replace rules R315-1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 13, 14, 16, and 50. The new rules will use the numbering system that matches the one used by the U.S. Environmental Protection Agency (EPA) for the hazardous waste rules and will use EPA language as much as possible. The change also uses incorporation by reference only where Utah rule writing requirements will not allow the construction of tables and equations. Although the rule numbering has changed the content of the proposed rules, with the exceptions described below, are the same as the rules that are being proposed for repeal.

In addition to the numbering change, the proposed rules adopt several hazardous waste rule changes that have been adopted on the federal level. Some of the changes in federal rules that are included in the proposed changes adopt federal rules that the state is required to adopt to maintain EPA authorization for the Utah hazardous waste program. Other changes are not required to maintain authorized state status but are required by state statute.

The major changes include:

- a change to the definition of solid waste that is related to the EPA effort to make recycling of hazardous waste easer;
- rules related to the federal implementation of an electronic manifest system;
- cathode ray tube export provisions;
- exclusion of some materials co-disposed with coal combustion residuals;
- carbon dioxide exclusion; and,
- several corrections and changes related to burden reduction.

Submitting Comments

The comment period began on February 1, 2016. Written comments on both of these proposals will be accepted if received by 5:00 p.m. MT on March 3, 2016. Written comments should be submitted to the following mailing 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 hand delivered and must be received by 5:00 p.m. MT on March 3, 2016. Hand-delivered comments should be submitted to the following address:

Division of Waste Management and Radiation Control
Multi Agency State Office Building
195 North 1950 West, 2nd Floor
Salt Lake City, Utah 84116

Comments can also be sent via electronic mail to swpublic@utah.gov. Comments submitted via electronic format should be identified by putting, "Public Comment on Hazardous Waste Rules," in the subject line. All documents included in comments should be submitted as ASCII (text) files or in pdf format.

An unofficial copy of the proposed hazardous waste rules will be made available on the Internet at http://www.deq.utah.gov/Laws_Rules/dshw/ProposedHWRules.htm.

For additional information, please contact Ralph Bohn of the Division of Waste Management and Radiation Control at (801) 536-0212.

Utah Waste Management & Radiation Control Board Meets

On January 14, 2016, 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 the Multi Agency State Office Building in Salt Lake City, Utah.

The Board subsequently canceled a meeting that had been scheduled for February 11, 2016. The next regular meeting is scheduled for March 10, 2016.

Agenda

The following items, among others, were on the agenda for the January 2016 Board meeting:

I. Call to Order

II. Approval of the Meeting Minutes for the December 10, 2015 Board Meeting *(Board Action Item)*

III. Underground Storage Tanks Update

IV. Hazardous Waste Rules

a. approval to proceed with formal rulemaking and 30-day public comment period for proposed Hazardous Waste Rules R315-103, R315-124, R315-260, R315-261, R315-262, R315-263, R315-264, R315-265, R315-266, R315-268, R315-270, and R315-273 *(Board Action Item)*

b. approval to proceed with formal rulemaking and 30-day public comment period for repeal of Hazardous Waste Rules R315-1, R315-2, R315-3, R315-4, R315-5, R315-6, R315-7, R315-8, R315-9, R315-12, R315-13, R315-14, R315-16, and R315-50 *(Board Action Item)*

V. Presentation on the X-Ray Program

VI. Other Business

a. miscellaneous information item

b. next Board meeting

VII. 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.

Southeast Compact Commission/State of Florida

ASLB Holds Evidentiary Hearing on Turkey Point Canal Temperature Issue

On January 11-12, 2016, an Atomic Safety and Licensing Board (ASLB) held an evidentiary hearing in Homestead, Florida to consider a challenge to license amendments that increase the ultimate heat sink water temperature limit for the cooling canal system at the Turkey Point nuclear power plant.

The ASLB is the U.S. Nuclear Regulatory Commission's (NRC's) independent body charged with conducting adjudicatory hearings and deciding legal challenges to the agency's licensing and enforcement actions. Florida Power & Light Co. (FPL) operates the two-unit Turkey Point plant near Homestead.

Overview

An intervenor, Citizens Allied for Safe Energy (CASE), filed four proposed contentions regarding the license amendments granted to FPL in 2014 that allowed the company to increase the ultimate heat sink water temperature for the plant's external cooling canal system.

The ASLB heard oral arguments last January 2015 on the admissibility of the contentions. On March 23, 2015, the ASLB granted a hearing on one contention.

That contention claims the NRC staff's environmental assessment supporting the license amendment did not adequately address the potential impacts of the higher temperature limit on migration of highly saline water out of the cooling canals or saltwater intrusion into nearby aquifers. The merits of this contention were the focus of the January 11-12 hearing.

Background

The hearing began at 9:30 a.m. on January 11 at the Hampton Inn and Suites in Homestead. It was scheduled to continue until 5:00 p.m. on January 12, unless the board finished earlier.

The evidentiary hearing was open to the public, but the board only heard testimony and legal arguments from witnesses and representatives for CASE, NRC, and FPL. As a result, no members of the public were heard during this proceeding.

However, members of the public were provided an opportunity to submit written "limited appearance statements" regarding the license amendments and the contention under consideration. These statements, which may be considered by the judges, were required to be submitted no later than January 15, 2016 to both the NRC Secretary and the ASLB Chair.

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

Southwestern Compact

Southwestern Compact Commission Publishes Governor's Annual Report

In January 2016, the Southwestern Low-Level Radioactive Waste Compact Commission announced that it's annual report for fiscal year 2015 is now available and posted on its web site. The report covers the period from July 1, 2014 through June 30, 2015.

According to the report, the California Radiologic Health Branch has 1,793 active radioactive materials licenses as of September 10, 2014. The report states that "[t]here have been no inquiries regarding, or interest expressed in, development of a low-level radioactive waste disposal facility in California at this time."

The Southwestern Low-Level Radioactive Waste Commission Annual Report for Fiscal Year 2015 can be found at www.swllrwcc.org. For additional information, please contact Kathy Davis, Executive Director of the Southwestern Compact Commission, at (916) 720-0144 or at swllrwcc@swllrwcc.org.

Texas Compact

Comment Sought re Texas Compact's Proposed Import Approval Approach

In January 2016, the Texas Low-Level Radioactive Waste Disposal Compact Commission (Texas Compact Commission) announced that it was seeking comments on a proposed process for approving import applications for the disposal of low-level radioactive waste into the Compact Waste Facility that is operated by Waste Control Specialists LLC (WCS) and located in Andrews County, Texas.

Under the laws of the State of Texas, no more than 275,000 curies of low-level radioactive waste may be disposed at the Compact Waste Facility in a fiscal year. Therefore, the Texas Compact Commission is working to develop and institute an import prioritization process that would provide the maximum chance of curies being available for shipment to those generators that are able to ship to the Compact Waste Facility.

The deadline for submitting comments on the proposed process for approving import applications was January 25, 2016.

A cover letter with additional information and the proposed concept paper are available on the Texas Compact Commission's web site at http://www.tllrwdcc.org/.

Proposed Concept Paper

The Texas Compact Commission's proposed concept paper, which is titled "A Process for Conditional Approval of Authorization to Dispose of Curies," states as follows:

1. Generally, the Commission will continue to enter into agreements with generators and brokers for importation of nonparty low-level radioactive waste for disposal ("Agreement") in the Texas-Low Level Radioactive Waste Disposal Compact Facility ("Facility") that are effective on the date of approval by the Commission through August 31 (the last day of the Facility's operational year). Generators and brokers may submit applications for future operational years, but those applications will be considered in light of this policy.

2. Starting with the February 4, 2016 meeting, all Agreements to import and dispose of a total volume of waste that contains more than 2,000 Curies during an operational year will be entered on a conditional basis.

3. The conditions that will be included in any Agreement to import and dispose of more than 2,000 Curies will include (but not be limited to):

    - A condition providing that no shipments may be made under the Agreement without further authorization from the Commission.

- A condition requiring that no less than 15 days before a shipment is made under the Agreement, the Generator or Broker shall provide the Commission a written notice containing evidence satisfactory to the Commission that a shipment will be made on the date proposed in the notice and that it will contain a specifically identified number of Curies. It is acknowledged that weather or other unforeseen conditions may cause a nominal delay of shipment, but that delay shall not exceed 5 days, or a new condition removal letter will be required.

- A condition providing that no shipment will be made until the Generator or Broker has received a written communication from the Commission that: (1) it has received the notice from the Generator or Broker; (2) it is satisfied that the shipment will be made on the proposed date and that it will contain the proposed number of Curies; and (3) the disposal of the waste listed in the notice will not cause the total number of Curies disposed at the Compact facility to exceed the maximum yearly allowances for that operating year.

- A condition memorializing the understanding of the Generator or Broker that the Agreement is null and void and no further shipments can be made pursuant to the Agreement on or after the date during an operating year that the Facility has received low-level radioactive waste containing 275,000 Curies.

The concept paper is dated January 10, 2016.

Questions for Comment

In addition to seeking comments on the overall proposed process, the Texas Compact Commission requests that stakeholders submit responses to the following questions:

1. What is an appropriate threshold for issuing Curies conditionally? For import applications with Curie requests above the threshold, Curies would be issued conditionally by the Commission as opposed to the current practice of issuing them unconditionally. The proposed Concept Paper proposes 2,000 Curies as that limit.

2. What would be appropriate documentation for demonstrating proof of a shipment is imminent? Is there a document that generators and brokers already use such that a new form would not need to be created and used? Are there good examples we could use should a new form need to be developed?

3. How many days prior to a shipment are generators certain that the shipment will occur? The proposed Concept Paper proposes 15 days.

4. How many days prior to a shipment are generators reasonably certain of the shipment's Curie value?

Comments on the above questions and the proposed concept paper were due by January 25, 2016.

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

Texas Compact Commission Holds February 2016 Meeting

On February 4, 2016, the Texas Low-Level Radioactive Waste Disposal Compact Commission (Texas Compact Commission) held a regularly scheduled meeting. The meeting, which began at 9:30 a.m., was held in Room E1.028 of the Texas Capitol located in Austin, Texas.

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;
- discussion and possible action with respect to ensuring payments and reimbursements from the Texas State Treasury to vendors, contractors, and other persons to whom the Texas Compact Commission is indebted;
- discussion and consideration of and possible action on the limitation of authorization of disposal of curie amounts to ensure maintenance of the curie limit for the compact facility as specified in Texas Health and Safety Code (THSC) 401.207(e) including a reduction of curie amounts previously authorized;
- consideration of and possible action on requests for amendment to agreements for importation of low-level radioactive waste from the Arizona Public Service; Entergy Fitzpatrick; and, Philotechnics;
- consideration of and possible action on an application and proposed agreement from Entergy Operations, Inc.—River Bend Station for importation of low-level radioactive waste whereby 40,000 curies of the originally requested 80,000 curies was continued from the Texas Compact Commission meeting that was held on October 1, 2015;
- consideration of and possible action on applications and proposed agreements for importation of low-level radioactive waste from Florida Power & Light Turkey Point; Entergy Pilgrim Station; Susquehanna Nuclear; NextEra Seabrook; and, RAM Services;
- consideration of and possible action on a petition and proposed order for exportation of low-level radioactive waste from Bionomics TAMU EH&S; Bionomics TAMU NSC; and, Philotechnics Pet Net Solutions;
- 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);
- 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, Consulting Supervisory 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 2016; 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 Consulting Supervisory Director Leigh Ing at (512) 305-8941 or at leigh.ing@tllrwdcc.org.

Texas Compact/State of Texas

New Reactor Licenses to be Issued for South Texas Project

Following Conclusion of Mandatory Hearing

By press release dated February 9, 2016, the U.S. Nuclear Regulatory Commission (NRC) announced that it has cleared the way for the agency's Office of New Reactors to issue two Combined Licenses (COL) for Nuclear Innovation North America's (NINA) South Texas Project site in Texas.

Based on the mandatory hearing on NINA's application, the Commission found the staff's review adequate to make the necessary regulatory safety and environmental findings.

Overview

Following the Commissioners' direction, the NRC staff will work to issue the COLs promptly. The licenses will authorize NINA to build and operate two Advanced Boiling Water Reactors (ABWR) at the site near Bay City, Texas. The South Texas Project Nuclear Operating Company already operates two reactors at the site.

The staff will impose several conditions on the license, including:

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

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

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

Background

NINA submitted its application for the licenses on September 20, 2007. The NRC's Advisory Committee on Reactor Safeguards (ACRS) independently reviewed aspects of the application that concern safety, as well as the staff's Final Safety Evaluation Report (FSER). The ACRS, a group of experienced technical experts, advises the Commission—independently from the NRC staff—on safety issues related to the licensing and operation of nuclear power plants, as well as on issues of health physics and radiation protection.

The ACRS provided the results of its review to the Commission on February 19, 2015. The NRC completed its environmental review and issued the Final Environmental Impact Statement (FEIS) for the proposed South Texas Project reactors in February 2011.

The NRC completed and issued the FSER on September 29, 2015. The NRC certified the 1,300-megawatt ABWR design in 1997.

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

Waste Management 2016 Conference

LLW Forum Sponsors Panel for Waste Management 2016 Conference

The Low-Level Radioactive Waste Forum, Inc. (LLW Forum) has organized a panel for the Waste Management 2016 Conference titled, *Hot Topics and Emerging Issues in US Commercial Low-Level Radioactive Waste Management.*

The Waste Management 2016 Conference will be held at the convention center in Phoenix, Arizona from March 6-10, 2016. The LLW Forum-sponsored Panel 16 is scheduled to be held in Room 103AB from 1:30 – 3:10 p.m. on Monday afternoon—March 7, 2016.

LLW Forum Panel Overview

Panel 16 will focus on emerging issues in commercial low-level radioactive waste management in the United States from the perspective of representatives of the LLW Forum.

State, federal and industry officials will share their views on a variety of timely and significant topics including

- the proposal to license a disposal cell for Greater-than-Class C (GTCC), GTCC-like and Transuranic waste through means other than deep geologic disposal at the Waste Control Specialists (WCS) facility in Texas;
- an initiative to develop implementation guidance for the Branch Technical Position on Concentration Averaging and Encapsulation (CA BTP);
- status of the proposed rule to amend 10 CFR Part 61, *Licensing Requirements for Land Disposal of Radioactive Waste;*
- the depleted uranium performance assessment, license and permit updates, and current waste disposal volumes and types at the Clive facility in Utah; and,
- broker and processor perspectives on the management and disposition of disused sources.

LLW Forum Panel Speakers

Scheduled speakers for Panel 16 include

- Charles Maguire, Director of the Radioactive Materials Division at the Texas Commission on Environmental Quality (TCEQ);
- Lisa Edwards, Senior Program Manager at the Electric Power Research Institute (EPRI);
- Gregory Suber, Chief of the Low-Level Waste Branch at the U.S. Nuclear Regulatory Commission (NRC);
- Dan Shrum, Senior Vice-President of Regulatory Compliance at Energy*Solutions*; and,
- John McCormick, Vice-President at Bionomics, Inc.

The panel will be co-chaired by LLW Forum Chair Rusty Lundberg and LLW Forum Executive Director Todd Lovinger.

Background

The Waste Management Conference takes place annually and is presented by Waste Management Symposia—a non-profit organization dedicated to education and opportunity in waste management.

The international conference was founded to provide a forum for discussing and seeking cost-effective and environmentally responsible solutions to the safe management and disposition of radioactive waste and radioactive materials.

This year's conference will include over 600 presentations covering all aspects of radioactive waste management, packaging and transportation, facility siting, site remediation, Fukushima progress and other related topics.

Additional information on the Waste Management 2016 Conference can be found at www.wmsym.org or by contacting the Waste Management office at (480) 557-0263.

Electric Power Research Institute (EPRI)/American Society of Mechanical Engineers (ASME)

International Low-Level Waste Conference and Workshops

June 20-23, 2016 in Orlando, Florida

From June 20-23, 2016, the Electric Power Research Institute (EPRI) will host its 25th annual International Low-Level Waste Conference and Exhibit Show specifically aimed at meeting the needs of nuclear industry professionals at The Loews Royal Pacific Resort in Orlando, Florida.

EPRI will host its 2016 Decommissioning Workshop on June 20-21, which will specifically focus on decommissioning planning, use and development of technologies and associated waste issues. Also on June 20-21, the American Society of Mechanical Engineers (ASME) and EPRI will host a Radwaste Workshop for utility members only.

Low-Level Waste Conference

EPRI's 25th annual conference will focus on all aspects of nuclear plant low and intermediate level liquid and solid radwaste operations, radwaste shipping and disposal, all contributing to improved management, safety, cost reduction and waste minimization. The conference format is intended to present the latest technical developments applicable to attendees' plant radwaste operation. In addition, it provides a forum for information exchange between technology developers, technical experts, vendors and other members of the industry.

EPRI Decommissioning Workshop

The objective of the EPRI Decommissioning Workshop is to draw from and share experiences and lessons learned, gather information on the implementation of innovative technologies, and insights gained in the conduct of nuclear power plant decommissioning projects. Presentations will address strategic issues such as planning and regulatory, and key aspects of relevant technologies, allowing an assessment to be made of their applicability to the global nuclear community. Regulators, utilities, service providers and research groups will make presentations on projects and studies being performed.

ASME/EPRI RadWaste Workshop

The ASME/EPRI RadWaste Workshop will focus on functional aspects of low-level radioactive waste management at nuclear power plants. Utility radwaste personnel will make presentations, followed by small interactive discussion groups to promote information exchange and review lessons learned. Topics will

include radwaste benchmarking, liquid processing, plant experience in managing solid and wet low-level waste, regulatory and training issues. The ASME/EPRI Workshop registration will be handled as a session within the LLW Conference so EPRI utility/ member attendees will use one link to register for both meetings.

For additional information, please go to the EPRI website at www.epri.com.

Congress

NRC Proposes FY 2017 Budget to Congress

Agency Continues to Achieve Efficiencies

The U.S. Nuclear Regulatory Commission (NRC) has proposed a $970.2 million Fiscal Year (FY) 2017 budget to the U.S. Congress to regulate the nation's nuclear power plants and radioactive materials users. The proposed budget for the Office of the Inspector General is an additional $12.1 million.

As proposed, the FY 2017 budget represents a decrease of nearly $20 million from FY 2016's spending levels. The decreased budget proposal continues a steady decline in both spending and staffing. The agency's budget is down eight percent since 2014.

"This budget recognizes the changing environment in the nuclear industry and reflects the considerable steps taken by the NRC to become more efficient, while still meeting our obligation to protect public health and safety," said NRC Chairman Stephen Burns. He noted that the agency used a variety of cost-saving approaches to pare the budget back well below the previous year.

Since the NRC recovers approximately 90 percent of its budget from licensee fees, which are sent directly to the Treasury, the resulting net appropriation request is $121 million.

Overview

The NRC's budget submission for operations was boosted by $5 million for work to develop the regulatory infrastructure for advanced reactor technologies in support of the President's Mission Innovation program. The $5 million is not included in the amount recouped by licensing fees.

The FY 2017 operations budget funds 3,462 full-time equivalent (FTE) employees, a decline of 90 FTE from the FY 2016 budget and 280 FTE since 2014. This year's decline is due to a number of initiatives to improve the efficiency of agency operations, including the centralization of corporate functions and merger of two program offices.

Before issuance of the FY 2017 budget, as part of agency initiatives to become more efficient and as a result of the 2016 appropriation, NRC was able to reduce spending by $30.1 million. This will likely result in a reduction to the recovery of nuclear reactors and materials licensee fees.

Highlights

The FY 2017 budget breakout includes $757.4 million for nuclear reactor safety and $212.8 million for nuclear materials and waste safety and will allow the agency to continue to uphold its important safety and security mission. The budget also includes resources to continue implementation of lessons-learned from the Fukushima nuclear accident, the review of applications for medical isotope productions facilities, and the oversight of four new reactors that are under construction.

Project Aim, the NRC's transformation effort, will ensure the agency has the right resource

levels and workforce staffing to conduct its future work. The goal is to improve the NRC's effectiveness, efficiency and agility. The FY 2017 budget incorporates some Project Aim recommendations and the Commission is considering a variety of other further potential efficiencies from the effort.

The amount requested for the Inspector General totals $12.1 million. That independent office conducts audits and investigations to ensure the efficiency and integrity of NRC programs, and promote cost-effective management. The OIG's budget also includes funding to provide auditing and investigation services for the Defense Nuclear Facilities Safety Board.

The budget briefing slides and the Congressional Budget Justification are available on the NRC web site at www.nrc.gov. A limited number of hard copies of the report will be available from opa.resource@nrc.gov.

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

International Workshop on Use of Robotic Technologies at Nuclear Facilities

Workshop Held re Using Robotic Technologies at Nuclear Power Plants

From February 2-4, 2016, the International Workshop on the Use of Robotic Technologies at Nuclear Facilities was held in Gaithersburg, Maryland. The U.S. Nuclear Regulatory Commission (NRC)—in conjunction with its U.S. and foreign counterparts—sponsored the workshop.

Workshop Co-Sponsors

The workshop co-sponsors included:

- the Organization for Economic Cooperation and Development's Nuclear Energy Agency;
- the U.S. National Institute of Standards and Technology (NIST);
- the U.S. Department of Energy's Office of Environmental Management (DOE/OEM);
- the U.S. Department of Homeland Security's Science and Technology Directorate, Office of Standards;
- the United Kingdom's Atomic Energy Authority; and,
- the Canadian Nuclear Safety Commission.

The American Nuclear Society (ANS), ASTM International and IEEE Robotics and Automation Society also collaborated on the workshop.

Workshop Logistics and Overview

The workshop began at 1:00 p.m. on February 2, 2016. It was held at the Green Auditorium on the NIST campus at 100 Bureau Drive in Gaithersburg, Maryland. Interested stakeholders were required to register to attend the meeting and pay the associated $71.00 registration fee.

The workshop covered existing and potential future uses of robotic technologies in safety applications and activities at nuclear facilities. The workshop examined topics including:

- how robots can evaluate plant systems;
- how robots can locate and recover radioactive material; and,
- how non-nuclear applications can be adapted to nuclear situations.

The workshop included discussion of lessons learned from historic nuclear applications and experiences (e.g., Three Mile Island, Sellafield, and Fukushima Daiichi); ongoing research; and, other relevant applications (e.g., NASA's Martian rovers).

For additional information, please contact Scott Burnell of the U.S. Nuclear Regulatory Commission at (301) 415-8200.

(Continued from page 1)

Decision, the Department will submit a report to Congress on disposal alternatives for GTCC low-level radioactive waste and await action by Congress as required by the Energy Policy Act of 2005.

Wastes and Volumes

The NRC low-level radioactive waste classification system does not apply to radioactive wastes generated or owned by DOE and disposed of in DOE facilities. However, DOE owns or generates low-level radioactive waste and non-defense-generated transuranic (TRU) radioactive waste, which have characteristics similar to those of GTCC low-level radioactive waste and for which there may be no path for disposal at the present time. DOE has included these wastes for evaluation in the Final EIS because similar approaches may be used to dispose of both types of radioactive waste. For the purposes of the Final EIS, DOE refers to this waste as GTCC-like waste.

The total volume of GTCC low-level radioactive waste and GTCC-like waste addressed in the Final EIS is about 12,000 m^3 (420,000 ft^3), and it contains about 160 million curies of radioactivity. About three-fourths of this volume is GTCC low-level radioactive waste, with GTCC-like waste making up the remaining one-fourth of the volume. Much of the GTCC-like waste is TRU waste.

DOE has evaluated the potential environmental impacts associated with the range of reasonable alternatives for disposal of GTCC low-level radioactive waste and GTCC-like waste in the Final EIS.

Alternatives Considered

DOE evaluated five alternatives in preparation of the Final EIS, including a "no action" alternative. One of the four action alternatives is disposal of GTCC low-level radioactive waste and GTCC-like waste in a geologic repository at the Waste Isolation Pilot Plant (WIPP). The other three action alternatives involve the use of land disposal methods at six federally owned sites and at generic commercial sites.

The land disposal alternatives consider the use of intermediate-depth borehole, enhanced near-surface trench, and above-grade vault facilities. The land disposal alternatives cover a spectrum of concepts that could be implemented to dispose of these wastes in order to enable an appropriate site and disposal technology to be selected.

The Final EIS evaluates each alternative with regard to the transportation and disposal of the entire inventory, but the evaluation of human health and transportation impacts is done on a waste-type basis, so decisions can be made on this basis in the future, as appropriate.

Preferred Alternative

The preferred alternative for the disposal of GTCC low-level radioactive waste and GTCC-like waste is the WIPP geologic repository (Alternative 2) and/or land disposal at generic commercial facilities (Alternatives 3-5). According to DOE, these land disposal conceptual designs could be altered or enhanced, as necessary, to provide the optimal application at a given location. The preferred alternative does not

include land disposal at DOE sites. In addition, there is presently no preference among the three land disposal technologies at the generic commercial sites.

The analysis in the Final EIS has provided the Department with the integrated insight needed to identify a preferred alternative with the potential to enable the disposal of the entire waste inventory analyzed in the Final EIS. Due to the uncertainty regarding the need for legislative changes and/or licensing or permitting changes, further analysis will be needed before a Record of Decision is announced.

Next Steps

DOE has determined that the preferred alternative would satisfy the needs of the Department for the disposal of GTCC low-level radioactive waste and GTCC-like waste. Prior to making a final decision on which disposal alternative to implement, DOE will submit a Report to Congress to fulfill the requirement of Section 631 (b)(1)(B)(i) of the Energy Policy Act of 2005 and await action by Congress.

Section 631(b)(1)(B)(i) requires that the report include all alternatives under consideration and all the information required in the comprehensive report to ensure safe disposal of GTCC low-level radioactive waste that was submitted by the Secretary to Congress in February 1987. DOE will not issue a Record of Decision until its required Report to Congress has been provided and Congress has taken appropriate action in accordance with the Energy Policy Act of 2005.

Background

The Low-Level Radioactive Waste Policy Amendments Act of 1985 assigned the responsibility for the disposal of GTCC low-level radioactive waste to the federal government. DOE's Office of Environmental Management was designated as the specific office responsible for GTCC low-level radioactive waste disposal.

GTCC low-level radioactive waste has radionuclide concentrations exceeding the limits for Class C low-level radioactive waste as established by the NRC. GTCC waste is generated commercially. GTCC-like radioactive waste is owned or generated by DOE and has characteristics similar to GTCC low-level radioactive waste. GTCC-like waste consists of low-level radioactive waste and non-defense-generated transuranic waste.

DOE issued an Advance Notice of Intent (ANOI) in the *Federal Register* on May 11, 2005 that invited the public to provide preliminary comments on the potential scope of the EIS. DOE then issued a Notice of Intent (NOI) to prepare an EIS on July 23, 2007. (A printing correction was issued on July 31, 2007.) The NOI provided responses to the major issues identified by commenters on the ANOI, identified the preliminary scope of the EIS, and announced nine public scoping meetings and a formal scoping comment period lasting from July 23 through September 21, 2007. DOE used all input received during the scoping process to prepare the Draft EIS.

A 120-day public comment period on the Draft EIS began with the publication of the EPA Notice of Availability in the *Federal Register* on February 25, 2011 and closed on June 27, 2011. DOE conducted public hearings at nine locations during April and May of 2011. All comments received on the Draft EIS were considered in the preparation of the Final EIS.

For additional information, please contact Theresa J. Kliczewski, GTCC EIS Document Manager for DOE, at (202) 586-3301 or at Theresa.Kliczewski@em.doe.gov.

A copy of DOE's Final EIS on the disposal of GTCC and GTCC-like waste, as well as related documents, may be found at http://www.gtcceis.anl.gov/documents/index.cfm#final.

U.S. Nuclear Regulatory Commission

NRC Issues SECY-15-0094 re Disposal of GTCC Waste

On December 22, 2015, the U.S. Nuclear Regulatory Commission (NRC) issued SECY-15-0094 regarding historical and current issues related to the disposal of Greater-Than-Class C (GTCC) low-level radioactive waste.

In SECY-15-0094, the Commission directs NRC staff to prepare a draft response, for processing as Commission correspondence but to be signed by the Director of the Nuclear Materials Safety and Safeguards (NMSS), to the Texas Commission on Environmental Quality (TCEQ) in response to their letter dated January 30, 2015. The Commission stated that the draft response should include a description of the regulatory basis, explain that this regulatory basis will inform NRC's answer to TCEQ's jurisdictional questions about disposal of GTCC waste, and invite TCEQ staff to provide input to the regulatory basis during the course of its development.

SECY-15-0094 further states that, within six months of the completion of the ongoing 10 CFR Part 61 rulemaking, NRC staff should prepare a regulatory basis for the disposal of GTCC waste through means other than deep geologic disposal, including near-surface disposal, and provide this regulatory basis to the Commission for information. The Commission directs that the regulatory basis should analyze whether, in accordance with section 274.c(4) of the Atomic Energy Act, disposal of GTCC waste presents a hazard such that the NRC should retain authority over its disposal. If NRC staff concludes, as a result of its analysis, that some or all GTCC waste is potentially suitable for near-surface disposal, SECY-15-0094 states that the staff should proceed with the development of a proposed rule to include disposal criteria for licensing the disposal of such waste under 10 CFR Part 61. The Commission directs staff to conduct a public workshop during the development of the regulatory basis to receive input from the State of Texas and any other interested stakeholders.

SECY-15-0094 states that, "[t]he Commission affirms that the case-by-case review contemplated in 10 CFR 61.55(a)(2)(iv) is available to parties who seek to dispose of GTCC waste in the near term." In addition, the Commission approves the staff's recommendation to address transuranic waste in 10 CFR section 61.2.

NRC Seeks Comments re Contaminated Material and Contaminated Trash

In a *Federal Register* notice issued on January 20, 2016, the U.S. Nuclear Regulatory Commission (NRC) announced that the agency is requesting comments on whether NRC staff should formally document a position on contaminated material and contaminated trash.

In February 2015, NRC issued Revision 1 of the Branch Technical Position on Concentration Averaging and Encapsulation (CA BTP). The CA BTP provides acceptable methods that can be used to perform concentration averaging of low-level radioactive waste for the purpose of determining its waste class for disposal. When the NRC issued the revised CA BTP, it noted that one issue, distinguishing contaminated materials from contaminated trash, might need further clarification. The NRC also stated that it would consider whether additional guidance, such as a Regulatory Issue Summary (RIS), would be warranted for distinguishing contaminated materials from contaminated trash.

Interested stakeholders are requested to submit comments by March 21, 2016. Comments received after this date will be considered if it is

practical to do so, but NRC is able to ensure consideration only for comments received before this date.

NRC's request for comments can be found at 81 Federal Register 3,166 (January 20, 2016) via the following link: https://www.gpo.gov/fdsys/pkg/FR-2016-01-20/pdf/2016-00972.pdf.

Specific Request for Comments

The NRC is requesting that interested stakeholders consider and address the following questions as they develop and provide their comments:

1. Is additional guidance needed to clarify the distinction between contaminated trash and contaminated material?
2. When filling out the Uniform Waste Manifest (UWM) via NRC Forms 540, 541, and 542, how is contaminated equipment (UWM code 33) currently distinguished from contaminated trash (UWM codes 39 and 40)?
3. Should numerical constraints be developed to clarify the distinction between contaminated materials and contaminated trash? If so, what basis should be used to develop the numerical constraints? If not, what qualitative factors should be considered?
4. If numerical values were developed, would activity or concentration constraints be preferable? Would an option to use either be feasible to implement?
5. What challenges, if any, do you foresee with implementing numerical thresholds for distinguishing between contaminated trash and contaminated materials? How could these challenges be ameliorated?
6. Would an emphasis on using process knowledge be sufficient to avoid the unintended consequence of causing licensees to characterize individual pieces of trash that have radionuclide concentrations significantly less than the class limits?
7. The NRC understands that items referred to as ''high rad trash'' are placed in containers of contaminated trash and averaged. The NRC also understands that this practice reduces worker exposure as compared to evaluating each item of trash. Please provide examples of ''high rad trash'' including estimated annual volume, areas of the facilities where this waste is generated, and typical contact dose rates (if available).
8. When classifying contaminated trash, is the same sample data (*e.g.*, scaling factors) for determining the radionuclide content of ''normal'' contaminated trash used for classifying the ''high rad trash?''
9. What process currently is used to determine whether items of ''high rad trash'' can be disposed of with lower-activity contaminated trash or whether items are treated as contaminated materials and averaged with the constraints described for contaminated materials under the 1995 CA BTP?
10. Is clarification needed for the term ''component'' in the definition of contaminated materials used in the 1995 and 2015 CA BTP?

The NRC is seeking responses to the above questions to assist the agency in determining what items that could be defined as contaminated material per the CA BTP, if any, are currently being disposed of as contaminated trash.

Submitting Comments

Interested stakeholders are requested to submit comments by March 21, 2016. Comments may be submitted via either of the following methods:

- Federal Rulemaking Web site: Go to *http://www.regulations.gov* and search for Docket ID NRC–2011–0022. Address questions

about NRC dockets to Carol Gallagher at (301) 415–3463 or at *Carol.Gallagher@nrc.gov.*

- Mail comments to: Cindy Bladey, Office of Administration, Mail Stop: OWFN–12–H08, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.

Comments received after this date will be considered if it is practical to do so, but NRC is able to ensure consideration only for comments received before this date.

Obtaining Additional Information

Please refer to Docket ID NRC–2011– 0022 when contacting the NRC about the availability of information for this action. Interested stakeholders may obtain publicly-available information related to this action by any of the following methods:

- Federal Rulemaking Web site: Go to *http://www.regulations.gov* and search for Docket ID NRC–2011–0022.
- NRC's Agencywide Documents Access and Management System (ADAMS): Go to the ADAMS Public Documents collection at *http://www.nrc.gov/reading-rm/ adams.html.* To begin the search, select ''ADAMS Public Documents'' and then select ''Begin Web-based ADAMS Search.'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff via phone at (800) 397–4209 or (301) 415–4737 or via email at *pdr.resource@nrc.gov.*
- NRC's PDR: Interested stakeholders may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

Volume 1 and Volume 2 of the revised CA BTP are available in ADAMS under Accession Nos. ML12254B065 and ML12326A611, respectively.

Background

The NRC issued Revision 1 of the CA BTP on February 25, 2015. (See 80 *Federal Register* 10,165 dated February 25, 2015). This revision provided updated guidance on the interpretation of § 61.55(a)(8) of title 10 of the *Code of Federal Regulations,* ''Determination of concentrations in wastes,'' as it applies to the classification (as Class A, B, or C waste) of a variety of different types and forms of low-level radioactive waste. Section 61.55(a)(8) states that radionuclide concentrations can be averaged over the volume of the waste or its weight if the units are expressed as nanocuries per gram. The average radionuclide concentrations are compared with the waste classification tables in § 61.55 to determine the class of the waste. The waste class determines the minimum safety measures to be applied in order to provide reasonable assurance of safe disposal of the waste. The previous version of the CA BTP was published in 1995 and can be located in ADAMS using Accession No. ML033630732.

In developing the Revised CA BTP, the staff identified one issue that may need further clarification. One of the categories of discrete wastes that are subject to additional concentration averaging constraints is ''contaminated materials.'' Both the 1995 and Revised CA BTP define contaminated materials as components or metals on which radioactivity resides on or near the surface in a fixed or removable condition. To demonstrate compliance with these averaging constraints, the radiological characteristics and volumes of individual items are typically determined. However, items with surface contamination may also be categorized as contaminated trash, which has fewer averaging constraints. Both the 1995 and the Revised CA BTP used the term contaminated trash which is intended to be the equivalent of waste descriptor codes 39 and 40 (*i.e.*, Compactible Trash and Non-Compactible Trash) of NRC Form 541, ''Uniform Low-Level Radioactive Waste Manifest—Container and Waste Description.''

Items in contaminated trash do not need to be individually characterized. Instead, a container of contaminated trash can be surveyed to determine its overall radioactivity and its classification determined by dividing the overall activity by the waste volume. Neither the 1995 CA BTP nor draft revisions published for public comment provided guidance for categorizing items as either contaminated materials or contaminated trash. In addition, the NRC received no comments from stakeholders on this issue.

The NRC is now addressing whether additional guidance, such as the issuance of an RIS, is warranted for distinguishing contaminated materials from contaminated trash.

For additional information, please contact Don Lowman, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, at (301) 415– 5452 or at Donald.Lowman@nrc.gov.

NRC Commissioner Ostendorff Will Not Seek Another Term

On February 17, 2016, William Ostendorff announced that he would not seek another term at the U.S. Nuclear Regulatory Commission (NRC) after his term expires on June 30, 2016. Commissioner Ostendorff, who will have served for six years in the five-member body that oversees the safety of the country's nuclear power plants, will instead return to the United States Naval Academy to teach, according to an agency spokesman.

The departure of Commissioner Ostendorff, a former naval officer who commanded an attack submarine and later taught and led the Math and Science Division at the Naval Academy, will leave the NRC with three members—two short of its intended staffing.

Overview

Ostendorff, a Republican, was originally appointed to the Commission by President Obama in 2010 to finish the term of retiring Commissioner Dale Klein. He was sworn in to a second term on July 7, 2011. He has served at the NRC through numerous challenges including, among other things, the agency's response to the Fukushima D'aiichi nuclear disaster in Japan in 2011. "We made a conscious decision by a unanimous commission vote, five to zero, to not require any U.S. nuclear power plant to shut down because of safety concerns," Ostendorff told Senators last year about the Fukushima response. "We did not have those safety concerns."

At a recent conference on nuclear energy, Ostendoff was quoted as saying, "I feel very comfortable leaving the Commission at the end of June with where we are on Fukushima." In a statement, NRC Chair Stephen Burns said that Commissioner Ostendorff "brought a wealth of experience to the Commission and helped guide the agency through the challenges of Fukushima, a changing industry environment and many other challenging issues."

Background

Commissioner Ostendorff has a distinguished career as an engineer, legal counsel, policy advisor, and naval officer. Before joining the NRC, he served as the Director of the Committee on Science, Engineering and Public Policy and as Director of the Board on Global Science and Technology at the National Academies.

Ostendorff came to the National Academies after serving as Principal Deputy Administrator at the National Nuclear Security Administration (NNSA) from April 2007 until April 2009. From 2003 to 2007, he was a member of the staff of the House Armed Services Committee. There, he served as Counsel and Staff Director for the Strategic Forces Subcommittee with oversight responsibilities for the U.S. Department of

Energy's (DOE's) Atomic Energy Defense Activities, as well as the Department of Defense's (DoD's) space, missile defense and intelligence programs.

Ostendorff was an officer in the United States Navy from 1976 until he retired in 2002 with the rank of Captain. During his naval career, he commanded an attack submarine, an attack submarine squadron and served as Director of the Division of Mathematics and Science at the United States Naval Academy.

Ostendorff earned a Bachelor's degree in systems engineering from the United States Naval Academy and law degrees from the University of Texas and Georgetown University. He is a member of the State Bar of Texas.

NRC Provides Update on Common Prioritization and Re-Baselining (Project AIM)

On January 14, 2016, the U.S. Nuclear Regulatory Commission (NRC) held a public meeting and teleconference to provide an update on Common Prioritization and Re-Baselining of NRC Activities (Project AIM Initiative) since the September 1, 2015 public meeting to solicit input from stakeholders on the agency's work.

This input assisted the agency in evaluating what activities can be shed (stopped), performed with fewer resources, or performed with a different priority, while still fulfilling its regulatory mission in a manner consistent with the NRC's Principles of Good Regulation and its Organizational Values.

For additional information, please go to http://meetings.nrc.gov/pmns/mtg?do=details&Code=20151893.

Logistics

The meeting will was scheduled from 9:30 – 11:30 a.m. on January 14, 2016. It was held in Room 01C05 of NRC Three White Flint North at 11601 Landsdown Street in Rockville, Maryland.

Interested stakeholders that were unable to attend the meeting in person were provided an opportunity to participate via teleconference.

Agenda

The following items were on the agenda for the meeting:

- welcome and introductory remarks;
- overview of comments received;
- activities completed and in progress;
- next steps;
- public questions and answers;
- summary and closing comments; and
- adjourn.

NRC's Office of the Executive Director for Operations participated in the meeting.

For additional information, please contact Rani Franovich at (301) 287-3533 or at rani.franovich@nrc.gov or Gina Davis at (301) 415-5776 or at gina.davis@nrc.gov.

Registration Opens for NRC's 2016 Regulatory Information Conference

Registration is now open for the U.S. Nuclear Regulatory Commission's (NRC's) 28th annual Regulatory Information Conference (RIC).

The conference is being held from March 8-10, 2016 at the Bethesda North Marriott located at 5701 Marinelli Road in Bethesda, Maryland.

Overview

The NRC's offices of Nuclear Reactor Regulation and Nuclear Regulatory Research jointly host the RIC. The conference is free and open to the public, but registration is required.

Approximately 3,000 people are expected to attend the RIC including industry executives, representatives from state governments, non-governmental organizations, individual community members, and representatives from dozens of foreign countries. The conference is an opportunity for attendees to discuss issues related to the safety and security of commercial nuclear facilities and current regulatory activities.

Program

The program features NRC Chair Stephen Burns as the keynote speaker. Additional program highlights include plenary sessions with Commissioners Kristine Svinicki, William Ostendorff and Jeff Baran. NRC's Executive Director for Operations, Victor McCree, will give remarks. Bill Dean, Director of NRC's Office of Nuclear Reactor Regulation, will give welcome and introductory remarks.

Highlights of this year's RIC include two sessions titled, "25 Years of NRC's Principles of Good Regulation" and "Project Aim: Accomplishments and Next Steps."

Other technical sessions will address significant domestic and international issues such as cyber-security, subsequent license renewal, advanced and small modular reactors, spent fuel research activities and the reactor oversight process.

Registration

The conference agenda and online registration links are now available on the NRC web site at www.nrc.gov. The deadline for online registration was February 23, 2016.

Early registration was encouraged; however, onsite registration will also be available during the conference.

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

RIS Issued re Decommissioning Timeliness Rule Implementation and Associated Regulatory Relief

On December 21, 2015, the U.S. Nuclear Regulatory Commission (NRC) issued Regulatory Issue Summary (RIS) 2015-19 titled, "Decommissioning Timeliness Rule Implementation and Associated Regulatory Relief."

RIS 2015-19 was distributed to all holders of and applicants for NRC licenses under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material;" 10 CFR Part 40, "Domestic Licensing of Source Material;" 10 CFR Part 70, "Domestic Licensing of Special

Nuclear Material;" and,10 CFR Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor- Related Greater than Class C Waste." The notice was also distributed to Agreement State Radiation Control Program Directors and State Liaison Officers.

Intent

According to the document, NRC issued RIS 2015-19 in order to:

1. provide clarity on the Decommissioning Timeliness Rule's (DTR's) requirements to notify the NRC to begin and complete decommissioning after certain criteria are met;

2. highlight opportunities for licensees to request alternatives to the DTR's requirements;

3. remind licensees that there are situations where they can request an alternative to the DTR's timeliness requirements for both beginning and completing decommissioning if adequately justified;

4. clarify when the DTR applies to licensees whose only location of use are temporary jobsites; and,

5. clarify when the NRC considers that the licensee has transitioned from an "operational" to a "decommissioning" status.

RIS 2015-19 informs licensees of requirements regarding the DTR requirements under 10 CFR Parts 30, 40, 70, and 72. According to NRC, the RIS constitutes supplemental guidance for decommissioning and does not contradict information presented in Administrative Letter 96-05, Revision 1, "Compliance with the Rule, 'Timeliness in Decommissioning of Material Facilities'" (Agency-wide Documents Access and Management System (ADAMS) Accession No. ML081500116) or NUREG-1757, Volume 3, Revision 1, "Consolidated Decommissioning Guidance: Financial Assurance, Recordkeeping, and Timeliness, Final Report" (ADAMS Accession No. ML12048A683). NRC further states that RIS 2015-19 does not apply to power reactors that have specific regulations concerning decommissioning (e.g., 10 CFR 50.82, "Termination of License," and 10 CFR 50.83, "Release of Part of a Power Reactor Facility or Site for Unrestricted Use.")

RIS 2015-19 requires no action or written response beyond that already required by regulations. The NRC provided RIS 2015-19 to the Agreement States for their information and for distribution to their licensees, as appropriate. However, a notice of opportunity for public comment on RIS 2015-19 was not published in the *Federal Register* because the RIS is intended to be informational and is not intended to represent a departure from current regulatory requirements.

Summary

The NRC staff has recently identified a number of situations where confusion regarding the application of the DTR has resulted in licensees not completing decommissioning in accordance with the DTR requirements. According to NRC, RIS 2015-19 was issued to reiterate the agency's positions on these issues.

<u>Clarification of "Operational" vs. "Decommissioning" Status</u>

Under 10 CFR Parts 30, 40, 70, and 72, the DTR requires all licensees to notify the NRC within 60 days of one or more of the events listed below and begin decommissioning, unless a decommissioning plan (DP) is required. If a DP is required, the licensee is still required to notify the NRC within 60 days and to submit a DP within 12 months after the notification. The licensee would then begin decommissioning after the NRC approves the DP.

Part 30 licensees transition from an "operational" to "decommissioning" status by one or more of the following initiating events:

1. the license has expired;

2. the licensee has decided to cease principle activities permanently, as defined in Part 30, at the entire site or in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with NRC requirements;

3. no principle activities under the license have been conducted for a period of 24 months; and,

4. no principle activities have been conducted for a period of 24 months in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with NRC requirements.

NRC points out that the regulations in 10 CFR Parts 40.42, 70.38, and 72.54 all list similar initiating events. The agency states that licensees should review the specific initiating actions in the specific part of the regulations under which they are licensed.

Similarly, NRC states that "principal activities" as defined in 10 CFR 30.4, 40.4, and 70.4—all titled "Definitions"—refer to activities authorized by the license that are essential to achieving the purpose(s) for which the license was issued or amended. Storage during which no licensed material is accessed for use or disposal and activities incidental to decontamination or decommissioning are not principal activities. Licensees regulated under other parts should refer to those provisions, as storage may be a principle activity (e.g., Part 72). Administrative letter 96-05 provides guidance regarding storage-only licenses.

The regulations in 10 CFR 20.1003, "Definitions," refer to "residual radioactivity" as radioactivity in structures, materials, soils, groundwater, and other media at a site resulting from activities under the licensee's control. This includes radioactivity from all licensed and unlicensed sources, but excludes background radiation. It also includes radioactive materials remaining at the site because of routine or accidental releases of radioactive material at the site and previous burials at the site, even if those burials were made in accordance with the provisions of 10 CFR Part 20, "Standards for Protection against Radiation." For compliance with the DTR, the NRC considers that residual radioactivity will include any licensed sealed sources and licensed radioactive materials that remain at the site once principal activities have ceased.

During the development of the DTR, the NRC estimated that licensees that are not required to submit DPs would complete their decommissioning activities in approximately 50 months or less after permanent cessation of operations. The DTR breaks down the 50 months into three periods. The first period is the 24 months of inactivity, such as described in events 3 and 4 listed above. The second period is the 60 days allowed for notification, such as specified in 10 CFR 30.36(d). The third period is the 24 months to complete decommissioning, such as specified in 10 CFR 30.36(h). These time periods are the same for Parts 30, 40, and 70 of the regulations where a DP is not required. If a licensee determines it has exceeded the timeliness requirements for the second or third periods, it should immediately notify the appropriate NRC regional office.

<u>Requirement to Begin Decommissioning</u>

A licensee is required to both notify the NRC and begin decommissioning its site within 60 days of one or more of the initiating events discussed previously unless the licensee is required to submit a DP consistent with 10 CFR Parts 30, 40,

70, and 72. If a DP is required, the licensee is required to notify the NRC within 60 days of one or more of the initiating events and submit a DP to the NRC, for review and approval, within 12 months of notification. The licensee must then begin decommissioning after the NRC approves the DP. Unless the NRC approves an alternative schedule, decommissioning must be complete within 24 months of the NRC's approval of the DP. If no DP is required or no alternative schedule approved, then decommissioning should be complete within 50 months of the initiating event. Subpart E of 10 CFR Part 20, "Radiological Criteria for License Termination," provides the criteria licensees must achieve when decommissioning.

"Decommission" is defined in 10 CFR 30.4, and means "to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) Release of the property for unrestricted use and termination of the license or (2) Release of the property under restricted conditions and termination of the license." The following examples are activities that the NRC would consider as actions the licensee could take during the 60-day period to begin decommissioning:

1. transport source(s), licensed material, or waste offsite;

2. perform surveys or remediation activities, if allowable under the license;

3. evaluate decommissioning costs based on current residual activity found on site; and,

4. begin budgeting process for waste removal or remediation.

NRC cautions that this is not intended to be a complete list and that the licensee may take other actions to begin the decommissioning process. However, it is incumbent upon the licensee to document the actions and to proceed in a timely manner to complete the decommissioning as required by the DTR:

Alternate Schedules for Decommissioning

The regulation in 10 CFR 30.36(f) states that the Commission may grant a request to extend the time periods in the DTR for the initiation of the decommissioning process if the Commission determines that this relief is not detrimental to the public health and safety and is otherwise in the public interest. The request must be submitted no later than 30 days before required notification of the initiating events described previously. Corresponding regulations in 10 CFR Parts 40.42(f), 70.38(f), and 72.54(f) similarly offer relief. The schedule for decommissioning will not commence until the Commission has made a determination on the relief request.

The NRC has approved alternative schedules when licensees have adequately demonstrated that they expect future work, but have not conducted principle activities within 24 months for economic reasons, such as a lack of grants or contracts. Licensees have adequately demonstrated an expectation to conduct future work by showing they are actively pursuing grants or contracts for work that requires a principle activity to be conducted. These licensees have also maintained appropriate safety measures and demonstrated that the delay in the initiation of decommissioning process was not detrimental to public health and safety and was otherwise in the public interest.

Furthermore, for an alternative schedule to be approved, the Commission must determine that the alternative schedule is necessary to the effective conduct of decommissioning operations and presents no undue risk from radiation to the public and health and safety and is otherwise in the public interest. The licensee must maintain in effect all decommissioning financial assurances pursuant to 10 CFR 30.36(e), or the corresponding regulations in Parts 40, 70, or 72, as applicable. Additional guidance on requesting

an alternative schedule can be found in NUREG-1757, Volume 3, Revision 1, Section 2.6.

Requesting an Alternative to the DTR's Timeliness Requirements

The regulation in 10 CFR 30.36(h), and the corresponding regulations in Parts 40.42(h), 70.38(h), and 72.54(j), require licensees to complete decommissioning of the site or separate building or outdoor area as soon as practicable but no later than 24 months after the initiation of decommissioning unless an alternative schedule has been approved by the NRC. Additionally, in accordance with 10 CFR 30.36(h)(2), or with similar regulations in Parts 40, 70, or 72, if the decommissioning involves the entire site, and the NRC has not approved an alternative schedule, the licensee is required to submit a license termination request as soon as practicable, but no later than 24 months after the initiation of decommissioning, which is also the base time frame for completing the decommissioning.

If a DP is not required, the licensee transitions from "operational" to "decommissioning" status when one of the initiating events described in 10 CFR 30.36(d)(1)-(4), or corresponding regulations in 10 CFR 40.42, 70.38, or 72.54, occurs. The licensee is then required to provide notification that they intend to start decommissioning. Failure to submit the required notification does not relieve the licensee from compliance with the DTR timeliness requirements to begin and complete decommissioning. If a licensee fails to submit notification of the intent to decommission as required, initiation begins when the applicable time limit for the notification requirement ends. For example, if a Part 30 licensee does not conduct principle activities for 24 months, the licensee has 60 days to notify the NRC that it has transitioned to a decommissioning status. If the licensee has not notified the NRC of the intent to decommission by the 60th day, initiation of decommissioning is presumed to begin even though the licensee failed to notify the NRC that it had not conducted principle activities for 24 months. The licensee would then have a maximum of 24 months (50 months total from the time principle activities were ceased) to complete decommissioning and request license termination unless the NRC approves an alternative schedule.

If a licensee cannot feasibly complete decommissioning within the 24 months, the licensee may request an alternative schedule in accordance with 10 CFR 30.36(i), or through a similar regulation in Parts 40, 70, or 72. Guidance for such a request may be found in NUREG-1757, Volume 3, Revision 1. If a licensee submits a request for an alternative schedule, decommissioning need not start until the NRC rules on that request. If a DP is required, the decommissioning need not start until the approval of the DP. The licensee would be expected to complete decommissioning within 24 months after the approval of the DP if an alternative schedule has not been approved.

DTR Applicability to Temporary Job Site-Only Location of Use

The DTR applies to all licensees that are licensed under 10 CFR Parts 30, 40, 70 and 72, including licensees who conduct licensed activities at a temporary job site (TJS). However, as described in administrative letter 96-05, Revision 1, operations conducted at a TJS generally do not result in site contamination and licensed materials are required to be removed from the site at the completion of the licensed work. If a TJS does not contain residual radioactivity that would result in a separate building or outdoor area being unsuitable for release in accordance with NRC requirements in 10 CFR Part 20, Subpart E, the DTR would not apply to the TJS. However, if contamination occurs at a TJS that results in residual radioactivity in a building or outdoor area such that the building or outdoor area would be unsuitable for release in accordance with NRC requirements in 10 CFR 20, Subpart E, the DTR does apply to the TJS. Additionally, if the license has expired, or no principle activities have been conducted under the license within 24 months, the

DTR applies to the licensed material even if it is only used at a TJS. The licensee would submit notifications and begin decommissioning within 60 days after the license transitions from operational to decommissioning status, as described previously.

The DTR applies to licenses individually. It therefore applies to a license under which no principle activities have been conducted within 24 months, even if a licensee is conducting similar principle activities under a different license (e.g. under an Agreement State license). In these situations, if the licensee would like to postpone the initiation of decommissioning under the license in which no principle activities have been conducted within the past 24 months, the NRC states that the licensee should seek relief as described in 10 CFR 30.36(f), or similar regulations found in 10 CFR Parts 40, 70, or 72, as described in NUREG-1757, Volume 3, Revision 1, Section 2.6. As a reminder, NRC notes that such licensees must be able to demonstrate that the relief is not detrimental to the public health and safety and is otherwise in the public interest.

Background

In July 1994, the Commission established the DTR to ensure the timely decommissioning of licensed facilities. The DTR was established to avoid delays in decommissioning sites at which licensed activities have permanently ceased to avoid the risk of compromised safety practices. Additionally, the DTR reduces the risk of delays in decommissioning because of bankruptcy, corporate takeover, or other unforeseen changes in a company's financial status that may occur after licensed activities have ceased.

The DTR established specific decommissioning timeliness requirements for entire sites after the permanent cessation of all licensed activities. It also established timeliness requirements for separate buildings and outdoor areas that contain residual radioactivity such that they are unsuitable for release in accordance with NRC requirements after licensed activities have ceased in these areas, even if licensed activities continue at other site locations.

NRC generic communications may be found on the NRC public Web site at http://www.nrc.gov by going to "NRC Library" and then to "Document Collections."

For additional information, please contact Greg Chapman of the NRC's Office of Nuclear Material Safety and Safeguards (NMSS) at (301) 415-8718 or at Gregory.Chapman@nrc.gov.

Updates re Final Safety Analysis, Emergency Preparedness and Fire Protection

In late calendar year 2015, the U.S. Nuclear Regulatory Commission (NRC) issued Regulatory Issue Summary (RIS) 2015-17 to remind licensees of the review and submission requirements of 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding," regarding information that may be withheld from public disclosure, as well as to recommend that the updates to Final Safety Analysis Reports (FSAR's) required by 10 CFR 50.71(e) be made electronically on a total FSAR replacement basis, as described in 10 CFR 50.4(b)(6).

Intent

The NRC issued RIS 2015-17 for the following purposes:

- To remind licensees of the potential for physical protection information, which the NRC is required to protect in the same manner as commercial or financial information for the

purposes of withholding from public disclosure pursuant to 10 CFR 2.390(d)(1), to be contained in documents that will be proactively released to the public in accordance with the Commission direction in Staff Requirements Memorandum (SRM)-SECY-15-0032. Specifically, the NRC reminds licensees of the potential for physical protection information to be contained in Preliminary Safety Analysis Reports (PSAR's), FSAR's, FSAR updates, and in emergency preparedness and fire protection documents, which had previously been presumptively withheld by the NRC.

- To recommend a format for submission of FSAR updates for nuclear power reactors. Other Part 50 licensees are not required to update its facility FSAR's, unless applying for renewal of the facility license. Licensees have two submission format options regarding FSAR updates: (1) electronically on a total FSAR replacement basis, as described in 10 CFR 50.4(b)(6), or (2) on a paper replacement page basis, as described in 10 CFR 50.71(e). Electronic submission of updates on a total FSAR replacement basis would save billable staff hours since time would not be taken to manually reconstruct sections of the FSAR for various staff reviews. Therefore, the NRC recommends that licensees voluntarily submit updates electronically on a total FSAR replacement basis. Submission of FSAR updates in this manner will also assist the NRC in its emergency response function by ensuring recently-updated, total FSAR's are available to NRC emergency response teams.

RIS 2015-17 does not transmit or imply any new or changed requirements or staff positions, or require any specific action or written response. However, licensee review of FSAR updates and emergency preparedness and fire protection documents for physical protection information or Safeguards Information (SGI) to be withheld from public disclosure, and submission of updates electronically on a total FSAR replacement basis, will enable the agency to more efficiently and effectively carry out its regulatory functions in an open and transparent manner.

Summary

The NRC's regulations at 10 CFR 2.390(b)(1) require anyone submitting a document to the NRC who seeks to have the document, or a portion of it, withheld from public disclosure because it contains trade secrets, privileged, or confidential commercial or financial information, shall request withholding at the time the document is submitted and shall comply with the document marking and affidavit requirements set forth in the same section. For the purpose of determining withholding under 10 CFR 2.390, information contained in § 2.390(d)(1), which states, "Correspondence and reports to or from the NRC which contain information or records concerning a licensee's or applicant's physical protection, classified matter protection, or material control and accounting program for special nuclear material not otherwise designated as Safeguards Information or classified as National Security Information or Restricted Data," is considered commercial or financial information. In terms of current practice, physical security information is normally referred to as "security-related information," a subset of Sensitive Unclassified Non-Safeguards Information (SUNSI) in the NRC's SUNSI Policy.

The NRC notes that given the issuance of SRM-SECY-15-0032, documents that could potentially contain security-related information, such as PSAR's, FSAR's, FSAR updates, and fire protection and emergency preparedness documents, will no longer be presumptively withheld from public disclosure, and will instead be reviewed per the NRC SUNSI Policy and proactively released, as appropriate, beginning December 15, 2015. Consistent with the guidance provided in RIS 2005-26, "Control of Sensitive Unclassified Non-Safeguards Information Related

to Nuclear Power Reactors," and in RIS 2005-31, "Control of Security-Related Sensitive Unclassified Non-Safeguards Information Handled by Individuals, Firms, and Entities Subject to NRC Regulation of the Use of Source, Byproduct, and Special Nuclear Material," licensees should perform SUNSI reviews of all submittals sent to the NRC, including PSAR's, FSAR's, FSAR updates, and fire protection and emergency preparedness documents.

To aid in identifying security-related information that should be withheld, the NRC notes that when the Commission issued SRM-SECY-04-0191, it also approved the staff to follow the guidelines of Attachment 1 to SECY-04-0191 (ADAMS Accession No. ML042310663), which provided a general framework and discussion of SUNSI, and specifically, security-related information, as well as a table detailing specific examples of security-related information that should be withheld from public disclosure. This table is organized by categories of information (e.g., plant drawings, hydrological information, risk information, fire protection), loosely aligning with a large number of standard sections of FSAR's, and provides specific examples of information that should be withheld from public disclosure under 10 CFR 2.390(d)(1). It is important to note that SRM-SECY-15-0032 rescinded the direction in SRM-SECY-04-0191 only to the extent that SRM-SECY-04-0191 approved presumptive withholding of FSAR's, emergency preparedness documents, and fire protection documents. Therefore, the NRC's use of Attachment 1 to SECY-04-0191 to clearly identify security-related information that should be withheld from public disclosure per 10 CFR 2.390(d)(1) continues, and it is publicly available for use by industry in the same manner. Licensees that identify security-related information to be withheld from public disclosure in accordance with 10 CFR 2.390(d)(1) or other provision of the regulation should use the same general practices as used for proprietary commercial or financial information, including appropriate page markings and portion markings. For the controls used in protecting information exchanged between the licensees and the NRC to be effective, licensees are expected to have sufficient internal controls to protect security-related information in its interactions with outside parties, such as contractors. The desired outcome is for the sensitive information to be accessible to only trustworthy individuals needing the information to support safe plant operations.

As a reminder, the NRC notes emergency preparedness documents consist of emergency plans, emergency plan implementing procedures, evacuation time estimate analyses, and biennial exercise scenarios that are required to be submitted to the NRC under Appendix E to 10 CFR Part 50 or under 10 CFR 50.54(q)(4). Examples of security-related information in emergency preparedness documents, which licensees should consider in its screening, may be, but are not limited to: (1) emergency response actions taken in response to a hostile action based event (e.g., locations for pre-positioning of operators); (2) alternate staging or incident command locations for emergency response personnel in a hostile action based event; or, (3) alternate emergency communications methods and protocols for a hostile action based event.

In addition, security-related information, which a licensee has screened as SGI, is not required by the NRC to be included in emergency preparedness documents. Examples of SGI can be found in 10 CFR 73.22(a) and 10 CFR 73.23(a). The licensee must control the pages containing SGI in accordance with 10 CFR 73.21, 10 CFR 73.22(d), and 10 CFR 73.23, as applicable.

Information providing sufficient details that may compromise implementation of the emergency plan or access to/operation of emergency facilities and equipment should be considered security-related information, and is not required by the NRC to be included in emergency preparedness documents required to be submitted to the NRC. However, if a licensee decides to include information to this level of detail, the licensee

should request that this information be withheld under 10 CFR 2.390. Examples of security-related information in emergency preparedness documents may be, but are not limited to: (1) specific information (e.g., telephone numbers/ passcodes, lock combinations, etc.) that would compromise access to or activation/operations of emergency plan facilities/areas/equipment or personnel emergency callout systems; or, (2) listings for non-publicly available telephone numbers to emergency facilities or Federal, State, and local governmental facilities.

The NRC will maintain confidentiality of an emergency preparedness exercise scenario submitted to the NRC under Appendix E to 10 CFR Part 50 before the conduct of the exercise by profiling the document as non-publicly available in Agency Documents Access Management System (ADAMS). A SUNSI review (for purposes of making the document public) will not be performed until after completion of the exercise. To facilitate maintaining scenario confidentiality until after the exercise is complete, a licensee is requested to include a cover page on the submittal of its exercise scenario with wording similar to the following: "This document's availability should be controlled as non-public to ensure confidentiality from exercise responders until the conduct of the exercise is concluded." After completion of the exercise and following a SUNSI review, the cover page may be removed or redacted, the file version of the document updated in ADAMS, and the document made publicly available, as determined by the SUNSI review. A licensee is reminded that emergency preparedness exercise scenario submittals to the NRC should be appropriately marked, including portion markings, and submitted in accordance with 10 CFR 2.390 for any material that should be withheld from the public. Exercise scenarios submitted to the NRC should either not contain specific information on how safety-related systems/equipment can be defeated, or should appropriately mark this information for redaction.

Similarly, fire protection documents consist of fire protection plans and fire protection related submittals (such as license amendment and exemption requests). Information in fire protection documents marked for withholding has generally been limited to information of potential use to an adversary. Descriptive information of fire protection and safe shutdown features, including fire risk information, is not generally withheld. Security-related information in the fire protection program should not be included in fire protection documents required to be submitted to the NRC, or should be withheld under 10 CFR 2.390(d)(1).

On very rare occasions, properly marked sensitive and/or non-sensitive unclassified information may, when viewed in its totality, reveal information that warrants SGI designation. The compilations of items of information that are individually sensitive and/or non-sensitive may be designated as SGI when that information, in its totality within a document, form a viable detailed description of methods, targets, techniques, or other information that could be reasonably expected to be useful to an adversary in planning or executing an attack or radiological sabotage on a nuclear power plant. Examples include, but are not limited to, the following uncontrolled or non-SGI information, that when combined may provide an adversary enough information to be considered useful and therefore, warrant an SGI designation: (1) the number of protective personnel at a given facility; (2) an excessive amount of maintenance that is required for security equipment due to demonstrated failure rates; (3) that all protective personnel are armed; (4) description of safety-related systems or equipment in vital areas and typical security measures; and, (5) the commonality between vital area and vital equipment.

Regarding the format for submitting FSAR updates, the NRC staff reviews each licensee's FSAR update that is submitted under 10 CFR 50.71(e) or 10 CFR 50.4(b)(6) on a sampling basis and, generally, the plant-specific project

manager reviews a sample of changes made to the FSAR, as compared to license amendments, inspection findings, commitments, et al., covering the period of the update. When only the replacement pages are submitted with the update, the staff has difficulty reviewing the changes without the entire section of the FSAR, as well as determining how the changes may affect other portions of the FSAR that may be relevant. This significantly increases the staff's review time because of the need to construct the revised FSAR to validate changes in context with the FSAR and other licensing documents. In an effort to save billable hours, the NRC recommends that licensees submit FSAR updates in an electronic format on a total replacement basis in accordance with the requirements of 10 CFR 50.4(b)(6).

Electronic format, total replacement basis FSAR's and FSAR updates are important references for the NRC in its emergency response functions. The NRC's emergency response teams use the design-basis information in these documents to evaluate emergency situations at licensee facilities, as well as to validate licensee responses. Therefore, it is important for the NRC to have quick access to the updated FSARs for executing agency responsibilities to protect the public health and safety.

Background

After the events of September 11, 2001, the NRC assessed and revised its sensitive information control policies to provide greater assurance against publicly disclosing information that could reasonably be expected to be useful to potential adversaries. On November 9, 2004, the Commission issued SRM-SECY-04-0191, which approved (among other things) proposed guidance to prohibit proactive release to the public of sensitive unclassified information concerning nuclear power reactors. The SRM approved the staff's recommendation to prohibit proactively making certain documents publicly available, specifically those relating to fire protection and emergency preparedness information, until requested and released under the Freedom of Information Act (FOIA), or disclosed in an adjudicatory or rulemaking proceeding. This direction marked a change from the NRC's usual policy of proactively releasing, to the public, categories of documents prepared by the regulated community or the NRC staff.

In response to the Commission's directions and as a result of the staff's recommendations, the NRC established its SUNSI Policy as described in COMSECY-05-0054. The agency issued this policy to ensure the staff properly handles and protects SUNSI from unauthorized disclosure. SUNSI is considered "any information of which the loss, misuse, modification, or unauthorized access can reasonably be foreseen to harm the public interest, the commercial or financial interests of the entity or individual to whom the information pertains, the conduct of NRC and Federal programs, or the personal privacy of individuals." The policy conformed to the Administrative Procedure Act in that, absent a FOIA request, the NRC is not obligated to proactively disclose the documents covered by the Commission's decisions. The SUNSI Policy itself does not protect from public disclosure fire protection and emergency preparedness information addressed by SRM-SECY-04-0191. Rather, that information is initially withheld from public release because of Commission direction in the SRM and is not reviewed against the SUNSI Policy.

In recent months, the agency has received FOIA requests seeking large numbers of agency documents that were covered by the agency's policies post-September 11, 2001. These requests have sought fire protection and emergency preparedness documents, as well as updated FSAR's. In addition, the staff has received requests for the agency to revise its policy prospectively, so that material covered by the prior policy would now be routinely available for review and release to the public, consistent with the NRC's policy of openness and transparency.

In SRM-SECY-15-0032, the Commission approved the staff's recommendation to discontinue the presumptive withholding from public release of FSAR updates, emergency preparedness documents, and fire protection-related documents, and to withdraw the direction provided in SRM-SECY-04-0191, to the extent that SRM-SECY-04-0191 approved presumptive withholding of these documents. Moving forward, the staff will proactively review and release FSAR updates and fire protection and emergency preparedness documents to the public, consistent with the NRC's SUNSI Policy.

In view of the Government-wide transition to the Controlled Unclassified Information (CUI) program, the NRC notes that RIS 2015-17 is intended to remain in effect after the transition to CUI. Additionally, the NRC notes the scope of RIS 2015-17 is limited to those licensees listed in the addressees' section of the RIS, and does not address materials or other licensees.

For additional information, please contact Andrea George at (301) 415-1081 or at Andrea.George@nrc.gov or Fred Lyon at (301) 415-2296 or at Fred.Lyon@nrc.gov.

Weapons Pre-Emption Authority Granted to Nuclear Facilities

By press release dated January 6, 2016, the U.S. Nuclear Regulatory Commission (NRC) announced that the agency has granted pre-emption authority to nuclear facilities in New York and California. The granting of pre-emption authority allows security forces at these facilities to possess and use certain firearms and related devices despite local, state or federal laws and regulations restricting their use.

The facilities are the Indian Point, James A. FitzPatrick, Nine Mile Point and R.E. Ginna nuclear power plants in New York and the San Onofre and Diablo Canyon nuclear power plants in California, as well as their dry cask spent fuel storage facilities.

The Energy Policy Act of 2005 gave the NRC authority to permit security forces at NRC-licensed facilities to possess and use certain firearms, ammunition and large-capacity ammunition feeding devices in the performance of their official duties regardless of local, state or federal restrictions on their use. This "pre-emption authority" became effective with the NRC's 2009 publication of guidelines on the use of firearms at NRC-licensed facilities, which were approved by the Attorney General.

Pre-emption authority helps ensure that the facilities can maintain capabilities described in their current NRC-approved security plans. NRC granted this authority through Orders and license amendments.

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

Planned Licensing Action Submittals Requested for All Power Reactor Licensees

In late calendar year 2015, the U.S. Nuclear Regulatory Commission (NRC) issued Regulatory Issue Summary (RIS) 2015-16 to ask licensees to provide information regarding the licensing actions they plan to submit to the NRC for review over the next 3 calendar years, and power uprate applications they plan to submit to the NRC for review over the next 5 calendar years.

The NRC plans to continue to request this information of licensees on an annual basis.

Submittal of the requested information is strictly voluntary. No specific action or written response is required.

RIS 2015-16 was issued to all holders of an operating license or construction permit for a nuclear power reactor under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.

Intent

The NRC issued RIS 2015-16 to assist the agency:

- in determining resource and budget needs with respect to future licensing activities and other anticipated 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," licensing actions;
- in planning the technical resources needed to conduct reviews of the licensing activities for the next 3 calendar years; and,
- in planning for the review of power uprates that will be submitted in the next 5 calendar years.

RIS 2015-16 is intended to promote early communication with NRC licensees regarding the 10 CFR Part 50 planned licensing activities. This information will assist the NRC in budgeting for and allocating its resources for licensing reviews.

According to NRC, RIS 2015-16 does not transmit or imply any new or changed requirements or staff positions. Although no specific action or written response is required, submission of the requested information will enable the agency to more efficiently and effectively plan its licensing work.

Summary

During the budget development process, the NRC allocates resources based on an assumed number of licensing actions of certain types (e.g., license amendments, exemptions, relief requests) that will be submitted for that particular fiscal year. To the degree that these assumptions do not correlate to incoming requests, the agency's budget estimates can be significantly incorrect in total resources, specific skill sets, or both. This ultimately impedes the NRC's ability to process licensing actions on a timely basis and can cause a significant delay in processing licensing actions when the required resources are not available. Specifically, licensing actions include requests for license amendments, renewals, and transfers; requests for exemptions; relief requests from in-service inspection and testing requirements; program reviews; review of topical reports submitted on a plant-specific basis; and, power uprate requests.

To more accurately forecast the resources needed to complete the requested licensing actions, the NRC is asking that all power reactor licensees voluntarily provide information regarding the number of licensing actions they plan to submit for NRC review for the next 3 calendar years, and any planned power uprates they plan to submit in the next 5 calendar years. The responses to NRC's request are not binding and can be updated, as needed. The NRC plans to continue to request this information of licensees on an annual basis. This information will enable the agency to better meet its performance and timeliness goals under the agency's strategic plan.

To adequately capture the resource impact of the various licensing action reviews, the NRC is requesting that licensees provide information such as a brief title and description of each of their planned licensing action submittals, an indication of whether the review would be first-of-a-kind or an update, an estimate of when the request would be submitted to the NRC, and the estimated requested completion date. Licensees would also

assist the NRC by indicating if the licensing action is routine or if it is outage-related. Based on the information received, the NRC will determine the complexity of the review and the technical skill set needed to perform the review, and develop preliminary review schedules. The NRC will use this information in planning for future workload and as the basis for allocating future technical resources.

The NRC encourages continued communication between licensees and site-specific NRC project managers with regard to plant licensing actions and schedules for submittal of licensing actions. According to NRC, RIS 2015-16 is not intended to replace the communications that take place between licensees and project managers regarding current and planned licensing actions. Indeed, NRC states that the continued communication will play a large role in improving project planning by the agency. However, NRC believes that the information provided in response to RIS 2015-16 will help the agency improve project planning and resource allocation throughout the entire budget cycle.

Voluntary Response

The NRC is developing budgetary, licensing, and project plans for its operating reactor licensing program. To support this effort, the NRC is seeking new or updated information regarding planned licensing action submittals, including schedules for submitting these various licensing actions.

Additional information about requests for withholding proprietary information from public disclosure is provided in RIS 2004-11, "Supporting Information Associated with Requests for Withholding Proprietary Information," dated June 29, 2004. The NRC asks potential applicants to request withholding only for information that they would not customarily disclose to the public and to provide, where necessary, the proprietary information in designated attachments to their response to RIS 2015-16.

If an addressee chooses to provide a voluntary response, the NRC would like to obtain the information within 45 days of the date of issuance of RIS 2015-16. Respondents are requested to provide answers to the following questions to the best of their ability, providing as much detail as possible.

- For all planned licensing actions expected to be submitted in the next 3 calendar years, the licensee is requested to provide the following information:

  - plant name;
  - licensing action type (i.e., amendment, relief request, etc.);
  - licensing action description;
  - projected submittal date;
  - whether the action is needed for an outage, and if so, the date the licensee will need to have the action completed for the outage; and,
  - comments (to assist the staff's planning efforts).

- Licensees are requested to address if they plan to apply for a power uprate—indicating whether it is a measurement uncertainty recapture, stretch, or extended power uprate) in the next 5 calendar years.

- Can the NRC staff make the above information public?

NRC plans to distribute a separate survey regarding the intent for the licensees to submit a power uprate request to the NRC. This will be the only request to submit information regarding planned submittals of power uprate requests. Any licensee that plans to submit a power uprate request to the NRC within the next 5 calendar years is requested to respond to the power uprate survey questions. The responses to NRC's

request are not binding and can be updated as needed.

Background

To meet the requirements of the Government Performance and Results Act of 1993, the NRC has continued to develop a series of initiatives to improve the agency's planning process.

Among those initiatives, the NRC has implemented an integrated planning, budgeting, and performance measurement process. This process applies the business principles of goal setting, strategy development, resource allocation, and performance measurement to NRC activities. Among other benefits, the integrated process strongly ties the agency's budget and resource allocation process to its strategic plan, its strategic arenas, and its performance goals and measures. In addition, to ensure that performance measures and corresponding resource allocations are as accurate as possible, the NRC periodically assesses the appropriateness of the information and assumptions used in the budget development process.

The NRC formulates its budget by projecting 2 years beyond the current fiscal year in which it is operating. To help the NRC plan its resources appropriately, information from the licensees regarding their intentions to submit a licensing action will assist the NRC in planning for the necessary resources during the budget process, as well as plan for any schedule needs in preparation for the review before the submittal of the licensing action.

The NRC did not publish a notice of opportunity for public comment on RIS 2015-16 in the *Federal Register* because it relates to an administrative aspect of the regulatory process that involves the voluntary submission of information on the part of addressees, and does not represent a departure from current regulatory requirements.

For additional information, please contact Tracy Orf of the NRC's Office of Nuclear Reactor Regulation at (301) 415-2788 or at tracy.orf@nrc.gov.

NRC Issues Info Notice re Revision to the NIST Standards for Radium-223

On January 12, 2016, the U.S. Nuclear Regulatory Commission (NRC) issued Information Notice (IN) 2016-03 titled, "Revision to the National Institute of Standards and Technology Standard for Radium-223 and Impact on Dose Calibration for the Medical Use of Radium-223 Dichloride."

IN 2016-03 was distributed to all NRC Medical Licensees, NRC Master Materials Licensees, Agreement State Radiation Control Program Directors, and State Liaison Officers.

Purpose

The NRC issued IN 2016-03 to alert addressees that the National Institute of Standards and Technology (NIST) revised its primary standard for Radium-223 (Ra-223) and to convey the impact this revision will have on the calibration of patient doses of Ra-223 dichloride (trade name Xofigo).

NRC requests that recipients review the information contained in IN 2016-03 for applicability to their facilities and consider taking appropriate action, if necessary. The information conveyed in IN 2016-03 is not a new NRC requirement; therefore, no specific action or written response to the notice is required.

Overview

In 2013, NIST was made aware of studies performed by the National Physical Laboratory (NPL), the National Measurement Institute of the

United Kingdom, in which an approximately 10 percent difference was found between NPL's activities obtained using several primary methods and those obtained with the calibration factors published by NIST from 2010. Subsequently, NIST performed additional testing using more robust methods than previously available to verify NPL's results and confirmed that activity readings were lower than expected. On March 11, 2015, NIST published information regarding the revised primary standard for Ra-223 resulting in a numerical increase of 10.5 percent for the new primary standard. This change was only to the numerical value of the quantity of Ra-223, as the actual amount of Ra-223 in the primary standard did not change.

Bayer notified Xofigo customers of the NIST standardization change and future labeling and calibration impacts in a letter dated March 18, 2015. (See "Bayer Letter to Healthcare Professionals for Ra-223 NIST Standardization Issue," available in ADAMS under Accession No. ML15264B158.) In the letter, Bayer stated that they will provide customers with a new NIST-traceable Ra-223 standard syringe and dose calibration dial setting based on the NIST revised primary standard. Bayer also stated that they would increase the numerical values listed on the package label by approximately 10 percent. For example, the labeling of the patient dosage will be updated from 50kBq/kg of body weight to 55kBq/kg of body weight. Additionally, Bayer stated that the manufacturing and product documentation would be updated and labeled as 1100 kBq/mL (previously 1000 kBq/mL) and 6.6 MBq/vial (previously 6.0 MBq/vial).

The NRC's licensees are typically authorized for the possession and medical use of Ra-223 dichloride in the millicurie range. Xofigo doses are administered in the microcurie range, so the NRC does not anticipate the need to update licenses as a result of the new primary NIST standard. Furthermore, Bayer stated in its March 2015 letter that the revised NIST standard for Ra-223 does not change the actual amount of Ra-223 dichloride being administered to patients and will not impact the safety and efficacy of Xofigo.

IN 2016-03 does not convey any new NRC requirements. Therefore, licensees are not required to take any action based on the notice. As stated in its March 2015 letter, Bayer is contacting healthcare providers to provide information on how to obtain an updated NIST-traceable standard and to prepare for future changes in the dose calibrator dial setting. The new dial setting should not be used for verifying the activity in patient dosages until Bayer implements label changes in 2016. Bayer will notify Xofigo customers of the label change via letter a few weeks before the implementation date. When the label change occurs and the new dial setting is to be implemented, licensees may update internal procedures, as needed (e.g., to reflect the new dial setting on the dose calibrator).

Conclusion

Bayer's March 2015 letter emphasizes that no immediate action on the part of its customers is necessary for meeting the new calibration standard.

NRC advises affected licensees to continue to use the existing NIST-traceable Ra-223 standard syringe and calibration dial setting until notified otherwise by Bayer.

Background

Ra-223 dichloride is an injectable radiopharmaceutical used to treat skeletal metastases in advanced, castration-resistant prostate cancer. Ra-223 emits alpha particles and has a half-life of 11.4 days. Once in the body, Ra-223 dichloride mimics calcium and forms complexes in areas of increased bone turnover, such as sites of bone metastases. Ra-223 dichloride kills tumor cells through highly localized, short-range alpha irradiation. Although Ra-223 is primarily an alpha-emitter, the activity

of Ra-223 can be measured in a radioisotope dose calibrator that has been calibrated with NIST-traceable Ra-223 reference material.

Following U.S. Food and Drug Administration (FDA) approval in May 2013, Bayer Pharma AG (Bayer), began commercial distribution of Xofigo domestically. Bayer provided Xofigo customers with an NIST-traceable Ra-223 standard syringe and an appropriate dial setting for dose calibrators based on NIST data published in 2010.

For additional information, please contact Michael Fuller of the NRC's Office of Nuclear Material Safety and Safeguards at (301) 415-0520 or at Michael.Fuller@nrc.gov.

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

by internet

- NRC Reference Library (NRC regulations, technical reports, information digests, and regulatory guides). ..... **www.nrc.gov**

- EPA Listserve Network • Contact Lockheed Martin EPA Technical Support at (800) 334-2405 or email (leave subject blank and type help in body of message). ..... **listserver@unixmail.rtpnc.epa.gov**

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

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

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

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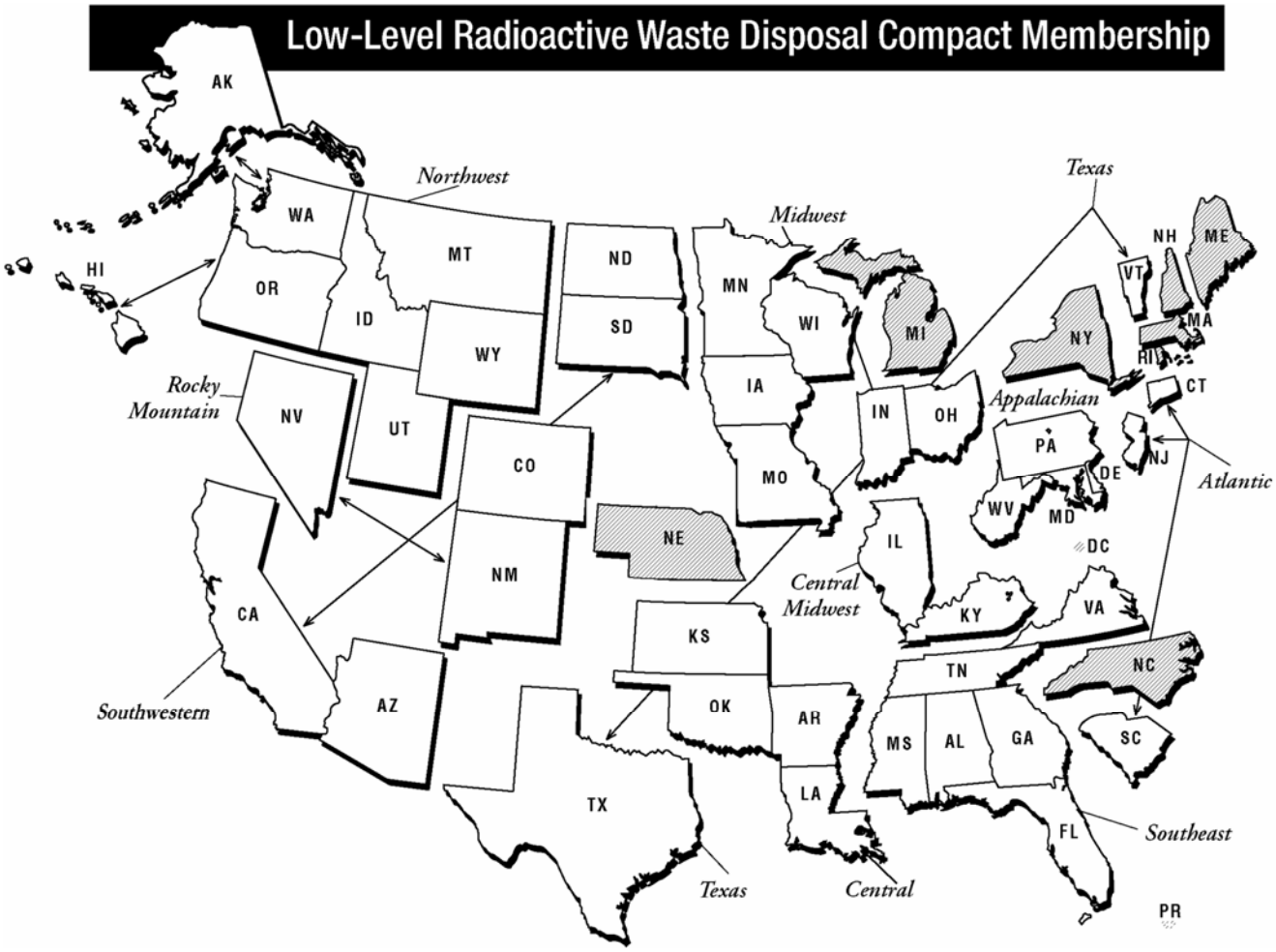

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Maryland
Pennsylvania
West Virginia

Atlantic Compact
Connecticut
New Jersey
South Carolina

Central Compact
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Kansas
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Oklahoma

Central Midwest Compact
Illinois
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Northwest Compact
Alaska
Hawaii
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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

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