

BACKGROUND ON LICENSING SUPPORT NETWORK ADVISORY REVIEW PANEL MEETING-ASSOCIATED ACTIVITIES

In response to a request in COMSECY-17-0019 from the Atomic Safety and Licensing Board Panel (ASLBP) and the Office of the Secretary (SECY), the Commission authorized the use of no more than \$135,000 in previously appropriated Nuclear Waste Fund (NWF) monies for several specific information-gathering activities as the next logical steps in the Yucca Mountain licensing process.¹ Among other things, ASLBP and SECY were directed to conduct a single Licensing Support Network Advisory Review Panel (LSNARP) “virtual” meeting to provide information to, and gather input from, LSNARP members and the public, regarding reconstitution of the Licensing Support Network (LSN) or a suitable replacement system. Moreover, in preparation for this meeting, the Commission also directed that training be prepared and conducted to better acquaint LSNARP members and other interested participants with the functionality and operations of the recently-completed LSN Library in the agency’s Agencywide Documents Access and Management System (ADAMS).

1. Conducting LSN Library Training

Starting in August 2017, a working group comprised of high-level waste (HLW), information technology (IT), and training experts from ASLBP, SECY, and the Office of the Chief Information Officer (OCIO) was convened to address the steps necessary to develop effective training that could be delivered using the GoToWebinar web conferencing platform. With the LSNARP meeting initially planned for January, it was decided that holding two training sessions—the first in November for HLW parties/LSNARP members and interested HLW stakeholders and a second in December open to the public—would provide an appropriate lead-in for those who would attend the LSNARP meeting. With the training schedule established, the working group set about identifying and assigning the various tasks necessary to make the training sessions a reality.

This effort began with creating a mechanism to communicate to all interested parties accessing the LSN Library web page. During August 2017, OCIO completed the design and construction of a “splash page” that would provide each incoming user with information about important LSN Library-related activities or events. It was used in the first instance (October 2017) to provide information about planned LSN Library training sessions. It has been used subsequently to announce other actions associated with the LSN Library, including system maintenance and updates.

With the splash page in place, the training working group began developing the curriculum for a 1.5 hour LSN Library virtual training session. Throughout the months of September and October, the working group developed the course materials and held several “mock” LSN Library training sessions to measure effectiveness. Based on these “mock” training sessions, it was determined that rather than using a pure “technical” training approach focusing on the

¹ See Yucca Mountain Project Activities, COMSECY-17-0019 (May 25, 2017) (<https://www.nrc.gov/docs/ML1714/ML17145A253.pdf>); Staff Requirements –COMSECY-17-0019 – Yucca Mountain Project Activities (July 31, 2017) (<https://www.nrc.gov/docs/ML1721/ML17212B393.pdf>); Support for [LSNARP] Activities, COMSECY-17-0035 (Nov. 20, 2017) (<https://www.nrc.gov/docs/ML1732/ML17324A393.pdf>); Staff Requirements – COMSECY-17-0035 – Support for [LSNARP] Activities (Nov. 21, 2017) (<https://www.nrc.gov/docs/ML1732/ML17325B321.pdf>).

features of the LSN Library, the most effective orientation for HLW parties/LSNARP members and interested HLW stakeholders would be a seminar-approach incorporating information on the past history of the original LSN, the features of the LSN Library versus those of the old LSN, and best searching practices for the new system.

With the format established, the training working group identified Acting LSN Administrator Margie Janney, Nuclear Regulatory Commission (NRC) Historian Dr. Thomas Wellock, and OCIO training contractor Rekha Nambiar as the best persons to conduct the sessions, with assistance from contract meeting facilitator Chip Cameron.²

The training was divided into the historical perspective (Ms. Janney), best search practices (Dr. Wellock), and advanced concepts for searching (Ms. Nambiar). Each section included time for questions and answers, with members of the working group monitoring the webinar to forward participant written inquiries to the presenters. Mr. Cameron, in his role as session moderator, hosted the training events, providing introductions and asking the questions of the presenters. Outside of the mock training sessions, the presenters and moderator rehearsed their presentations. Concurrently, OCIO developed revised versions of the existing LSN Library User's Manual and the LSN Library Quick Reference Guide that included changes based on the new training materials.

In late October, 80 invitations to the initial November training webinar were e-mailed to individuals identified as associated with LSNARP member entities or entities that participated in previous LSNARP meetings or with parties and entities participating in the Yucca Mountain adjudication.³ When the first LSN Library training was held on November 8, 2017, 40 individuals connected, with representatives of 20 LSNARP members participating.⁴ In mid-November, a splash page announcement about the second and final training ahead of the planned LSNARP meeting was published on the LSN Library webpage. Some 125 invitations also were e-mailed to those associated with the LSNARP or members of the public who had identified themselves as having an interest in LSNARP activities.⁵ The second webinar training session on the LSN Library's functionality and operations was held on December 6, 2017. Approximately 20

² Ms. Janney, who currently is Chief of the Information Management Services Branch in OCIO's Governance and Enterprise Management Services Division, served from 2000 to 2006 as an ASLBP Senior Program Analyst responsible for developing guidelines, policies, and procedures, as well as performing training, for the LSN. She now is serving in the role of Acting LSN Administrator (LSNA) via a limited rotational assignment. Dr. Wellock, a former university professor who works in SECY as the agency's historian, has an extensive knowledge of search techniques as a result of his various research efforts that gives him a unique perspective on how to communicate to the diverse group of HLW community stakeholders about best search practices. Ms. Nambiar, a contractor supporting the LSN Library, has expert technical knowledge regarding the HLW document collection and the features of the underlying IBM Watson Analytics platform used to search the LSN Library. Mr. Cameron, formerly of the Office of the General Counsel with 20-plus years working with the HLW community as a facilitator of LSNARP meetings and other public interactions, was the training presentation moderator and, thereafter, the LSNARP meeting facilitator.

³ E-mail from Acting LSN Administrator to LSNARP Mailing List (Oct. 27, 2017, 15:33 EDT) (<https://www.nrc.gov/docs/ML1813/ML18130A480.pdf>).

⁴ NRC, Using the [LSN] Library (Nov. 2017) (PowerPoint presentation) (<https://www.nrc.gov/docs/ML1730/ML17307A054.pdf>).

⁵ E-mail from Acting LSN Administrator to LSNARP Mailing List (Nov. 17, 2017, 16:32 EST) (<https://www.nrc.gov/docs/ML1813/ML18130A504.pdf>).

members of the public, including individuals affiliated with more than a half dozen different public interest groups, and 15 individuals associated with seven governmental entities or organizations that are LSNARP members or prior LSNARP meeting participants, or that are parties to the HLW adjudication, attended the second training session. After both sessions, the written “text” questions submitted by participants were answered, confirmed, and posted on the LSN Library website in a Frequently Asked Questions (FAQ) document.⁶

The virtual training sessions generally were well received. As a part of the “lessons learned” discussion regarding the training, the working group determined that providing specific recordings of LSN Library features and search examples would be most helpful. The working group then engaged with the Office of Public Affairs (OPA) to see what options existed to create publicly available videos to assist the HLW community ahead of the LSNARP meeting. In that vein, Dr. Wellock and Ms. Nambiar, working with OPA’s Ivonne Couret, produced a series of ten short training videos on LSN Library usage topics that were made available on the agency’s YouTube channel as a training resource in advance of the LSNARP meeting.⁷

The final training deliverable was provided at the end of the first day of the February 2018 LSNARP meeting. After the meeting adjourned that day, about a dozen individuals, half onsite and half online using GoToWebinar, attended an LSN Library orientation session. Ms. Nambiar, assisted by Dr. Wellock, conducted a guided orientation of some additional advanced concepts associated with searching the LSN Library, which included answering participant questions and conducting online search demonstrations. The training presenters were able to provide “one-on-one” assistance to address the technical questions of several LSNARP member representatives. As with the previous training sessions, questions submitted by participants and the answers provided were confirmed and posted on the LSN Library website in the FAQ document.

2. Organizing the LSNARP Meeting

a. Determining LSNARP Membership and Verifying Contact Information

In early August 2017, SECY began developing a contact list for LSNARP members by utilizing existing contact information and the HLW adjudication service list. Using the assembled list, on August 11, 2017, LSNARP Chairman Dr. Andy Bates sent a memorandum by e-mail and U.S. Postal Service mail requesting updated contact information from all those entities that were LSNARP members and participants as of the last LSNARP meeting in 2003, along with those entities that subsequently were admitted as parties to the Yucca Mountain adjudication.⁸

Thirty organizations and governmental entities responded with updated contact information, culminating in an updated list.⁹ SECY then reached out in September 2017 to confirm the

⁶ U.S. [NRC HLW LSN] Library Frequently Asked Questions (<https://www.nrc.gov/docs/ML1808/ML18087A367.pdf>).

⁷ NRC, [LSN] Library How-To Video Series, YouTube (last updated Feb. 20, 2018) (<https://www.youtube.com/playlist?list=PLBpOUiOs1fJb3BiCatr-aJBf5VRgB03Cm>).

⁸ Memorandum from Dr. Andrew Bates, LSNARP Chairman, to [LSNARP] Members and Interested Members of the Public (Aug. 11, 2017) (<https://www.nrc.gov/docs/ML1726/ML17261B294.pdf>).

⁹ E-mail from Russell Chazell, SECY, to Charles Fitzpatrick, State of Nevada Counsel (Oct. 2, 2017, 15:40 EDT) <https://www.nrc.gov/docs/ML1727/ML17275B325.pdf> (e-mail response to a letter received from State of Nevada counsel requested a listing of the names and organizational affiliations of those to whom the August 11, 2017 memorandum was sent).

information provided and ascertain the key contacts for each organization/governmental entity. By the end of September, responses had been received from all LSNARP members and participants, as well as those entities subsequently admitted as parties to the Yucca Mountain adjudication, with the exception of the National Congress of American Indians and the U.S. Environmental Protection Agency. Based on the responses received and consistent with the LSNARP charter, SECY appointed HLW adjudication parties Native Community Action Council, Prairie Island Indian Community, and the Timbisha Shoshone Tribe as members of the LSNARP.¹⁰ In early November, SECY generated a final list of LSNARP member entities and representatives.¹¹

b. Developing an Options Paper

To facilitate discussion at the LSNARP meeting, ASLBP, SECY, and OCIO jointly drafted an options paper that outlined possible IT system options for the replacement of the original LSN, as well as for the option of reconstituting the original LSN.¹² The paper included a brief technical/operational description, as well as cost and time estimates, for each option. The paper described four possible options:

- Option 1 - Traditional Discovery - The existing LSN Library would be available for access to all previously submitted LSN material and any new documentary material identified by the HLW hearing participants would be exchanged through traditional methods such as regular mail, fax, a delivery service, or e-mail.
- Option 2 - Use of Existing LSN Library - This option would leverage the Commission-authorized investment making the LSN collection available to the parties and the public through the LSN Library. Two alternative mechanisms are discussed for the addition of new headers/documents to the LSN Library or modification of existing headers/documents in the LSN Library.¹³ The first alternative is a fully automated process utilizing the existing Electronic Information Exchange (EIE) system to move new documents into the LSN Library, while the second is a semi-manual process by which a designated NRC official receives additions or modifications of documentary material from a party on electronic media and subsequently makes the appropriate changes to the LSN Library.
- Option 3 - Move to the “Cloud” - This option involves the utilization of “cloud”-based technology to store, index, search, and retrieve the collection of HLW headers/documents. In its simplest terms, a “cloud”-based solution uses on-demand resources that are part of a provider’s shared “cloud” environment or infrastructure. Prominent examples of “cloud”-based services include Google Mail (Gmail), Microsoft Office 365, and Dropbox. The general premise of Option 3 is to transfer the collection of

¹⁰ Memorandum from Annette Vietti-Cook, Secretary of the Commission, to LSNARP Member Entities and Representatives (Nov. 7, 2017) (<https://www.nrc.gov/docs/ML1731/ML17311A091.pdf>).

¹¹ Memorandum from Annette Vietti-Cook, Secretary of the Commission, to LSNARP Member Entities and Representatives LSNARP Member Entities and Representatives (Nov. 16, 2017) (<https://www.nrc.gov/docs/ML1732/ML17320A336.pdf>).

¹² NRC, Reconstitution/Replacement Options for the [LSN] (rev. 4 Feb. 22, 2018) [hereinafter Options Paper] (<https://www.nrc.gov/Seedocs/ML1734/ML17347B671.pdf>).

¹³ Although the options paper discussed the deletion of material from the LSN, as was noted during the LSNARP meeting, *see, e.g.*, Options Paper at 8, 11, 13; *see also* Feb. 27, 2018 Transcript at 164–65 (<https://www.nrc.gov/docs/ML1806/ML18067A312.pdf>), removal of material from the LSN generally was not permitted.

headers/documents from the LSN Library to a shared “cloud”-based storage solution. The options paper discussed both an NRC-maintained “cloud”-based system (Alternative 1) and an alternative HLW participant-maintained “cloud”-based solution (Alternative 2). Further, in the HLW participant-maintained alternative, the NRC would either provide a “cloud”-based single-entry point that indexes participant collections and provides a unified search mechanism (Alternative 2(a)) or a single webpage with pointers to each participant’s “cloud”-based collection (Alternative 2(b)).

- Option 4 - Rebuild the Original LSN - This option rebuilds the original LSN to its pre-decommissioned state with the NRC providing a central indexing and searching portal and the HLW participants maintaining their document collections on web servers.

c. Request for Rough Estimate of Potential Discovery and Evidentiary Material

To gather as much relevant options-related information as possible, the Acting LSN Administrator requested “sizing” information from eight Yucca Mountain adjudication parties: the Department of Energy (DOE); the NRC staff; the States of Nevada and California; the Nevada counties of Nye and Clark; Inyo County, California; and the Nuclear Energy Institute (NEI).¹⁴ These eight participants were selected because in the adjudication they provided 500 or more items of documentary material to the original LSN or sponsored ten or more admitted contentions.

The NRC staff, DOE, the State of Nevada, Nye County, Inyo County, and NEI provided formal written responses to the request outlining the number of additional documents they anticipated adding to any replacement LSN system and the number of evidentiary exhibits they anticipated submitting. This information was incorporated into the options paper.¹⁵

d. Conducting the LSNARP Meeting

The LSNARP meeting was held on February 27–28, 2018,¹⁶ at NRC headquarters, with sixteen of the twenty LSNARP members and some twenty-five members of the public attending either onsite or virtually.¹⁷ The meeting agenda comprised four main sections.¹⁸ The first part of the meeting covered introductions, an overview of the meeting process, and background information on the role of the LSNARP.¹⁹ The second segment of the meeting provided an

¹⁴ Memorandum from Acting LSN Administrator to LSNARP Contacts for Clark County, Nevada, Inyo County, California, NEI, Nye County, Nevada, State of California, State of Nevada, DOE, NRC Staff (Oct. 27, 2017) (<https://www.nrc.gov/docs/ML1733/ML17338A590.pdf>).

¹⁵ See Options Paper at 4–5.

¹⁶ Although originally scheduled for January 30-31, 2018, see [LSNARP]: Meeting Notice, 82 Fed. Reg. 60,634, 60,634–35 (Dec. 21, 2017), in response to requests from LSNARP members State of Nevada and NEI, the meeting was rescheduled for late February 2018, see [LSNARP]: Revised Meeting Notice, 83 Fed. Reg. 1274 (Jan. 10, 2018).

¹⁷ The meeting was transcribed. See Feb. 27, 2018 Transcript [hereinafter 2/27/18 Tr.] (<https://www.nrc.gov/docs/ML1806/ML18067A312.pdf>); Feb. 28, 2018 Transcript [hereinafter 2/28/18 Tr.] (<https://www.nrc.gov/docs/ML1806/ML18067A313.pdf>). The PowerPoint slides for the meeting’s presentations also are available in ADAMS. See NRC, [LSNARP] Meeting, Feb. 27-28, 2018 (Feb. 2018) (PowerPoint presentation) (<https://www.nrc.gov/docs/ML1805/ML18058B305.pdf>).

¹⁸ LSNARP Meeting Agenda, Feb. 27-28, 2018 (<https://www.nrc.gov/docs/ML1805/ML18053A056.pdf>).

¹⁹ See 2/27/18 Tr. at 5–23.

opportunity for presentations regarding the status of the Yucca Mountain adjudication, a history of the LSN and LSN Library, a high-level overview of the options paper, and a presentation on the Electronic Information Exchange or E-Filing system, the Electronic Hearing Docket, and an identified gap in the HLW exhibit submission process.²⁰ The third part of the meeting included presentations and discussions from ASLBP, OCIO, and LSNARP members on the options described in the options paper.²¹ The fourth portion of the meeting provided a summary of the options and a discussion of the next steps.²²

Also during the first day, Nevada representatives gave presentations concerning Nevada's perspective on the LSNARP's role in any LSN reconstitution/replacement process and LSN user needs;²³ the need to use rulemaking rather than Subpart J exemptions in establishing a replacement LSN;²⁴ and issues with the LSN Library discovered by Nevada personnel.²⁵

During the meeting's final session, LSNARP members in attendance onsite or virtually were asked to provide their views on the options and any other relevant matters, with the understanding that members (and the public) also would have an opportunity to provide written comments by March 23. Indicating the meeting was helpful in advancing their understanding of what needs to be done, members expressed the most support for an agency-operated system under either Option 2 (LSN Library), with enhancements to address identified operational and functionality issues, or Option 3 ("cloud"-based system), albeit with a number also expressing the caveat that additional technical analysis be provided to the LSNARP regarding these options, particularly regarding search engine options for a litigation-based system, possibly through the vehicle of a technical working group such as that used for assessing options for establishing the original LSN. Concern was also expressed by a number of members that DOE funding for the local counties and Native American tribes would be needed to allow them to participate further. The DOE representative indicated funding would not be available without additional congressional authorization.²⁶

²⁰ See *id.* at 43–51, 54–87; see also *id.* at 87–99 (discussion regarding presentations).

²¹ See *id.* at 101–19 (Option 1), 101–26, 154–95 (Option 2); 2/28/18 Tr. at 15–77 (Option 3), 80–104 (Option 4).

²² See 2/28/18 Tr. at 104–35.

²³ See 2/27/18 Tr. at 24–31; see also *id.* at 31–41 (LSNARP discussion regarding Nevada presentation). The PowerPoint slides for this presentation can be found at <https://www.nrc.gov/docs/ML1805/ML18057A062.pdf>.

²⁴ See 2/27/18 Tr. at 51–53. The PowerPoint slides for this presentation can be found at <https://www.nrc.gov/docs/ML1805/ML18057A061.pdf>.

²⁵ See 2/27/18 Tr. at 127–41. The PowerPoint slides for this presentation can be found at <https://www.nrc.gov/docs/ML1805/ML18057A063.pdf>. In a responsive presentation, OCIO personnel and SECY staff involved in LSN Library training discussed how many of the issues identified either had been fixed, could be resolved by boosting LSN Library speed/capacity and adding functional enhancements (subject to funding availability), or were irrelevant to any of the options because the identified problems involved how specific documents were entered into the existing database by the document originator. See 2/27/18 Tr. at 141–51. Enclosure C provides additional information regarding agency efforts to address these stated concerns.

²⁶ See 2/28/18 Tr. at 6–7.

Six LSNARP members — the NRC staff, DOE, NEI, Nevada, the Nevada Nuclear Waste Task Force, and Eureka County, Nevada — provided post-meeting written comments that generally were consistent with the views they expressed during the meeting.²⁷

Attachment 1 to this enclosure provides a more detailed summary of member meeting and post-meeting comments on the potential options for, and LSNARP next steps regarding, reconstitution or replacement of the LSN.

²⁷ Additionally, after the meeting SECY contacted representatives of LSNARP members Prairie Island Indian Community and White Pine County, Nevada, who attended the LSNARP meeting online but were not available at the meeting's end and confirmed that those members had no comments on the options. See E-mail from Brian Newell, SECY, to NRC Recipients (Mar. 28, 2018, 11:19 EDT) (<https://www.nrc.gov/docs/ML1810/ML18107A809.pdf>); E-Mail from Bryan Pyle, White Pine County LSNARP Representative, to Brian Newell, SECY (Apr. 5, 2018, 17:04 EDT) (<https://www.nrc.gov/docs/ML1810/ML18107A810.pdf>).