



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

August 16, 2018

COMSECY-18-0015

MEMORANDUM TO:

Chairman Svinicki
Commissioner Baran
Commissioner Burns
Commissioner Caputo
Commissioner Wright

PLEASE RESPOND BY:
August 30, 2018

FROM:

E. Roy Hawken *E Roy Hawken*
Chief Administrative Judge

Annette L. Vietti-Cook
Secretary *Annette Vietti-Cook*

SUBJECT:

YUCCA MOUNTAIN PROJECT ACTIVITIES ASSOCIATED WITH
COMSECY-17-0019

In COMSECY-17-0019, in accord with the United States Court of Appeals for the District of Columbia Circuit's decision in In re Aiken County, 725 F.3d 255 (D.C. Cir. 2013), the Atomic Safety and Licensing Board Panel (ASLBP) and the Office of the Secretary (SECY) sought Commission authorization for the expenditure of funds from Nuclear Waste Fund (NWF) monies previously appropriated to the U.S. Nuclear Regulatory Commission (NRC) to initiate information-gathering activities regarding the Licensing Support Network (LSN) and a potential Nevada hearing facility.¹ In the staff requirements memorandum (SRM) associated with COMSECY-17-0019,² the Commission directed that, as the next logical steps in the Yucca Mountain licensing process, (1) one virtual LSN Advisory Review Panel (LSNARP) meeting be conducted to provide information to, and gather input from, LSNARP members and the public regarding reconstitution of the LSN or a suitable replacement system; (2) in preparation for this meeting, training activities be conducted to better acquaint LSNARP members and other interested participants with the functionality and operations of the recently-completed LSN Library in the Agencywide Documents

¹ Yucca Mountain Project Activities, COMSECY-17-0019 (May 25, 2017)
(<https://www.nrc.gov/docs/ML1714/ML17145A253.pdf>).

² Staff Requirements—COMSECY-17-0019—Yucca Mountain Project Activities (July 31, 2017)
(<https://www.nrc.gov/docs/ML1721/ML17212B393.pdf>).

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Access and Management System (ADAMS);³ and (3) a high-level survey be conducted of potential Nevada hearing venues as well as an evaluation of using “virtual courtroom” technology and existing facilities in Rockville, Maryland, for any stage of the resumed adjudication. The Commission also directed that, upon their completion, ASLBP and SECY report back to the Commission on these activities.

In this paper and the accompanying four enclosures we provide details regarding efforts by the ASLBP/SECY-led group working on COMSECY-17-0019-related matters to implement these three activities and, consistent with the availability of unexpended NWF monies, we outline and make recommendations regarding additional activities that might be undertaken by the ASLBP/SECY-led working group as possible next logical steps regarding LSN replacement/reconstitution and a hearing facility.

To enhance the timeliness and flexibility of any potential Commission decision to restart the HLW adjudication, ASLBP and SECY recommend that the Commission (1) authorize the expenditure of \$212,000 of the remaining NWF monies to improve the LSN Library user interface; and (2) defer any Commission decision on Nevada hearing venues until there is more certainty about the timing of any restarted adjudication.

1. LSN Reconstitution/Replacement and the LSNARP

As a chartered Federal Advisory Committee Act (FACA) committee consisting of those state and local governmental bodies, Native American tribes, and industry and public interest groups concerned about the Yucca Mountain proceeding, under 10 C.F.R. Part 2, Subpart J, the LSNARP is intended to provide the agency with advice regarding the LSN and the other information technology (IT) components established by Subpart J for conducting the Yucca Mountain construction authorization proceeding adjudication. The LSNARP also has served as a vehicle for public input concerning these matters. Prior to agency development and implementation of the LSN, input was sought from the LSNARP regarding, among other things, system capabilities and configuration.

Enclosure A to this paper describes the activities associated with organizing and conducting the “virtual” LSNARP meeting in Rockville, Maryland, on February 27-28, 2018, as well as the related LSN Library training activities conducted before and during the meeting. A principal focus at the LSNARP meeting, which was attended by sixteen of the twenty LSNARP members, was a report prepared by the ASLBP/SECY-led working group outlining four options for reconstituting or

³ As originally authorized by the Commission in 2013 following the Aiken County decision, the LSN Library was a non-public database supporting the NRC staff in completing its safety review of the Department of Energy (DOE) construction authorization application. See U.S. Dep’t of Energy (High-Level Waste Repository), CLI-13-8, 78 NRC 219, 229–30 (2013). In 2015, the Commission directed that the library’s contents, which included only non-NRC staff LSN documentary material, should be combined with the NRC staff’s LSN documentary material and made publicly available. See High-Level Waste Repository, CLI-14-1, 79 NRC 1, 5 (2014).

replacing the LSN.⁴ These options included employing the LSN Library for existing LSN documents and using traditional discovery for new documentary material (Option 1); using the LSN Library for both existing and new material (Option 2); moving the LSN into the “cloud” with variations under which either the agency (Option 3, Alternative 1) or the individual litigants (Option 3, Alternative 2) would assume responsibility for creating the database and search engine needed to provide access to existing and new documents; and reconstituting the LSN as it existed when it was decommissioned in 2011 (Option 4).

As Enclosure A and the accompanying Attachment 1 indicate, there is little support from LSNARP members for either the option of traditional discovery (Option 1) or reconstituting the LSN as it existed (Option 4).⁵ As to the other two options, DOE, the Nuclear Energy Institute (NEI), and Lincoln County, Nevada, supported using the LSN Library (Option 2), while the NRC staff and Nye County, Nevada, indicated both Options 2 and 3 could be useful.

In contrast, the other LSNARP members who provided views at the meeting and/or in post-meeting comments did not affirmatively endorse an option for an LSN replacement system. In this regard, a number of these members indicated that before making a recommendation they desired additional technical information on (1) choices for implementing a “cloud”-based

⁴ The options paper was prepared by ASLBP, with assistance from personnel in SECY and the Office of the Chief Information Officer (OCIO). Consistent with the dictates of 10 C.F.R. § 2.1001 as it defines where within the agency the responsibility for LSN development and operation can reside, the NRC staff (which is a party to the suspended adjudication) was not consulted regarding the options paper’s preparation, provided a copy of the paper prior to its December 2017 distribution to other LSNARP members and the public, or aided in reviewing the paper in preparation for the February 2018 LSNARP meeting by ASLBP, SECY, or those within OCIO who assisted in the paper’s preparation.

This approach in generating the options paper was consistent with the initial creation of high-level options for implementing the original LSN in 1999, which were developed by the LSN Administrator for consideration by the LSNARP. See Memorandum to Potential LSN Participants from Daniel J. Graser, LSN Administrator, at 1 & unnumbered attach. at 12-1 to -4 (Oct. 13, 1999) (LSN compliance assessment guidelines describing three technical alternatives for LSN implementation) (<https://www.nrc.gov/docs/ML9927/ML992720028.pdf>).

⁵ Support for traditional discovery (Option 1) came only from the Lincoln County, Nevada representative (also representing the City of Caliente, Nevada), who indicated a preference for use of the existing LSN Library (Option 2), but with the ability to use traditional discovery for those lacking the technical knowledge to support other options. Moreover, other than from the Nevada Nuclear Waste Task Force (which is not a participant in the Yucca Mountain adjudication), the two proposals under the option of moving the LSN into a “cloud”-based system that would be maintained by the participants rather than the NRC (Option 3, Alternatives 2(a)-(b)) also seem to lack support from LSNARP members. As was the case with the original LSN and likewise would be applicable for a reconstituted LSN (Option 4), those two “cloud”-based alternatives would place significant responsibility on the individual participants to maintain and make available the electronic document databases necessary to implement those alternatives.

arrangement under Option 3;⁶ and (2) other search engines that might be employed in such a “cloud”-based system, including those used for existing litigation support database systems, and how they compared to the search engine used for the LSN Library.⁷ A number of these same members also opined that this information should be considered by an LSNARP technical working group (TWG) populated by personnel from the various LSNARP members, which would then provide input to the full LSNARP for its consideration in making any final recommendations regarding LSN replacement.⁸ The ASLBP/SECY-led working group considered several possibilities for obtaining additional information to be used by the LSNARP to address the desire expressed by these members for such information. Enclosure B to this paper discusses options for generating and providing additional information to the LSNARP members about these aspects of Options 2 and 3, should the Commission choose to undertake such efforts. These options include having the agency retain an independent contractor to provide such information to the members or having the LSNARP itself, under the auspices of a TWG, generate that information.

While further LSNARP or contractor exploration of search engine and “cloud”-based options would provide more information for making a decision about LSN reconstitution or replacement if the HLW adjudication is restarted, such an effort would exceed current NWF budgetary resources—put another way, additional appropriations would be required to complete this activity.⁹ For this reason, the ASLBP/SECY-led working group does not recommend moving forward with information gathering via contractor or a TWG. In contrast, an activity that offers a means of generating data on access and functionality within budgetary limitations would be to upgrade the LSN Library as currently constituted by implementing further system enhancements. The goal of the proposed system enhancements would be to improve the current user experience and provide further information to evaluate the improved LSN Library’s capability to replace the LSN should the adjudication be restarted. During the LSNARP meeting, the issue of the LSN Library’s adequacy

⁶ As outlined in the options paper, Option 3 envisioned an effort to develop a new “cloud”-based system that would not be associated with other NRC information systems or involve moving the current LSN Library functionality to a “cloud”-based platform. OCIO is working on an incremental move of NRC information systems to the “cloud,” but there currently is no plan (or funding) to move only the LSN Library to the “cloud.” Moreover, according to OCIO, HLW proceeding participants would not have a different experience with system performance or added functionality whether the LSN Library is operated in-house on NRC servers or at a remote “cloud”-based data center.

⁷ The LSN Library utilizes the Enterprise search engine by IBM Watson Content Analytics, which is the same search engine that is now available for use by agency staff for searching the ADAMS main library.

⁸ Established by the LSNARP and its predecessor, the Licensing Support System Advisory Review Panel, TWGs previously have provided information and recommendations to the full panel on a variety of technical subjects, including acceptable document formats, appropriate header fields, and system configuration.

As is noted in Enclosure A, during the February 2018 meeting, several LSNARP members, and particularly the affected units of local government (AULGs), indicated they will be unable to take part in any additional LSNARP activities in the absence of access to renewed federal funding. A number of AULGs that are LSNARP members, such as the Nevada counties of Nye and Clark, are participating in the HLW adjudication as parties or as interested governmental entities under 10 C.F.R. § 2.315(c). See Nuclear Waste Policy Act of 1982 § 2(31), 42 U.S.C. § 10101(13) (defining AULG as a local governmental entity that has jurisdiction over the repository site or is contiguous to an entity with jurisdiction).

⁹ If, prior to making a decision on LSN replacement or reconstitution, the Commission chooses to undertake this information-gathering task at a later time (when funding is provided), it may add considerable lead time to ultimate implementation of the LSN or a functionally equivalent system.

engendered considerable interest. The State of Nevada in particular raised questions about the ability of the system to provide an effective discovery database for HLW adjudication participants. While a number of those concerns have been addressed by OCIO (see Attachment 1 to Enclosure C), several other items identified during the meeting, as well as subsequently by the ASLBP/SECY-led working group, require funding to resolve. These enhancements would benefit current LSN Library users and provide the Commission with information on user experience with the system's improved features without predisposing the Commission to any final decision on an LSN replacement.

Thus, we recommend as a next logical step that OCIO, in conjunction with the ASLBP/SECY-led working group, be directed to address specific system issues as identified in Enclosure C. Table 1 of Enclosure C provides a list of the potential enhancements, an explanation of their significance, and cost estimates, while Table 2 makes recommendations for the most optimal enhancements, including several features that now are available in public ADAMS but are not in the LSN Library.

2. Information-Gathering Activities Associated with Re-establishing a Hearing Facility in the Vicinity of the Yucca Mountain Site and/or Conducting "Virtual" Hearings at NRC Headquarters in Rockville, Maryland

Also pursuant to the Commission's direction in SRM-COMSECY-17-0019, ASLBP personnel worked with staff from the Office of Administration, Division of Facilities and Security (ADM/DFS) to conduct a high-level survey to identify potential hearing facility space in Nevada as well as to evaluate "virtual courtroom" technology and existing NRC Rockville, Maryland facilities that might be employed if the adjudication were to restart.

As is detailed in Enclosure D to this paper, based on hearing facility requirements information provided by ASLBP, the ADM/DFS staff contacted the General Services Administration (GSA) about the availability of hearing room and associated space in existing federally owned or leased buildings in Las Vegas, Reno, and Pahrump, Nevada. GSA reported that nothing is currently available in these locations that would meet the agency's requirements. The next step in this process would be for GSA to initiate a survey to identify suitable commercial space in these localities, although the changeable nature of the commercial real estate market dictates that such a survey is time-sensitive and should be performed close to the time the space would be procured (i.e., six months to a year before the space is needed).

With respect to a possible Rockville hearing facility, as Enclosure D also discusses, ADM/DFS and ASLBP identified and considered five possible venues in NRC headquarters space: (1) the ASLBP hearing room in the Two White Flint North (TWFN) building; (2) the Advisory Committee on Reactor Safeguards (ACRS) TWFN meeting rooms; (3) the Commission hearing room in the One White Flint North building; (4) the NRC auditorium in TWFN; and (5) Three White Flint North (3WFN) building first-floor conference rooms. After applying filtering criteria that assessed availability duration (potentially 2-plus years), ease of modification, and availability of adjacent participant conference space, the only spaces that remained viable were the ASLBP hearing room and the 3WFN conference space.

Existing agency practice is that adjudicatory proceedings be held in the general area of the proposed facility to the extent practicable. How this agency practice will be implemented for the HLW adjudication is, in the first instance, a Commission determination. As Enclosure D further describes, however, ASLBP considers the use of "virtual courtroom" technology a viable technical option for the HLW adjudication. In addition to ASLBP's experience over the past decade (including during the HLW adjudication prior to its suspension) with remote audio and video hearing participation by counsel and witnesses and remote audio and video hearing attendance by members of the public, at the recent LSNARP meeting ASLBP successfully integrated various audio-video technology platforms to allow onsite and remote meeting attendance and participation by both LSNARP members and public stakeholders. This experience suggests as well the possibility of creating a dedicated satellite location (or locations) in Nevada to be used in conjunction with virtual courtroom technology in a main hearing facility in Rockville.

3. Remaining NWF Balance

As of July 31, 2018, \$479,123 of NWF carryover funding remains unexpended. Of this, approximately \$415,000 is not otherwise assigned to any ongoing HLW activities, while approximately \$35,000 remains available from the \$135,000 previously designated by the Commission for LSNARP and hearing facility activities.¹⁰ Although no further work is required in connection with the petition for a writ of mandamus filed by the State of Texas in the United States Court of Appeals for the Fifth Circuit (which dismissed the petition on June 8, 2018), other litigation expenses are either possible or anticipated, including defense of a challenge to the Environmental Protection Agency standards incorporated into 10 C.F.R. Part 63 (currently being held in abeyance before the District of Columbia Circuit). Further, the Office of Nuclear Material Safety and Safeguards (NMSS) has advised that, absent a major change in agency workload, it currently does not anticipate having any significant need for funding from existing NWF monies.

If the Commission authorizes the expenditure of any additional NWF monies in response to this COMSECY, ASLBP and SECY, along with the Office of the Chief Financial Officer (OCFO), will monitor the remaining NWF carryover resources carefully and notify the Commission of any circumstances that may require a shift in approved activities.

RECOMMENDATIONS:

Consistent with the Aiken County mandate, as outlined below there are further activities that could be authorized, under the aegis of the ASLBP/SECY-led working group, to aid in re-establishing the LSN that will be important to timely completion of the hearing process should the Yucca Mountain licensing adjudication be restarted.

In that regard, we recommend using a portion of the remaining NWF monies to proceed with the LSN Library upgrades outlined in Enclosure C that would (1) address concerns about system functionalities expressed at the LSNARP meeting and/or parallel functionalities now found in the agency's existing public ADAMS system, thereby bringing the LSN Library more fully into alignment with ADAMS (items 1-6); and (2) provide a more streamlined user interface (items 7-9). Besides supporting the LSN Library as a federal records system, a purpose the library must continue to fulfill in the absence of an LSN replacement system, funding these upgrades would benefit those now using the LSN Library and provide the Commission with the opportunity to be further informed regarding the enhanced system's effectiveness without predisposing the Commission to any final determination about LSN reconstitution/replacement. The cost of these nine recommended items, including project management and cybersecurity costs, would be approximately \$212,000 and require approximately six to seven months to accomplish.¹¹ Given the limited amount of NWF monies remaining, we do not recommend undertaking the process of obtaining an independent analysis of search engine and "cloud"-based options.

¹⁰ Approximately \$21,000 of the unexpended \$35,000 in NWF monies previously designated by the Commission for the COMSECY-17-0019-related activities are obligated to contractual vehicles. Of that amount, approximately \$3000 is on contracts that do not have the scope to cover the new activities outlined above and so would need to be de-obligated and re-designated to any new tasks, while the other \$18,000 is on contracts with a scope adequate to allow the money to be redirected to the new activities outlined in this paper, if authorized by the Commission.

¹¹ The implementation period estimates given in Table 1 to Enclosure C for the individual enhancement items, which total a little over six months, assume individual implementation of each enhancement and so do not reflect the implementation time or cost for associated project management/cybersecurity activities for each particular item, which would vary for each individual item. The timing and cost estimate in Table 2 to Enclosure C is based on implementing the nine recommended items as a single, unified project and encompasses the associated project management/cybersecurity activities for that entire project.

Concerning the possible Nevada hearing facility, in light of the cost of undertaking the next step of instituting a search for available commercial space and the limited shelf life of the information produced, as well as the current uncertainty about the timing of any restart of the HLW adjudication, we recommend that further action be deferred until there is more certainty about the timing of the need for a Nevada-based facility.

Relative to a Rockville headquarters-based facility, ASLBP plans to continue exploring the use of virtual courtroom technology in ongoing NRC adjudications, work that does not require the expenditure of HLW monies. Any lessons learned would be introduced into the HLW adjudication should it restart. ASLBP also considers the 3WFN space to be the optimal headquarters space for creating a dedicated HLW hearing room and associated facilities. The space, which likely can be built out in a year (as opposed to 1.5-plus years for a dedicated Nevada hearing facility), is sufficient to house the number of participants likely to be involved on a regular basis during the evidentiary hearing sessions that currently are anticipated to be held nearly continuously over a two-plus-year period. Additionally, that space will accommodate the incorporation of "virtual courtroom" technology that would allow for remote party/witness participation and public attendance, perhaps in conjunction with a dedicated Nevada satellite facility (or facilities). ADM/DFS has committed, within agency priorities, to work with ASLBP for the duration of the 3WFN occupancy agreement to provide space for a hearing facility. Nonetheless, if that 3WFN space were to become unavailable, the ASLBP TWFN hearing room could be modified to better accommodate HLW evidentiary hearings. Doing so, however, could impact ASLBP's ability to conduct timely adjudications in other anticipated licensing proceedings, such as for small modular reactors, interim HLW storage facilities, or subsequent reactor license renewals, as well as limit scheduling options in the event it becomes necessary to employ more than one licensing board in the HLW adjudication.

In summary, ASLBP and SECY recommend the Commission approve two actions that would preserve flexibility in making decisions in support of utilizing any future appropriated funds for the HLW program:

- Authorize the expenditure of \$212,000 of the remaining NWF monies to improve the LSN Library user interface per the enhancements outlined in Enclosure C; and
- Defer further action regarding Nevada hearing venues until there is more certainty about the timing of the need for a Nevada-based facility.

The information in this paper has been coordinated with separated staff in the Office of General Counsel, ADM, and OCIO, and with the Office of Commission Appellate Adjudication, OCFO, and NMSS. Coordination with NMSS was limited to its anticipated utilization of existing agency HLW carry-over funding. The paper has not otherwise been coordinated or shared with those members of the NRC staff participating in the administrative adjudication.

This paper is to be made publicly available, including to all participants to the administrative adjudication, once the Commission makes a final decision regarding this paper.

SECY, please track.

Enclosures:

- A. Background on Licensing Support Network Advisory Review Panel Meeting-Associated Activities
- A.1. Summary of Licensing Support Network Advisory Review Panel Member Comments
- B. Options for Providing Additional Information to Licensing Support Network Advisory Review Panel Members
- C. Potential Licensing Support Network Library Enhancements
- C.1. Licensing Support Network Library Concerns Raised at the Licensing Support Network Advisory Review Panel Meeting
- D. Background on Information-Gathering Activities Associated with Re-Establishing a Dedicated Hearing Facility for Conducting the Yucca Mountain Adjudication

cc: OGC/B. Clark, A. Averbach
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SUBJECT: YUCCA MOUNTAIN PROJECT ACTIVITIES ASSOCIATED WITH
COMSECY-17-0019

ADAMS: Package# ML18227A092

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