

# Licensing Support Network Advisory Review Panel Meeting

February 27 - 28, 2018

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# Introductions

Dr. Andrew Bates  
LSNARP Chair

Chip Cameron  
Meeting Facilitator

Margie Janney  
Acting LSN Administrator

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# Agenda

## February 27, 2018

- Introductions
- Meeting Process & Overview
- Break
- Status of Yucca Mountain Adjudicatory Process
- History of the LSN and Introduction of LSN Reconstitution/Replacement Options Paper
- Status of EIE/EHD and Exhibit Submission Gap
- Lunch
- Option 1, Traditional Discovery
- Option 2, NRC ADAMS LSN Library
- Break
- Wrap-Up
- Break
- ADAMS LSN Library Orientation

## February 28, 2018

- Recap of Day One
- Recap of Meeting Process
- Option 3, Move to the Cloud
- Lunch
- Option 4, Rebuild the Original LSN
- Break
- Replacement/Reconstituted LSN Options Summary
- Comment and Discussion on All Options
- Member Views on Options
- Wrap Up/Path Forward

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# Member Introductions

- Churchill County, NV
- City Of Caliente, NV
- Clark County, NV
- Department of Energy
- Esmeralda County, NV
- Eureka County, NV
- Inyo County, CA
- Lander County, NV
- Lincoln County, NV
- Mineral County, NV
- National Congress Of American Indians
- Native Community Action Council
- Nevada Nuclear Waste Task Force
- NRC Staff
- Nuclear Energy Institute
- Nye County, NV
- Prairie Island Indian Community
- State of Nevada
- Timbisha Shoshone Tribe
- White Pine County, NV

# Meeting Process

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# Comment and Discussion

## I. Comments from LSNARP Members

1. LSNARP Members in the Room
2. LSNARP Members connected through GoToMeeting
3. LSNARP Members on the Telephone

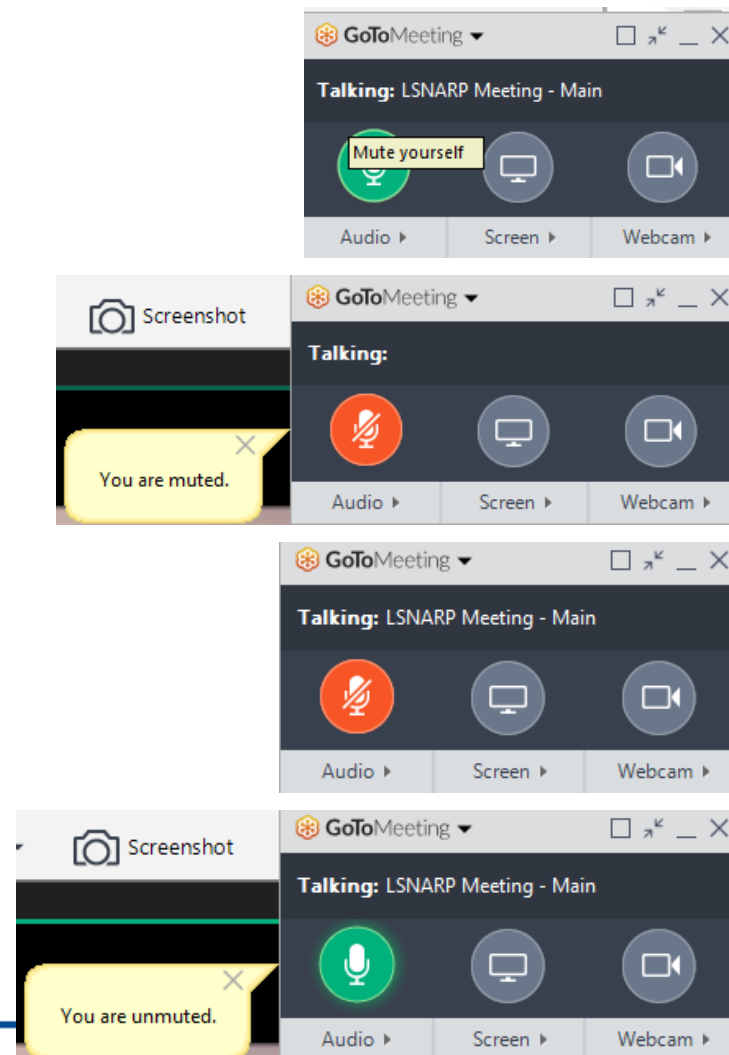
## II. Comments from Members of the Public

1. Members of the Public in the Room
2. Members of the Public connected through GoToWebinar
  - “Raise Your Hand” - comment through audio
  - Typed “Questions” to be read by Facilitator
3. Members of the Public on the Telephone

# GoToMeeting LSNARP Member Participation

# GoToMeeting – Audio Mute/UnMute

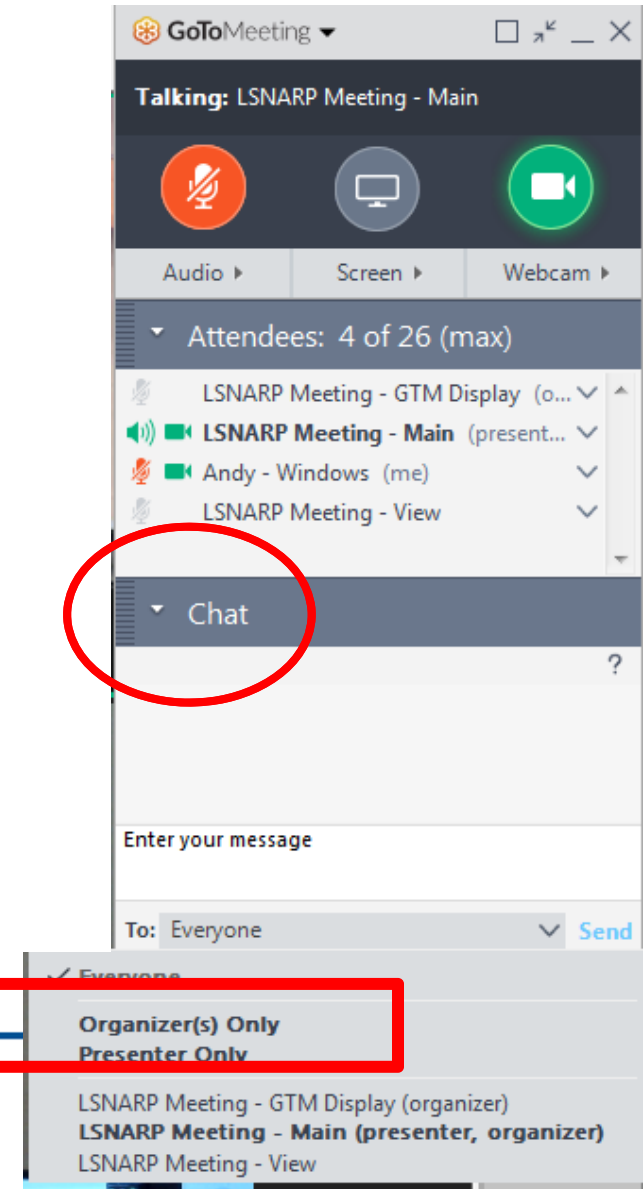
- “Self” mute your audio by clicking on the microphone icon
- Unmute your audio when you are called
- Pause a moment before speaking as there is a brief delay when audio is unmuted





# GoToMeeting – Chat

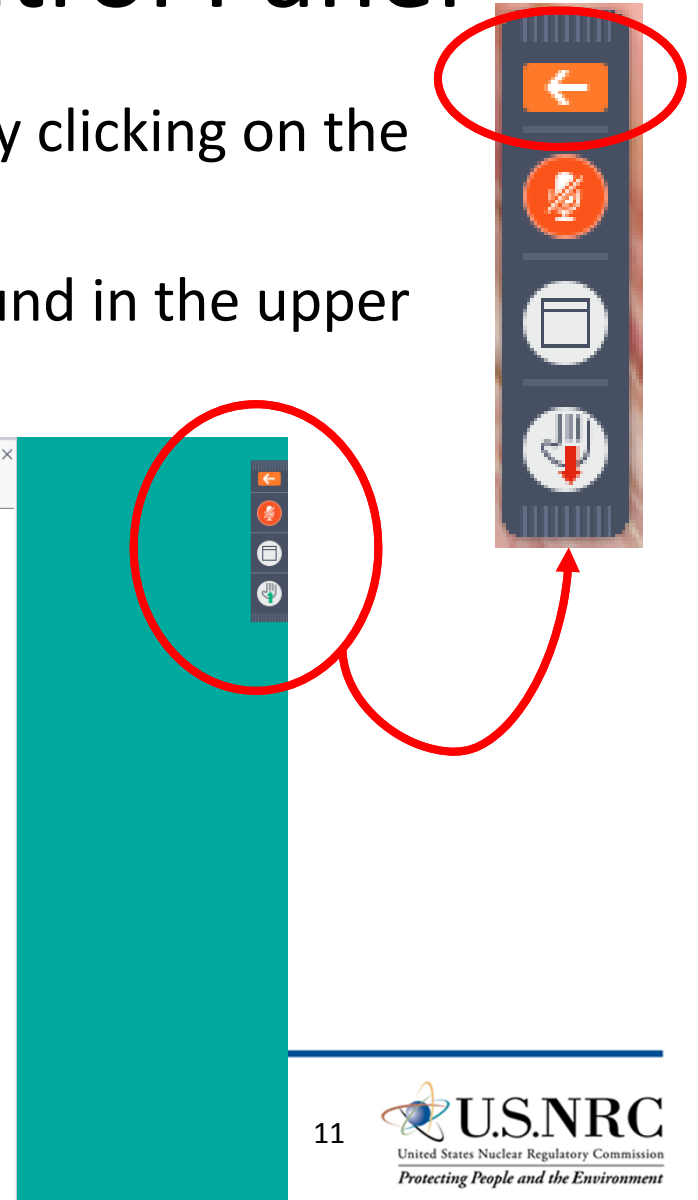
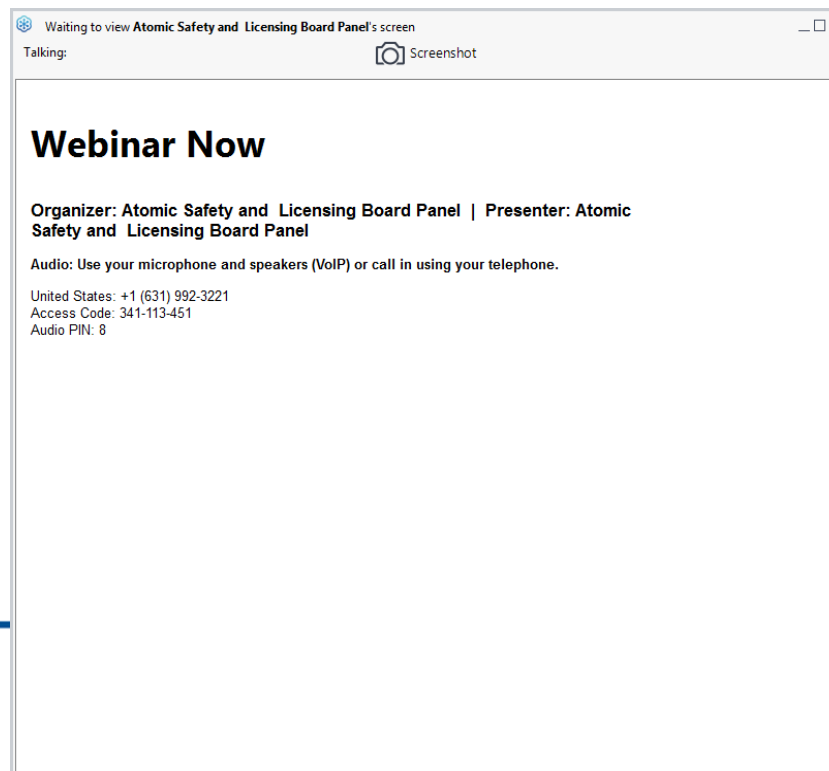
- If you do not have a web camera or need to communicate with the IT staff, please use the chat feature
- Be sure to send chat requests to “Organizer(s) Only”



# GoToWebinar Public Participation Options

# GoToWebinar - Control Panel

- Open the GotoWebinar Control Panel by clicking on the “Orange” arrow
- The “Orange” arrow can typically be found in the upper right area of your computer screen



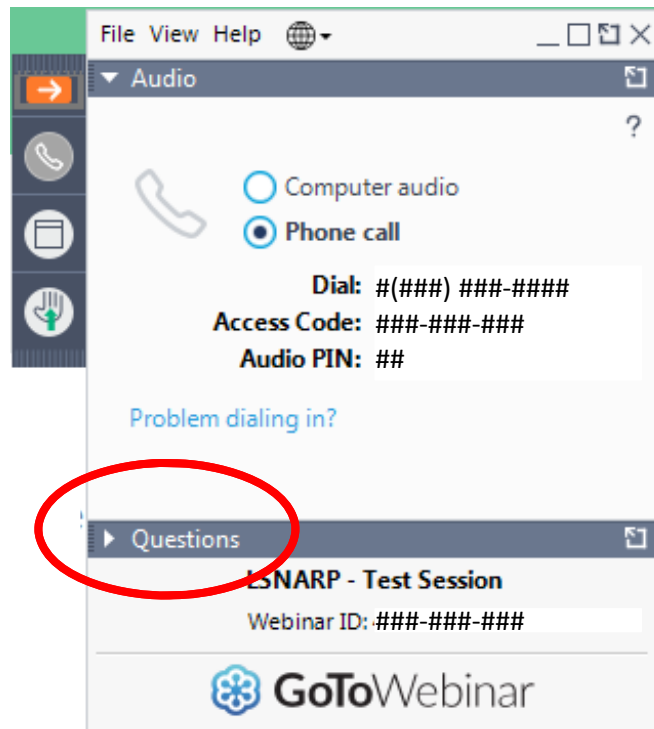
# Verbal Question

- If you are using your computer audio and have a microphone or are using the GoToWebinar provided phone number, you can ask a question verbally
- From the GoToWebinar tool bar, click on “Raise Your Hand”
- The hand will display an “Up Arrow”
- When it is time for public comments and you have “Raised” your hand, your audio connection will be unmuted



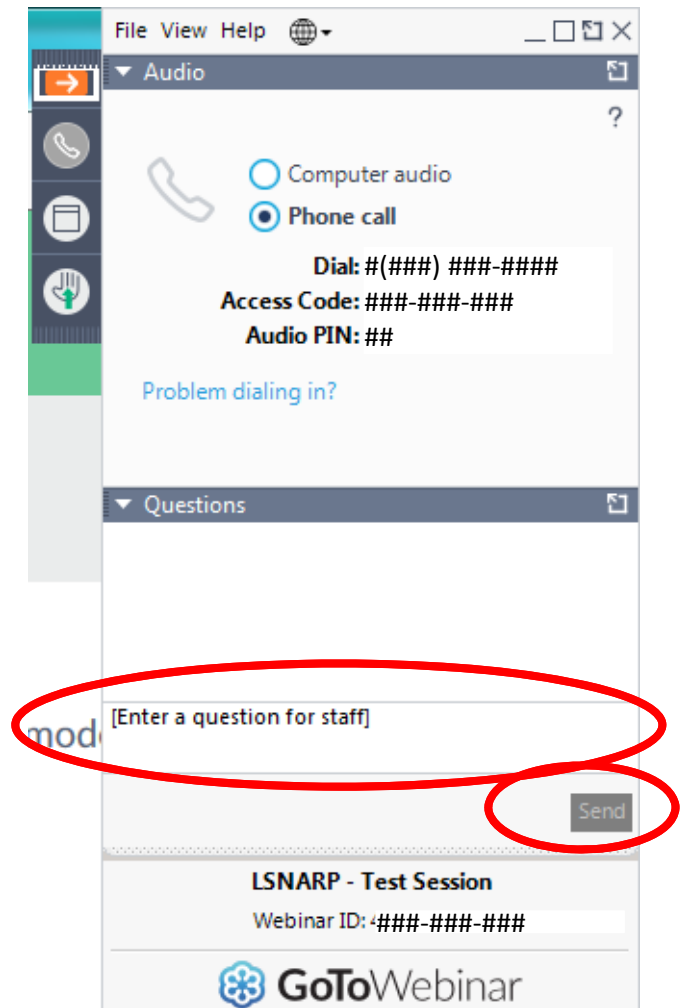
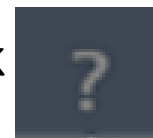
# Typed Question

Open the “Questions” panel



Type in your question and press “Send”

iOS, Android, etc. display a Question Mark



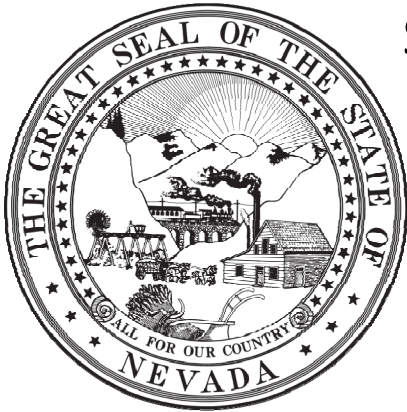
# Meeting Overview

Licensing Support Network  
Advisory Review Panel Meeting

# State of Nevada Perspective

Robert Halstead  
Executive Director

State of Nevada Agency for Nuclear Projects



Rockville, MD  
February 27, 2018

# Importance of the LSN

- The LSN and any LSN substitute serve the important purpose of allowing the public to stay informed about Yucca Mountain.
- The principle objective of the LSN and any LSN substitute is to provide an electronic discovery tool that will serve the needs of the participants in the Yucca Mountain licensing proceeding.
- This is especially important to the State of Nevada.
- Nevada will need to support and defend over 200 contentions, probably under strict deadlines, and Nevada will suffer the most if the LSN or LSN substitute performs poorly.



# LSNARP and Determination of “Users’ Needs”

- The LSNARP was established under the Federal Advisory Committee Act (FACA) and, as required by FACA, operates under an NRC approved Charter that specifies LSNARP’s objectives.
- LSNARP Charter: LSNARP’s “primary focus” is “technical issues relating to the operation and maintenance of the LSN and continuing assessments as to how and whether the LSN is performing its intended function and serving users’ needs.”
- Therefore determining the “users’ needs” is critical.
- The “users’ needs” (especially the needs of the nineteen participants) can only be determined through their active participation in the advisory committee process and in subsequent rule making.
- All nineteen participants must be involved, especially at early stages when criteria for architecture selection are developed and architecture options are put forward.

# LSNARP & Current Constrained Circumstances

- With the proceeding suspended for over six years, prospects for resumption unclear at best, and no new federal funding for parties and participants in the current fiscal year, it is not reasonable to expect the kind of participant involvement that is required.
- The Commission has recognized that participants' funding limitations must be taken into account in deciding how to move forward (CLI-13-08, 78 NRC 219, 233 (2013)).
- To move forward with this advisory committee process all LSNARP members will need adequate resources so that they can participate effectively, especially in formulating criteria for architecture selection and then putting options forward for further consideration.

# Nevada Expectation for This LSNARP Meeting

- Nevada understands that the LSNARP Chair Dr. Bates, representatives of the Atomic Safety and Licensing Board Panel, and other NRC staff, are and will in the future be constrained by Commission directives.
- Nevertheless, Nevada wishes to state, for the record, that, while it is participating in this LSNARP meeting, Nevada objects to any process whereby an inadequately funded LSNARP would be asked to provide final advice after only this one meeting.
- Nevada suggests that the proper deliverable from this meeting cannot be final opinions and options to the ASLBP.
- Nevada suggests the deliverable (if any) should be a path forward for facilitating effective participation in future LSNARP meetings and obtaining LSNARP advice that reflects all of the users' needs.

# Nevada's View of User Needs

## Guidance for Database Management System Design

- Database management software should be designed with the end-user in mind.
- Not all end-users will access a database for the same purpose or use it the same way.
- DBMS designers should be aware of the functions various end-users will need in order to accomplish their tasks.
- A listing of desired attributes for end-users, based on Nevada's experience in the Yucca Mountain licensing proceeding, is provided in the following slides.

# Nevada's View of User Needs - 2

## Desired Attributes in a Database Management System

- Rapid speed for access, search, filter, view and download
- Centralized search capability – single portal access to the entire library
- Accessible to users via the web
- Accessible via popular web browsers (not just Internet Explorer)
- Equal access by agencies, participants, and interested members of the public
- Stable collection of documents/headers

# Nevada's View of User Needs - 3

Desired Attributes in a Database Management System, cont.

- Transparent process for adding, revising and deleting documents (deleting is rare)
- New versions of documents already in the database are added; they do not replace existing versions of documents; documents with marginalia are treated as new versions
- Search templates with logical search properties (*i.e.*, date, title, LSN#, P/A#, type)
- Content search of documents (entire document, not limited to page or line breaks)
- Search items are highlighted in the search results list
- Search template disappears to reveal search results and does not have to be hidden

# Nevada's View of User Needs - 4

Desired Attributes in a Database Management System, cont.

- Ability to narrow and filter search results
- Ability to set number of documents displayed per search page
- Display header/bibliographic information with each document listed in search results
- Ability to scroll through pages of search results rapidly or page jump as needed
- Print search results (one-click printing, not the copy and paste work around)
- View the actual document without having to download it first
- Easy and rapid download of documents

# Comment and Discussion

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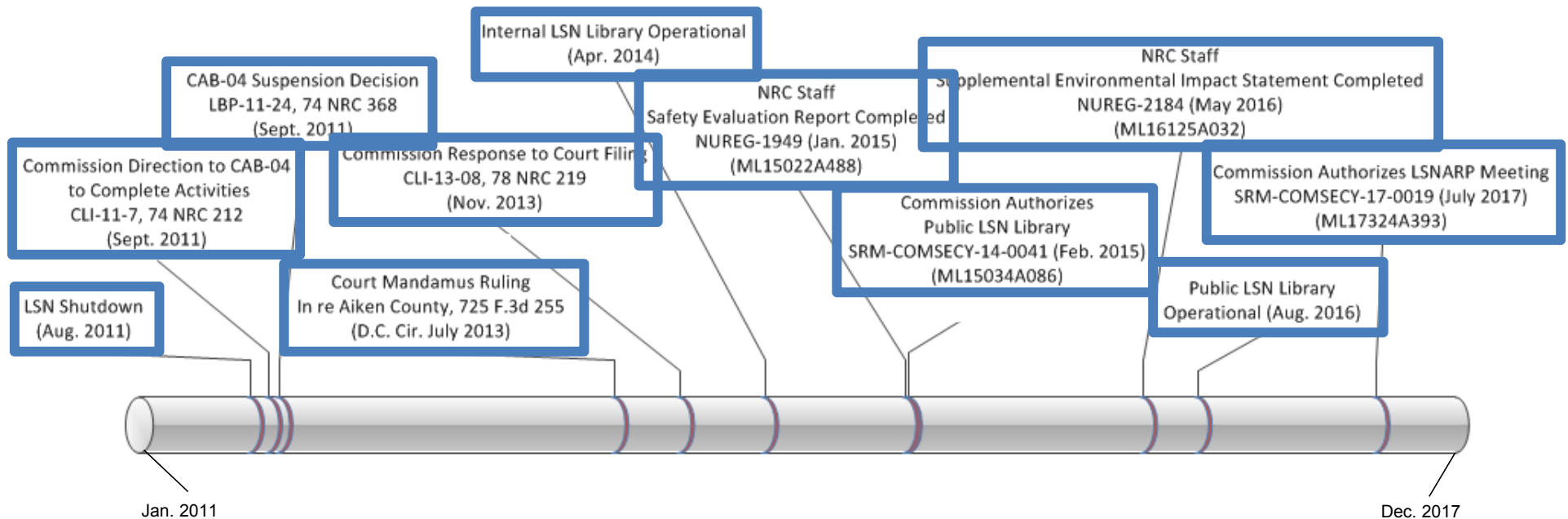


Break  
*(Enter Time)*

# Status of Yucca Mountain Adjudicatory Process

Paul Bollwerk, Administrative Judge  
Atomic Safety and Licensing Board Panel

# Timeline



**Commission Authorizes LSNARP Meeting**  
SRM-COMSECY-17-0019 (July 2017)  
(ML17324A393)

# Status of Yucca Mountain Adjudicatory Process

Paul Bollwerk, Administrative Judge  
Atomic Safety and Licensing Board Panel

# Licensing Support Network Advisory Review Panel Meeting

## State of Nevada A Path Forward for the LSN

Martin G. Malsch

Partner

Egan Fitzpatrick Malsch & Lawrence, PLLC

Special Deputy Attorney General

State of Nevada

Rockville, Maryland

February 27, 2018



# Nevada's Statement on a Path Forward for the LSN

- The LSN was developed only after numerous advisory committee meetings and consideration of options prepared by a technical working group.
- Also both the LSN and the prior electronic discovery system (the LSS) were incorporated into Part 2 only after notice and comment rulemaking.
- The same process should be followed here (assuming the “old” LSN cannot simply be revived).
- An immediately effective change to (or an exemption from) 10 C.F.R. Part 2 Subpart J to reflect an LSN substitute will only cause confusion, delay and, possibly, prejudice.

# History of the LSN and the ADAMS LSN Library

Margie Janney  
Acting LSN Administrator

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# Purpose of the LSN

- NWPA requires NRC to evaluate DOE's application for a geologic repository
- NRC's licensing process
  - Technical review
  - Licensing adjudication
- LSN to make discovery material electronically available for initial construction authorization and “receive and possess” proceedings



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# LSN Development

- LSN Rule issued (1998)
- 10 C.F.R. Part 2, Subpart J provides specific rules governing a HLW discovery system
- LSNARP was created
- NRC submitted business case analysis (2000)
- LSN operational (2001-2011)

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# Functionality of Original LSN

- Requirements documented in Licensing Support Network Functional Requirements (ML003722859)
- LSN Guidelines (ML061380788)

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# LSN Comprised...

- 19 servers
- LAN environment
- Offsite data center
- [www.lsnnet.gov](http://www.lsnnet.gov)
- Participant-operated web sites
  - Headers and documents
- LSN created index and pointed to the documents

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# Shutting Down the LSN

- HLW proceeding suspended Sept 2011
- CAB-04 issued April 2011 order
  - Participants to submit document collections to SECY
  - SECY to make documents publicly available in ADAMS
- NRC required to be compliant with NARA records requirements.

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# History of Public ADAMS LSN Library

- To help the NRC staff complete its HLW Safety Evaluation Report, the Commission directed entry of LSN documents into nonpublic ADAMS (11/2013, ML13322A744)
- Commission directed LSN document collections be made publicly available in ADAMS (01/2014, ML14024A429)
- Commission placed responsibility for LSN document activities with SECY and ASLBP (02/2015, ML15034A088)
- The project to make LSN document collections publicly available in ADAMS began in December 2015 (ML15335A395)
- In August 2016, the LSN Library became publicly available (ML16210A436)

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# Anomalies with ADAMS LSN Library

- LSN Library was verified using LSN Administrator's final list of LSN Accession Numbers and corresponding Participant Accession Numbers as provided to SECY (ML11209C291).
- Issues were found with 130 of the 3,692,306 LSN Library documents.
- Resolution of anomalies documented in the LSN Library Anomaly Resolution document (ML17087A500).

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# From LSN to LSN Library

- Since 2011, the NRC has acted to:
  - Preserve LSN documents from all parties.
  - Resolve anomalies in documents and indexes submitted by the parties.
  - Make LSN records available and searchable for the NRC staff and public in a new “LSN Library” database.

# Introduction of LSN Reconstitution/Replacement Options Paper

Margie Janney, Acting LSNA

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# Underlying Assumptions

- Options will require modifications to or exemptions from parts of 10 C.F.R. Part 2, Subpart J
- ASLBP LSNA appointed to oversee design, implementation, and operation
- Hardware and software components that constituted the NRC portion of original LSN no longer available or supported
- Original LSN Guidelines to be updated by the LSNA, with the LSNARP, to provide technical guidance on the operation
- Reconstituted or replacement LSN needs to remain in operation through any judicial appellate proceedings following the receive and possess licensing proceeding
- Participant's 2011 bibliographic information still associated with each header and document
- Original LSN accession number can be used to find headers and documents in the public ADAMS LSN Library

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# Document Sizing Responses

- Inyo County = ~ 50 documents, no header only entries
- NEI = 100 to 500 documents, no header only entries
- State of Nevada = 1,000+ documents
- DOE = 1,000+ documents, 9% header only
  - Additional license application work and new contentions will influence the amount of new material
- NRC = 1,000 to 2,000 new documents, 1% header only
  - Significant uncertainties as to resumption of adjudication may impact estimate
- Nye County = 200 to 300 documents, 5% header only entries

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# General Objective of the Paper

- Outlines possible IT system options for the replacement of the original LSN
- Each option discussion includes
  - IT system implementation cost estimate
  - IT system implementation time estimate
  - IT system implementation risks and challenges
  - IT system implementation pros/cons
- Cost and time estimates were based on available information and intended to provide a comparison between options

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# High Level Overview

- Option 1 – Traditional Discovery
  - Existing public ADAMS LSN library used to access previously submitted documentary material
  - New material exchanged amongst the parties
- Option 2 – Use of Existing Public ADAMS LSN Library
  - Uses the already developed existing public ADAMS LSN library
  - Intake/modification processes would be developed using the EIE or a semi-automated process for new material
- Option 3 – Move to the Cloud
  - Previously submitted material moved from the existing public ADAMS LSN library to a cloud-based system
  - Intake/modification process moved to a cloud-based system for new material
- Option 4 – Rebuild the Original LSN

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# High Level Overview, cont'd.

- Appendix A provides a list of original LSN functional requirements that
  - Couldn't be met by one or more of the options
  - Would need to be modified
  - Appendix A does not include original LSN functional requirements that
    - Are not IT system related
    - Are currently provided by other systems
    - Have been overtaken by events
- Appendix B describes the risk factors that were considered for each option
- Appendix C lists proposed new functional requirements
- Appendix D is an options summary table

# E-Filing and the Electronic Hearing Docket

Russell Chazell  
Assistant for Rulemakings and Adjudications  
FACA Committee Management Officer  
Office of the Secretary  
LSN Advisory Review Panel Meeting

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# Office of the Secretary (SECY)

- The Commission mandated electronic filing in 10 CFR 2.1013.
- 10 CFR 2.1013(a)(2) mandates that SECY manage the High Level Waste (HLW) docket.
- To facilitate electronic filing of HLW documents, the Electronic Information Exchange (EIE) and Electronic Hearing Docket (EHD) systems were developed and implemented.
- These systems are currently used for submission of adjudicatory documents.

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# E-Filing and the Electronic Hearing Docket

- Documents are filed using the NRC's Electronic Information Exchange (EIE) at
- <https://eie.nrc.gov/eie/adj/termsOfService.eie>



# www.nrc.gov

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Pilgrim Oversight

Project Aim

Commission Documents

Japan Lessons Learned

Seabrook Concrete Degradation

NRC Safety Culture Policy Statement

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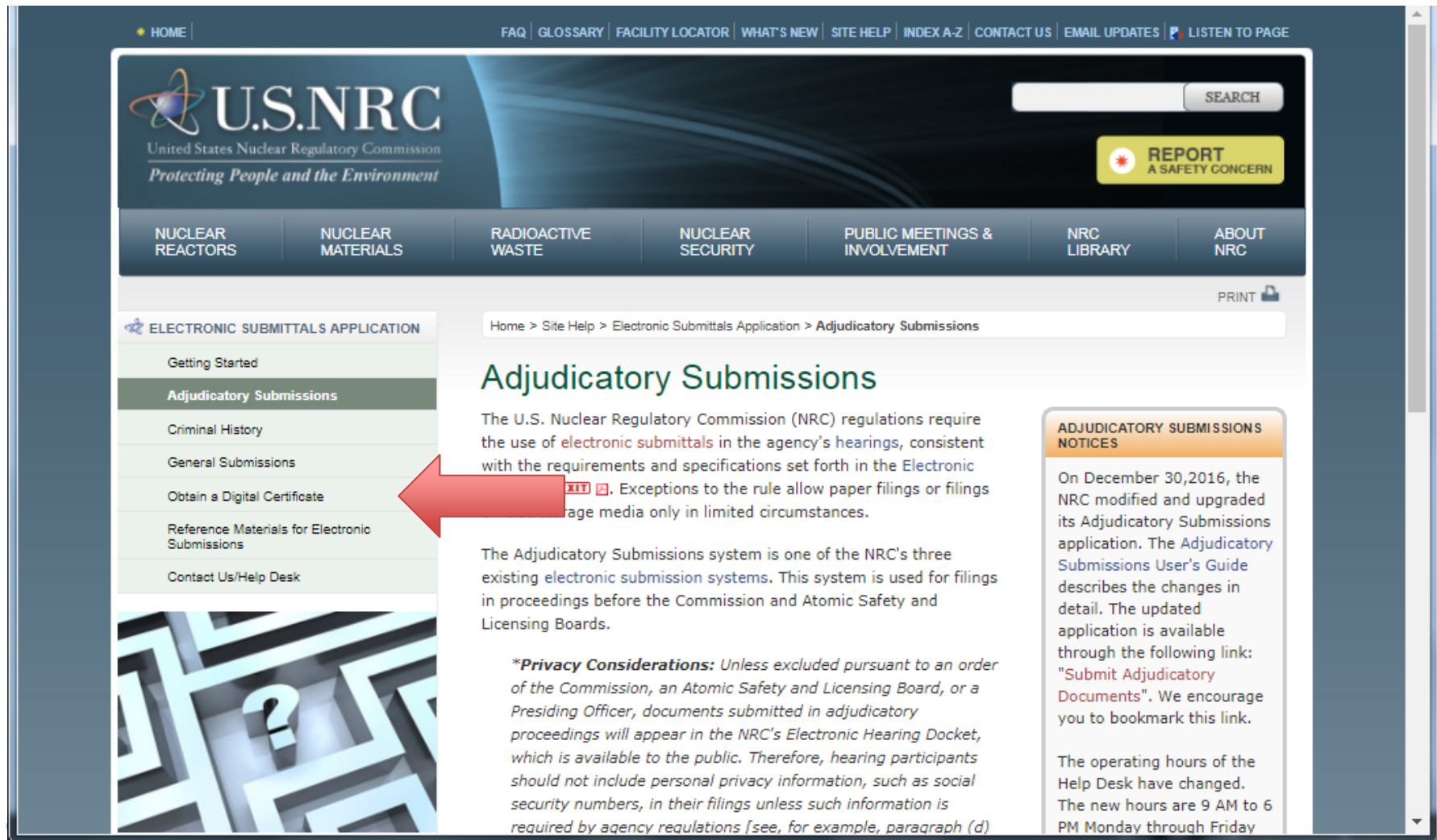
For Employees

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# E-Filing and the Electronic Hearing Docket

- A digital certificate is needed to access the application.
- One can be obtained at <https://pki.nrc.gov/ecs/>, then click on Electronic Submittals - Adjudicatory

# Adjudicatory Submissions – Obtain a Digital Certificate



The screenshot displays the U.S. Nuclear Regulatory Commission (NRC) website. The top navigation bar includes links for HOME, FAQ, GLOSSARY, FACILITY LOCATOR, WHAT'S NEW, SITE HELP, INDEX A-Z, CONTACT US, EMAIL UPDATES, and LISTEN TO PAGE. The U.S. NRC logo is prominently displayed, along with the tagline "Protecting People and the Environment". A search bar and a "REPORT A SAFETY CONCERN" button are also visible.

The main content area is titled "Adjudicatory Submissions". It features a left sidebar with a list of links: "ELECTRONIC SUBMITTALS APPLICATION", "Getting Started", "Adjudicatory Submissions" (highlighted), "Criminal History", "General Submissions", "Obtain a Digital Certificate" (indicated by a red arrow), "Reference Materials for Electronic Submissions", and "Contact Us/Help Desk".

The main text area contains the following information:

## Adjudicatory Submissions

The U.S. Nuclear Regulatory Commission (NRC) regulations require the use of **electronic submittals** in the agency's hearings, consistent with the requirements and specifications set forth in the **Electronic Submittals Rule**. Exceptions to the rule allow paper filings or filings on digital media only in limited circumstances.

The Adjudicatory Submissions system is one of the NRC's three existing electronic submission systems. This system is used for filings in proceedings before the Commission and Atomic Safety and Licensing Boards.

**\*Privacy Considerations:** Unless excluded pursuant to an order of the Commission, an Atomic Safety and Licensing Board, or a Presiding Officer, documents submitted in adjudicatory proceedings will appear in the NRC's Electronic Hearing Docket, which is available to the public. Therefore, hearing participants should not include personal privacy information, such as social security numbers, in their filings unless such information is required by agency regulations [see, for example, paragraph (d) of the Electronic Submittals Rule].

**ADJUDICATORY SUBMISSIONS NOTICES**

On December 30, 2016, the NRC modified and upgraded its Adjudicatory Submissions application. The Adjudicatory Submissions User's Guide describes the changes in detail. The updated application is available through the following link: "[Submit Adjudicatory Documents](#)". We encourage you to bookmark this link.

The operating hours of the Help Desk have changed. The new hours are 9 AM to 6 PM Monday through Friday.

# External Credential Service

U.S.NRC  
United States Nuclear Regulatory Commission  
*Protecting People and the Environment*

Enter your search SEARCH

REPORT  
A SAFETY CONCERN

NUCLEAR REACTORS NUCLEAR MATERIALS RADIOACTIVE WASTE NUCLEAR SECURITY PUBLIC MEETINGS & INVOLVEMENT NRC LIBRARY ABOUT NRC

EXTERNAL CREDENTIAL SERVICE

- Integrated Source Management Portfolio
- EIE - Adjudicatory Proceedings
- EIE - Criminal History
- EIE - General Forms
- EIE - Operator Licensing Application
- Emergency Response Data System
- NMSS - State Communication Portal

CREDENTIALING OVERVIEW

- Level 3
- Level 1

RESOURCES

- User Guides

Home > Site Help > External Credential Service

## External Credential Service

Login

Welcome to the NRC Digital Credential Center. The purpose of this site is to enable the users of various NRC applications to establish a more secure form of Identity.

To view the NRC applications currently participating in this NRC digital credentialing program, select one of the links below: As additional applications become available their links will be added.

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- Integrated Source Management Portfolio (ISMP)
- Electronic Submittals - Adjudicatory
- Electronic Submittals - Criminal History
- Electronic Submittals - General Forms

# Apply Now

The screenshot shows the U.S. Nuclear Regulatory Commission (NRC) website. The header includes navigation links: HOME, FAQ, GLOSSARY, FACILITY LOCATOR, WHAT'S NEW, SITE HELP, INDEX A-Z, CONTACT US, BROWSE ALOUD, and EMAIL UPDATES. The U.S. NRC logo is prominently displayed with the tagline "Protecting People and the Environment". A search bar and a "REPORT A SAFETY CONCERN" button are also visible. The main navigation menu includes: NUCLEAR REACTORS, NUCLEAR MATERIALS, RADIOACTIVE WASTE, NUCLEAR SECURITY, PUBLIC MEETINGS & INVOLVEMENT, NRC LIBRARY, and ABOUT NRC. The left sidebar contains a tree view for the "EXTERNAL CREDENTIAL SERVICE" with links to Integrated Source Management Portfolio, EIE - Adjudicatory Proceedings, EIE - Criminal History, EIE - General Forms, EIE - Operator Licensing Application, Emergency Response Data System, NMSS - State Communication Portal, CREDENTIALING OVERVIEW (Level 3, Level 1), and RESOURCES (User Guides). The main content area shows the breadcrumb trail: Home > Site Help > External Credential Service > DCC for the Electronic Submittals - Adjudicatory Proceedings. The title is "External Credential Service for the Electronic Submittals - Adjudicatory Proceedings". The text explains that the Adjudicatory Submissions system is used for filings in proceedings before the Commission or Atomic Safety and Licensing Board. It states that the U.S. NRC regulations require the use of electronic submittals, consistent with the requirements and specifications set forth in the Electronic filing rule (72 FR 49, 139). Exceptions to the rule allow paper filings or filings on disc storage media only in limited circumstances. It provides a link to the Adjudicatory Submissions Website for more details. The text also states that this system is a secure, web-based database and that a user must obtain a digital credential to access it. A digital certificate is an electronic identification which establishes a user's credentials when processing transactions on the Web. The use of digital certificates allows the Adjudicatory Submissions System to uniquely identify each user. The process of obtaining the digital certificate is called credentialing. It provides a link to the Credentialing Overview for more details on the process. At the bottom, there is a red arrow pointing to the "Apply now!" link. Below this link, it says: "If you have any questions or concerns, please contact the NRC's Electronic Submittals Help Desk at 866-672-7640, or email your request to [EIE Help Desk](#)".

HOME | FAQ | GLOSSARY | FACILITY LOCATOR | WHAT'S NEW | SITE HELP | INDEX A-Z | CONTACT US | BROWSE ALOUD | EMAIL UPDATES

U.S. NRC  
United States Nuclear Regulatory Commission  
Protecting People and the Environment

Enter your search SEARCH

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EXTERNAL CREDENTIAL SERVICE

- Integrated Source Management Portfolio
- EIE - Adjudicatory Proceedings
- EIE - Criminal History
- EIE - General Forms
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- Emergency Response Data System
- NMSS - State Communication Portal

CREDENTIALING OVERVIEW

- Level 3
- Level 1

RESOURCES

- User Guides

Home > Site Help > External Credential Service > DCC for the Electronic Submittals - Adjudicatory Proceedings

## External Credential Service for the Electronic Submittals - Adjudicatory Proceedings

The [Adjudicatory Submissions](#) system is used for filings in proceedings before the Commission or Atomic Safety and Licensing Board proceedings. The U.S. Nuclear Regulatory Commission (NRC) regulations require the use of electronic submittals in the agency's hearings, consistent with the requirements and specifications set forth in the Electronic filing rule (72 FR 49, 139). Exceptions to the rule allow paper filings or filings on disc storage media only in limited circumstances.

For more details on this program, please visit the [Adjudicatory Submissions Website](#).

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For more details on the credentialing process, please visit [Credentialing Overview](#).

**Apply now!**

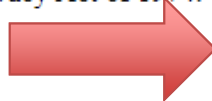
If you have any questions or concerns, please contact the NRC's Electronic Submittals Help Desk at 866-672-7640, or email your request to [EIE Help Desk](#)

# Level 1 Credentialing

## WARNING

WARNING: By accessing and using this U.S. Government computer system, you are consenting to system monitoring for network administration and security purposes. Anyone who attempts to gain unauthorized access to, or exceed authorized access to, this computer system in violation of 18 United States Code, Section 1030, may be referred to the FBI and the CIA for investigation and prosecution.

Authorized uses of this computer system by public users are limited to enrollment for a credential by those with a legitimate need to conduct business with the U.S. Nuclear Regulatory Commission, and maintenance of the user's own information and credential. This computer system requires that you provide personal information to the U.S. Nuclear Regulatory Commission. Any personal information submitted will be protected under the provisions of the Privacy Act of 1974.



[Continue to Level 1 Credentialing](#)   [Exit](#)

# Digital Credential Request

ENROLLMENT

LOGIN

## Digital Credential Request - Registration Information

Please enter the following information and then click *Continue* to go to next screen.

First Name:	<input type="text"/>	Middle:	<input type="text"/>	Last:	<input type="text"/>	Suffix:	<input type="text"/>
Company Name:	<input type="text"/>						
Business Email:	<input type="text"/>	Company Phone Number:	<input type="text"/>	Extension:	<input type="text"/>		
Create Password:	<input type="password"/>						
Confirm Password:	<input type="password"/>						

## Authentication Questions

Please answer the following questions, Answers will be automatically converted to upper-case.

Security Question 1:	<input type="text"/>	<input type="text"/>
Security Question 2:	<input type="text"/>	<input type="text"/>
Applicant Notes:	<div><div></div><div></div></div>	


\* indicates a required field indicates a required field

Continue

Cancel



# Adjudicatory Submissions



## Spotlight

CHOOSE A SECTION ▶

*proceedings will appear in the NRC's Electronic Hearing Docket, which is available to the public. Therefore, hearing participants should not include personal privacy information, such as social security numbers, in their filings unless such information is required by agency regulations [see, for example, paragraph (d) (1)(i) of 10 CFR 2.309] or other legal requirements.*

- [Submit Adjudicatory Documents](#)

(Note: The Adjudicatory Submissions system supports Internet Explorer v8.0 and above, current versions of Firefox, Chrome and Safari 10 and above.)

### Related Instructional Resources

- [Getting Started](#)

▲ TOP

*Page Last Reviewed/Updated Tuesday, August 15, 2017*

The operating hours of the Help Desk have changed. The new hours are 9 AM to 6 PM Monday through Friday (except for Federal holidays.)


If you have questions or comments please contact our Help Desk at 866-672-7640.

#### HOME

- NEWS RELEASES
- EVENT REPORTS
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- DIGITAL GOVERNMENT
- THE STUDENT CORNER
- PHOTOS & VIDEO
- FOR DEVELOPERS

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- LICENSE FEES
- HISTORY OF THE NRC
- CAREER OPPORTUNITIES
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- AGENCY STATUS
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- FORMS
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- ADJUDICATORY SUBMISSIONS
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# Electronic Information Exchange

**Electronic Information Exchange**

United States Nuclear Regulatory Commission  
*Protecting People and the Environment*



**Welcome to the NRC Electronic Information Exchange System**  
**Terms of Service**

USE OF THIS COMPUTER CONSTITUTES A CONSENT TO MONITORING

This computer system is for official or authorized use only. Federal computer systems are subject to monitoring for maintenance, to preserve system integrity and security, and for other official purposes. You should not expect privacy, nor protection of privileged communication with your personal attorney, regarding information you create, send, receive, use, or store on this system. If monitoring reveals possible evidence of violation of criminal statutes, this evidence and any related information, including your identification, may be provided to law enforcement officials, including the Office of the Inspector General. Anyone who violates security regulations or makes unauthorized use of Federal computer systems is subject to criminal prosecution and/or disciplinary action.

**UNAUTHORIZED ACCESS PROHIBITED BY LAW - TITLE 18 U.S. CODE SECTION 1030**

Public Law 99-474 provides that anyone who accesses a Federal computer system without authorization, and by means of such conduct obtains, alters, damages, destroys, or discloses information, or prevents authorized use of information on the computer, shall be subject to fine or imprisonment, or both.

**REPORT ANY UNAUTHORIZED USE TO COMPUTER SECURITY AND THE INSPECTOR GENERAL**

☒ I consent to monitoring    ☐ I do not consent to monitoring

Continue

Exit



# EIE Adjudicatory Main Page



The screenshot shows the EIE Adjudicatory Main Page. At the top, there is a header with the text "EIE Adjudicatory" on the left and the United States Nuclear Regulatory Commission logo and "U.S.NRC" on the right. Below the header is a navigation bar with links: "Home", "Request Access To Proceeding", "New Submission", "Other User Functions", "Help", and "Logout". The main content area features a welcome message: "Welcome to the EIE Adjudicatory application". Below this is a red arrow pointing upwards to the word "Welcome". To the right of the arrow is the text "System Announcement" in blue, followed by "June 21, 2017" in blue. Below the date, there are three paragraphs of text: "It has been reported that some users have encountered issues in attempting to access files when the related service list notice refers to a submission containing more than one attachment.", "Our experience is that the system works best when using either SecureZip or WinZip products. Both of these product are available for download free of charge from their vendors. Other compression software products work but our experience is that these two are most suitable for this application.", and "We encourage our users to adopt one of these two products as their file compression products." The final paragraph states: "Should you have questions or comments about these changes please contact our help desk at 866-672-7640 weekdays between 9AM and 6PM Eastern Time."

**EIE Adjudicatory**

United States Nuclear Regulatory Commission  
*Protecting People and the Environment* **U.S.NRC**

Home Request Access To Proceeding New Submission Other User Functions Help Logout

**Welcome to the EIE Adjudicatory application**

**System Announcement**

**June 21, 2017**


It has been reported that some users have encountered issues in attempting to access files when the related service list notice refers to a submission containing more than one attachment.

Our experience is that the system works best when using either SecureZip or WinZip products. Both of these product are available for download free of charge from their vendors. Other compression software products work but our experience is that these two are most suitable for this application.

We encourage our users to adopt one of these two products as their file compression products.

Should you have questions or comments about these changes please contact our help desk at 866-672-7640 weekdays between 9AM and 6PM Eastern Time.

# Public Submission



The screenshot displays the 'EIE Adjudicatory' web application interface. The header includes the title 'EIE Adjudicatory' on the left and the 'United States Nuclear Regulatory Commission' logo with the tagline 'Protecting People and the Environment' and 'U.S.NRC' on the right. Below the header is a navigation bar with links: 'Home', 'Request Access To Proceeding', 'New Submission', 'Other User Functions', 'Help', and 'Logout'. The 'New Submission' dropdown menu is open, showing three options: 'Public Submission' (highlighted with a red arrow), 'Non-Public Submission', and 'Legal In-Camera Submission'. The main content area contains text about attachments, system experience, and file compression products, along with contact information for the help desk.

**EIE Adjudicatory**

United States Nuclear Regulatory Commission  
*Protecting People and the Environment* **U.S.NRC**

Home Request Access To Proceeding **New Submission** Other User Functions Help Logout

**Public Submission**  
(This submission can be viewed by all participants and members of the public)

**Non-Public Submission**  
(This submission can be viewed only by individuals selected by you from the proceeding service list)

**Legal In-Camera Submission**  
(The contents of In-Camera submissions are delivered only to the presiding officer(s) of the selected proceeding)

It has been reported that some users have encountered more than one attachment.

Our experience is that the system works best when files are compressed from their vendors. Other compression software may not be suitable for this application.

We encourage our users to adopt one of these two products as their file compression products.

Should you have questions or comments about these changes please contact our help desk at 866-672-7640 weekdays between 9AM and 6PM Eastern Time.

# Proceeding Selection

**EIE Adjudicatory**

United States Nuclear Regulatory Commission  
*Protecting People and the Environment*

**U.S.NRC**

HomeRequest Access To ProceedingNew Submission ▾Other User Functions ▾HelpLogout

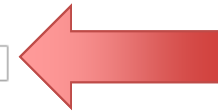
**NRC Electronic Adjudicatory Submissions**

**Proceeding Selection**

Required fields are marked with an asterisk (\*)

**\*Proceeding Name:**


Continue



# Proceeding Selection, cont'd.

**EIE Adjudicatory**

United States Nuclear Regulatory Commission  
*Protecting People and the Environment*



HomeRequest Access To ProceedingNew Submission ▾Other User Functions ▾HelpLogout

## NRC Electronic Adjudicatory Submissions

### Proceeding Selection

Required fields are marked with an asterisk (\*)

\*Proceeding Name: 

--- Select a Proceeding --- ▾

--- Select a Proceeding ---  
HLW License App 63-001 CAB04  
Shaw Areva Mox Services 70-3098-ML  
Vogtle-M-52-025 and 52-026-COL

# Adjudicatory Submission Form

**EIE Adjudicatory**

United States Nuclear Regulatory Commission  
Protecting People and the Environment



HomeRequest Access To ProceedingsNew Submission ▾Other User Functions ▾HelpLogout

Timothy Sullivan	timothy.sullivan@doj.ca.gov	<input checked="" type="checkbox"/>
Timothy J V Walsh	timothy.walsh@pillsburylaw.com	<input checked="" type="checkbox"/>

Submitter Signature

1. If signature blocks on the submission are appropriately prepared in accord with 10 C.F.R. 2.304(d)(1), activating the "Sign" button fulfills the signature requirement of section 2.304(d). Signing this form will generate the date of signature on the line below. Filers should be aware, however, that any questions about the the timeliness of any submission will be governed by when the "Submit" button is used to actually transmit the submission to the agency.

2. The "Submit" button sends the submission to the NRC where it is first scanned for computer viruses. Following a "clean" scan, an email notice of the submission will be sent to the parties selected on the service list. If the submission does not pass the virus scan, you will be notified and asked to resubmit.

Signature:

Date:

Sign

Submit

[Back to Top](#)

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---

# E-Filing and the Electronic Hearing Docket

- Adjudicatory documents are housed in the Electronic Hearing Docket (EHD)
  - The EHD can be accessed at <http://adams.nrc.gov/ehd/>
  - The EHD can also be accessed from the main [www.nrc.gov](http://www.nrc.gov) webpage under NRC Library, then Electronic Hearing Docket, then about 2/3 of the way down the page, Access the Electronic Hearing Docket
- Documentary materials are housed in the Licensing Support Network (LSN)

# www.nrc.gov

NRC: Home Page

Secure | https://www.nrc.gov

HOME | FAQ | GLOSSARY | FACILITY LOCATOR | WHAT'S NEW | SITE HELP | INDEX A-Z | CONTACT US | EMAIL UPDATES | LISTEN TO PAGE

**U.S.NRC**  
United States Nuclear Regulatory Commission  
*Protecting People and the Environment*

SEARCH

**REPORT**  
A SAFETY CONCERN

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Basic References  
Document Collections  
ADAMS Public Documents  
Public Document Room  
LSN Library  
FOIA & Privacy Act  
Records Management  
Training Courses  
FAQ Index  
Get Copies of Documents  
Withholding of Sensitive Information  
Photos & Video  
**Electronic Hearing Docket**

**Spotlight**  
Rulemaking Activity

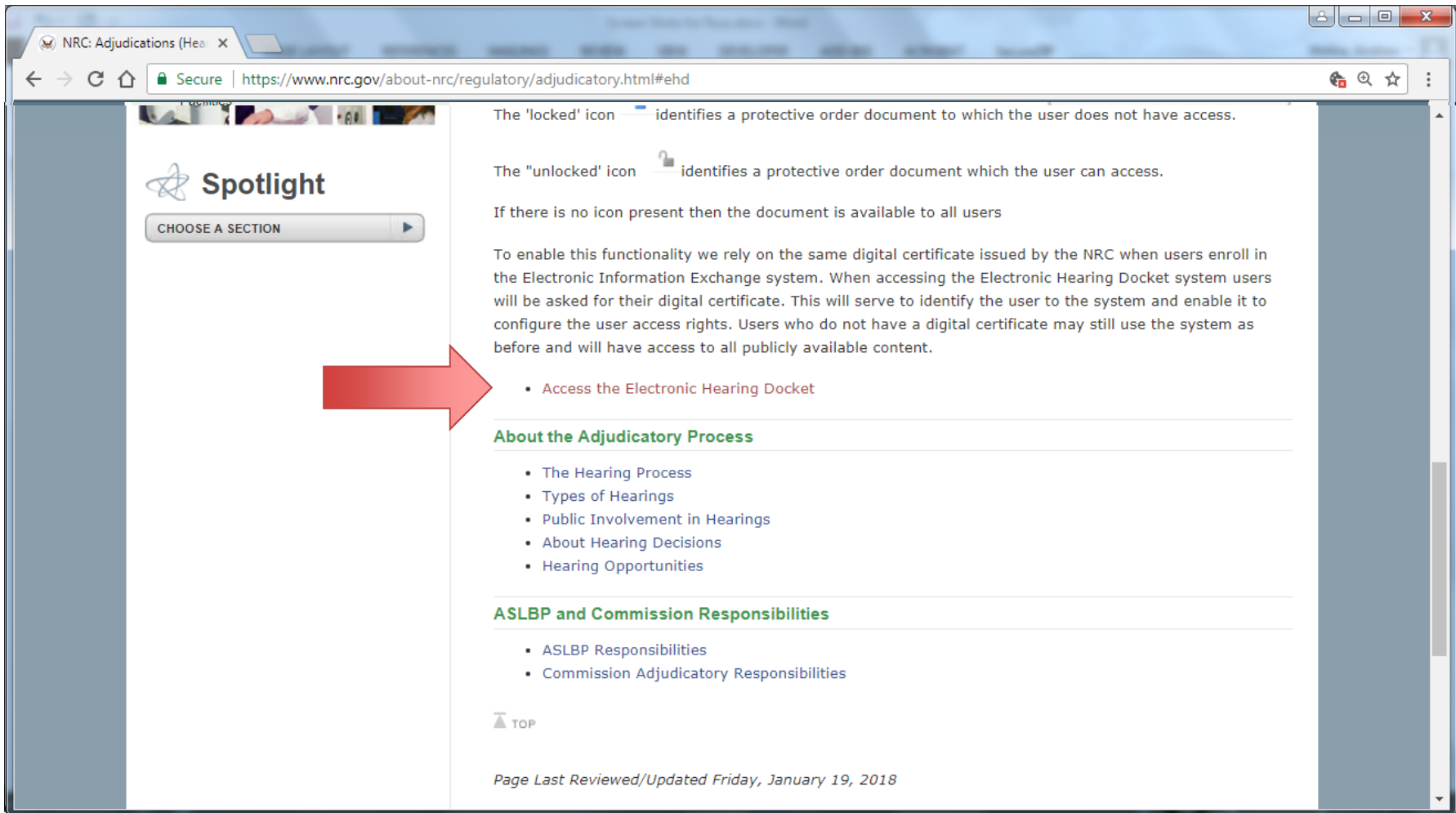
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NRC Approach to Open/Digital



# Access the Electronic Hearing Docket



The screenshot shows a web browser window with the URL <https://www.nrc.gov/about-nrc/regulatory/adjudicatory.html#ehd>. The page features a 'Spotlight' sidebar on the left with a 'CHOOSE A SECTION' button. A large red arrow points from this button to a bulleted list in the main content area. The list includes the link 'Access the Electronic Hearing Docket'. Below this list are sections titled 'About the Adjudicatory Process' and 'ASLBP and Commission Responsibilities', each with their own bulleted lists of links. The page footer indicates it was last reviewed/updated on Friday, January 19, 2018.

Spotlight

CHOOSE A SECTION

The 'locked' icon identifies a protective order document to which the user does not have access.

The 'unlocked' icon identifies a protective order document which the user can access.

If there is no icon present then the document is available to all users

To enable this functionality we rely on the same digital certificate issued by the NRC when users enroll in the Electronic Information Exchange system. When accessing the Electronic Hearing Docket system users will be asked for their digital certificate. This will serve to identify the user to the system and enable it to configure the user access rights. Users who do not have a digital certificate may still use the system as before and will have access to all publicly available content.

- [Access the Electronic Hearing Docket](#)

**About the Adjudicatory Process**

- [The Hearing Process](#)
- [Types of Hearings](#)
- [Public Involvement in Hearings](#)
- [About Hearing Decisions](#)
- [Hearing Opportunities](#)

**ASLBP and Commission Responsibilities**

- [ASLBP Responsibilities](#)
- [Commission Adjudicatory Responsibilities](#)

TOP

Page Last Reviewed/Updated Friday, January 19, 2018

# Electronic Hearing Docket

US NRC ADAMS Comm X

Secure | <https://adams.nrc.gov/ehd/>

Web-based ADAMS

Electronic Hearing Dockets | Staff Discovery Materials | Content Search | Advanced Search

United States Nuclear Regulatory Commission  
Protecting People and the Environment

ADAMS

Download | Properties | Export

Hide Package Contents

Document Title	Accession Number	Document Date	Availability	Date Added
Notice of Appearance of Megan A. Wright on Behalf of the U.S. Nuclear Regulatory Commission.	ML111330619		Publicly Available	05/17/2011 12:46 PM EDT
The Department of Energy's Response to the Timbisha Shoshone Tribal Council's Motion for Recognition as the Legitimate Representative of the Timbisha Shoshone Tribe.	ML11249A180		Publicly Available	09/07/2011 03:22 PM EDT
2010/02/04-The Department of Energy's Answers to the Board's Questions At the January 27, 2010 Case Management Conference.	ML100351158		Publicly Available	02/12/2010 04:44 PM EST
Letter to CAB04 Judges from Daniel Graser, LSN Administrator, Re: CD Submission of LSN Accession Numbers/Participant Accession Numbers and Transmittal of DOE License Application Supporting Documents Identifiers.	ML11220A329		Publicly Available	08/10/2011 10:43 AM EDT
2009/12/07-U. S. Department of Energy Phase I Legal Briefs.	ML093410666		Publicly Available	12/09/2009 11:57 AM EST
2009/10/13-U.S. Department of Energy's Initial List of Party Witnesses and Related Information.	ML092870545		Publicly Available	10/15/2009 05:47 PM EDT
2009/10/30-Initial Notice of White Pine County's Other Witnesses.	ML093080322		Publicly Available	11/05/2009 03:55 PM EST
2009/09/22-Motion to Compel for the NRC Staff for Production of Document Asserted as Privileged by NRC Staff.	ML092670051		Publicly Available	09/25/2009 08:04 AM EDT
2010/01/22-Notice of Appearance [of Shane Thin Elk] on Behalf of Timbisha Shoshone Tribe.	ML100220986		Publicly Available	01/25/2010 04:57 PM EST
2010/03/04-Petition of Aiken County, South Carolina to Intervene.	ML100630979		Publicly Available	03/08/2010 04:52 PM EST
2009/06/19-State of Nevada Request for Extension of Time to File Replv.	ML091700546	06/19/2009	Publicly Available	06/22/2009 03:30 PM EDT

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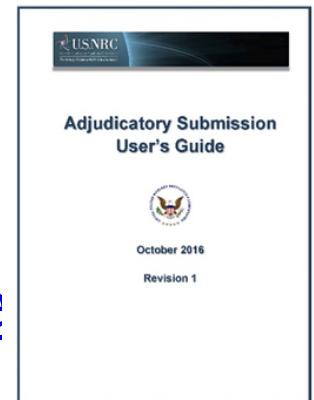
Displaying 20 items per page of total 105

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# EIE/EHD Usage Guidance

- The Adjudicatory Submissions User's Guide
- describes the process for obtaining a digital certificate and using EIE and EHD

(see <https://www.nrc.gov/site-help/e-submittals/adjudicatory-eie-submission-user-guide>)



- The operating hours of the E-Filing Help Desk are 9AM to 6PM (Eastern) Monday through Friday (except for Federal holidays). The Help Desk can be reached at 866-672-7640.

# Contacts

Russell Chazell  
301-415-7469  
[russell.chazell@nrc.gov](mailto:russell.chazell@nrc.gov)

Brian Newell  
301-415-4659  
[brian.newell@nrc.gov](mailto:brian.newell@nrc.gov)  
[lsnarp@nrc.gov](mailto:lsnarp@nrc.gov)

# Exhibit Submission Gap

Andy Welkie  
IT Specialist

Atomic Safety and Licensing Board Panel

---

---

# Exhibit Submission - Background

- Exhibits are documents or objects offered as evidence to support written or oral testimony
- 10 C.F.R. § 2.1001 Definitions.
  - LSN is “... the combined system that makes documentary material available electronically to parties...”
  - Electronic docket is “... the NRC information system that receives, distributes, stores, and retrieves the Commission's adjudicatory docket materials.” (i.e. EIE and EHD)
- 10 C.F.R. § 2.1013 Use of the electronic docket during the proceeding.
  - (b) “Absent good cause, all exhibits tendered during the hearing must have been made available to the parties in electronic form before the commencement of that portion of the hearing in which the exhibit will be offered.”
- 10 C.F.R. § 2.304 Pre-filed written testimony and exhibits.
  - (g) “... the written testimony of each individual witness or witness panel and each individual exhibit shall be submitted as an individual electronic file.”

---

# Exhibit Submission Gap

- High percentage of evidentiary material likely exists in the LSN with no automated mechanism to submit a document as an exhibit directly from the LSN to the Electronic Hearing Docket
- Re-entry of existing bibliographic information would be required resulting in higher labor effort and potential data entry errors
- Potentially significant participant labor effort to download documents from the LSN and submit through the Electronic Information Exchange

---

## Process to File an LSN Document as an Exhibit

*(If the Proceeding had Continued in 2011)*

1. Find the document(s) in the LSN
2. Download the document(s) and either
  - Use the entire document
  - Extract parts of the document
3. Place an exhibit number on each document
4. Log in to the Electronic Information Exchange
5. Fill out information regarding the exhibit
6. Submit each exhibit (100 MB aggregate file size limit per submission)
7. Receive a confirmation e-mail that the submission was successful
8. Add the exhibit(s) to an exhibit list and submit the exhibits list per Board instructions



---

## Potential Gap Closure Process to File an LSN Document as an Exhibit *(If the Proceeding were to Resume)*

1. Find the document(s) in the reconstituted/replacement LSN system
2. Add the document(s) to an exhibit cart by a to-be-determined selection method
3. For each document listed in the cart
  - Specify full document or specific pages
  - Provide an exhibit number
4. Submit the exhibit cart *(Each exhibit would have a system-generated cover sheet added that included party exhibit number, LSN accession number, title (from LSN header), etc.)*
5. Receive a confirmation e-mail that the documents in the cart were submitted
6. Download an exhibit list based on documents submitted from the exhibit cart

---

# Limitations

- Only for publically available documents contained in a reconstituted/replacement LSN system
- Header-only documents would be filed separately (likely as a non-public exhibit or physical exhibit)
- Non-LSN documents would be filed separately (e.g. pre-filed testimony or other non-discovery material)

---

# Options Applicability

- A possible capability for
  - Option 2 - Use of Existing Public ADAMS LSN Library
    - Alternative One - EIE System Modification
    - Alternative Two - Semi-Manual Process
  - Option 3 - Move to the Cloud
    - Alternative One - NRC Maintained Cloud-Based System
    - Alternative Two (a) - HLW Participant-Maintained Cloud-Based System with NRC Maintained Search Index
  - Option 4 - Rebuild the Original LSN
- Unlikely for
  - Option 1 - Traditional Discovery (unless decision made to enhance the public ADAMS LSN Library)
  - Option 3 - Move to the Cloud
    - Alternative Two (b) - HLW Participant-Maintained Cloud-Based System with Participant Maintained Search Index

---

# Clarifying Questions

- I. Clarifying Questions from LSNARP Members
  1. LSNARP Members in the Room
  2. LSNARP Members connected through GoToMeeting
  3. LSNARP Members on the Telephone
- II. Clarifying Questions from Members of the Public
  1. Members of the Public in the Room
  2. Members of the Public connected through GoToWebinar
    - “Raise Your Hand” - comment through audio
    - Typed “Questions” to be read by Facilitator
  3. Members of the Public on the Telephone

# Lunch Break

*Approximately 12:45 p.m. (EST)*

# Option 1

## Traditional Discovery

Paul Bollwerk, Administrative Judge  
Atomic Safety and Licensing Board Panel

---

# Background

- For Restarted Adjudication, a Principal Concern Will Be Ensuring Suitable Participant Access to Both Existing and New Documentary Material
- To Address This Concern
  - Is an Entirely New LSN-like Electronic System Necessary for All Materials
  - or
  - Will Traditional Discovery Methods Be Sufficient for New Documentary Material?

---

# Traditional Discovery Process (Background)

- 10 C.F.R. § 2.336 Details Document Discovery Procedures
- Requires Initial and Subsequent Periodic Document Disclosures
- Participants Must Provide a Copy or Description, by Category and Location, of Each Relevant Document
- Generally Implemented by Electronic Hearing Docket Filing of Document Lists, with Document Distribution Governed by Participant-established Protocols



---

# Option Assumptions

- Hearing Participants Will Have a Small Volume of New Discovery Material
- NRC Will Continue to Maintain the Public LSN Library for Existing Documentary Material

---

# General Description

- Public LSN Library Remains Source for Documentary Material Identified Prior to Adjudication's Suspension
- New Documentary Material Would Be Exchanged/Made Available to Adjudication Participants Via Traditional Discovery Methods

---

# Cost and Time Estimate

- Option Does Not Involve Implementation of New Information Technology System, So No Significant Additional Implementation Time or Cost Is Required

---

# Implementation Risk Factor Score

Option	Risk Score <i>Range: (6 – 54)</i>
Option 1 - Traditional Discovery	Not Applicable

Risk Factors: Acquisition, Technical Complexity, Technical Obsolescence, IT Policy, Technical Expertise, Standardization

---

# Pros/Cons

Pros	Cons
Immediate implementation	Members of the public may not have access to new documentary material
No/low implementation costs	HLW hearing participants would be required to distribute new documentary material to multiple other HLW hearing participants
	Any new documentary material would not be searchable electronically using a centralized search system
	New documentary material would lack a consistent/uniform numbering system
	No ability to modify or delete existing headers/documents currently available electronically in the Public LSN Library

# Rank Summary

Option	Cost	Time	Risk	Pros/Cons	Total
Option 1 - Traditional Discovery	1	1	1	7	10
Option 2 - Use of Existing Public ADAMS LSN Library / Alternative One - EIE System Modification	4	4	2	1	11
Option 2 - Use of Existing Public ADAMS LSN Library / Alternative Two - Semi-Manual Process	3	3	2	2	10
Option 3 - Move to the Cloud / Alternative One - NRC Maintained Cloud-Based System	5	5	4	6	20
Option 3 - Move to the Cloud / Alternative Two (a) - HLW Participant-Maintained Cloud-Based System with NRC Maintained Search Index	5	6	7	4	22
Option 3 - Move to the Cloud / Alternative Two (b) - HLW Participant-Maintained Cloud-Based System with Participant Maintained Search Index	2	2	5	4	13
Option 4 - Rebuild the Original LSN	7	7	6	3	23

---

# Comment and Discussion

## I. Comments from LSNARP Members

1. LSNARP Members in the Room
2. LSNARP Members connected through GoToMeeting
3. LSNARP Members on the Telephone

## II. Comments from Members of the Public

1. Members of the Public in the Room
2. Members of the Public connected through GoToWebinar
  - “Raise Your Hand” - comment through audio
  - Typed “Questions” to be read by Facilitator
3. Members of the Public on the Telephone

# Option 2

## Use of Existing Public ADAMS LSN Library

KG Golshan, Branch Chief  
Office of the Chief Information Officer  
Business Application Delivery Branch

---



---

# Option Assumptions

- For Alternative One - EIE System Modification
  - The total number of header/document actions will average *more than* 1000 per month for the duration of the HLW proceeding
- NRC will be the custodian of all discovery documents in the LSN for federal record keeping purposes

---

# General Description

- Two Alternatives
  - Alternative One - leverages the EIE System
  - Alternative Two - Semi-Manual Process
- Both Alternatives
  - Use the existing Public ADAMS LSN Library
  - No substantive changes made to the Public ADAMS LSN Library
  - Modifications and deletions are reflected in system generated list made available on the Public ADAMS LSN Library home page.

---

# Key Difference Between Alternatives

- Alternative One - EIE System Modification
  - Additions, deletions and modifications are initiated by using the EIE system
- Alternative Two - Semi-Manual Process
  - Additions, deletions and modifications are initiated by the submission of a CD/DVD

---

# Cost and Time Estimate

- Alternative One - EIE System Modification
  - Cost estimate
    - Initial cost: \$900K - \$1,525K
    - Annual Recurring cost: \$800K - \$1,500K
  - Time estimate: Between 8 and 15 months
- Alternative Two - Semi-Manual Process
  - Cost estimate
    - Initial cost: \$600K - \$1,100K
    - Annual Recurring cost: \$800K - \$1,500K
  - Time estimate: Between 7 and 12 months

Cost Rank : 4  
Time Rank : 4

Cost Rank : 3  
Time Rank : 3

---

# Implementation Risk Factor Score

Option	Risk Score <i>Range: (6 – 54)</i>
Alternative One - EIE System Modification	15
Alternative Two - Semi-Manual Process	15

Risk factors Acquisition, Technical Complexity, Technical Obsolescence, IT Policy, Technical Expertise, Standardization

---

# Common Pros/Cons

Pros	Cons
Relatively quick implementation	Additional costs associated with federal records responsibility for new headers/documents
Centralizes and a single repository	NRC will maintain the collections, but additional steps required for participants to make additions, deletions and/or to their collections
Leverages the current NRC investments	
Continues standardization of LSN accession numbering scheme	
Robust search engine built on IBM Watson	
Automated audit capabilities available for the entire collection	

---

# Unique Pros/Cons

- Alternative One - EIE System Modification

Pros	Cons
Allows for quick processing of large volumes of documents	Aggregate size of all headers/documents in a submission cannot exceed 100 megabytes

- Alternative Two - Semi-Manual Process

Pros	Cons
No submission size restrictions	Partial manual process with potential processing delays for large volumes of headers/documents

# Rank Summary

Option	Cost	Time	Risk	Pros/Cons	Total
Option 1 - Traditional Discovery	1	1	1	7	10
Option 2 - Use of Existing Public ADAMS LSN Library / Alternative One - EIE System Modification	4	4	2	1	11
Option 2 - Use of Existing Public ADAMS LSN Library / Alternative Two - Semi-Manual Process	3	3	2	2	10
Option 3 - Move to the Cloud / Alternative One - NRC Maintained Cloud-Based System	5	5	4	6	20
Option 3 - Move to the Cloud / Alternative Two (a) - HLW Participant-Maintained Cloud-Based System with NRC Maintained Search Index	5	6	7	4	22
Option 3 - Move to the Cloud / Alternative Two (b) - HLW Participant-Maintained Cloud-Based System with Participant Maintained Search Index	2	2	5	4	13
Option 4 - Rebuild the Original LSN	7	7	6	3	23



# Licensing Support Network Advisory Review Panel Meeting

## State of Nevada ADAMS LSN Problem List



Laurie Borski

Paralegal

Egan Fitzpatrick Malsch & Lawrence PLLC

Rockville, Maryland

February 27, 2018

# *General Concerns – 1*

- Too many significant error messages are encountered for a database that is so advanced in development.
- LSN DR D-2.1: “Sites must be provisioned to be able to satisfy not less than 500 web page requests per minute.” Does the ADAMS LSN have this capability?
- Has it been taken into consideration that there may be >200 users on ADAMS LSN at the same time and for an extended period of time during any hearing?

## *General Concerns – 2*

- Nevada asked several different people to conduct specific test searches on ADAMS LSN and the same problems became evident to all searchers at the same time.
- Quotation marks must be freshly typed in search boxes as those copied and pasted are disregarded.
- The ADAMS LSN feels very “clunky” to the end-user compared to other NRC and .gov websites, and litigation databases.

## *General Concerns – 3*

- Document preview windows do not always contain a “close” button to allow users to close the preview window.
- The computer problems experienced during the second ADAMS LSN webinar were reflective of user experience.
- NRC documents occasionally download with a default number that is not the LSN Number or the Participant Accession Number (NRC000012598, ML012060483, downloaded as 012060483).

# *Speed*

- Slow speed is an issue with ADAMS LSN, but not Web Based ADAMS.
- LSN DR D-2.2: “Sites must be provisioned to be able to deliver a web page or image page on average in not more than five seconds to a web browser located on the same LAN (Local Area Network) segment.”
- Most basic searches took 1 to 4+ minutes to return results.
- It took >2 minutes to narrow the results of a basic search.
- Default setting was used for number of entries displayed.
- Searches were generally fastest with LSN#.
- Our searches are more basic (broad) in order to discover what is on the LSN versus simply locating a particular document.

# *Printing search results*

- There is no one-click printing of search results.
- This is a major database software error.
- One-click printing of search results was available on the LSN.net.
- LSN IT said they “will explore it as a future option.”
- Printouts are used to memorialize search results and to make decisions on downloading or printing documents.
- Printouts are also used as exhibits and evidence by attorneys in a deposition, pleading, or at the licensing proceeding to illustrate the number of documents returned in a particular LSN search.

## *Users cannot cancel a request in progress*

- Applies to search requests, page scrolling, and refining searches.
- This is an issue because of the ADAMS LSN's slow speed; most basic searches and some advanced searches take 1 to 4+ minutes to perform.
- Web Based ADAMS has the ability to cancel a search in progress and it works well.

# *Scrolling through pages of search results*

- It took >10 minutes to scroll through 1,124 search results at 100 results per page.
- Scrolling through large search results stops at document 3,000 and the remaining pages display as “Results 0-0 of 11,342” with a blank page of search results; it matters not whether 25, 50, or 100 hits per page are displayed.
- All too often, an attempt to scroll results in repeated error messages.
- There is no ability to “page jump” through search results by typing in a desired page number to view.



# *Document preview*

- Documents could be previewed on LSN.net by clicking on the document title.
- There is no preview of the PDF document and no option to “view the PDF” in the “Action” dropdown. Clicking on the document title is most likely to download the document than to view it.
- Ability to preview a PDF listed in the search results has varied by user, not the internet browser used.
- The “File8” view of the document is text-only and not reliable enough to use when confirming a document search.

# *Facet Chart*

## **Facet Chart:**

- Has the same information as the Facet Tree.
- Merely “visualizes” search results shown in the Facet Tree.
- Does not allow scrolling down to see the entire listing for a given property.
- Facet Chart is not even mentioned in the LSN Quick Guide.
- LSN User Guide says “the facet chart allows you to visualize how many documents are available as meeting a certain criterion.”
- Facet Chart takes up too much real estate on the screen without providing any benefit.
- The Facet Chart often lags behind the current search, displaying the results from a previous search if the new search returns zero hits.

# *Facet Tree and Time Series*

## **Facet Tree:**

- “More Facets” displays for >15 facet results; smaller screen does not display all search results and slider does not fully operate past a certain point.
- LSN #s and Participant Accession #s listed in the Facet Tree are not in the same order as displayed in the list of document search results.

## **Time Series:**

- Has the same information as the Facet Tree.
- Merely “visualizes” search results shown in the Facet Tree.
- Time Series takes up too much real estate on the screen without providing any benefit.

# *Advanced search*

- The Advanced Search feature takes up most of the screen and does not retreat from the screen once “enter” is pressed, as in most search software.
- Users must manually click on “Hide Advanced” after every search or modification in order to see more than one line of the search results.
- When changing the “Field Query” property, the previous search term should disappear, but instead must be manually deleted each time.

# *Document dates – 1*

- Users should be aware that the original LSN database contained many document date errors that propagated to ADAMS LSN and cannot be changed.
- An advanced search for documents dated 01/01/1900-12/31/1901 returns 35,322 documents dated between 1899 and 1902.
- 11 of those documents are dated 12/31/1899.
- >3,000 of those documents are dated 12/31/1900 – I was unable to scroll past the 3,000th result due to database error.

## *Document dates – 2*

- A search for documents dated 12/31/1900 returns zero documents.
- DN2001470545, ALH.20040511.1644 displays as having a date of 12/31/1900 in the header, but the time series bar on the bottom of the screen shows a date of 01/01/1901.
- 3 documents are returned by searching for dates between 01/01/1902 and 12/31/1902; two of these documents are dated 12/31/1901 (HQZ.19870302.0500, ALK.20040511.7733); one is dated 09/01/1902 (HQZ.19870227.2511).

*Related records are listed in document properties but are not accessible*

- DN2002041330, ALH.20040617.5604 is a letter to the NRC SECY transmitting DOE's comments on a proposed rulemaking and has one listed related record, **ALG.20040617.8674**. The cover letter references Enclosure 1, "Comments on Proposed Revisions to the 10 CFR Part 2 Rule." Searches for the Participant Accession Number lists only one document: DN2002041330. Search on the title of the enclosure returned zero results.
- ALA.20070712.1698 has one related record, ALA.20070712.1697, which in turn has one related record, **ALA.20070712.1696**. Able to locate and download the first two records, but search results for the third record shows zero hits. A search using the document date of the first two documents yields 469 hits, none of which is the document. How should I search to locate the third related record if the Participant Accession Number is all I have? Does this mean the LSN Library is incomplete?
- DN2002468468, ALA.20070829.0827 has 9 related records, ALA.20070829.0828 through ALA.20070829.0836. Able to locate, verify and download 8 of the 9 with **ALA.20070829.0829** the lone holdout.

# *Document title searches*

- Basic Search for presentation entitled “LA Development Approach” (ALC.20040610.8938) yielded six documents, none of which was the correct document; the document’s LSN title is: “LA DEVELOPMENT APPROACH; LA Approach 0606b.ppt” so why did this not pop up during the initial search?
- Search for “Technical Guidance for License Application Planning (Plan B: Compliance-Focused Program)” got zero results. Next search for “Plan B: Compliance-Focused Program” got zero results. Third search for “Technical Guidance for License Application Planning” got 58 results, including 13 direct hits.



# *Searches – 1*

- If a document is not being returned in a search by Participant Accession Number, and that is the only information one has, then how is that document to be found?
- Advanced Search for known DOE document CCU.20071009.0009 (DN2002493055) by Participant Accession Number returned one result, which is the correct document (CCU.20071009.0009, DN2002493055); Basic Search on the PA# in quotes returned 8 documents, one is the correct document, and another has the PA# searched on listed as a “document number.”
- Basic Search by title of a known CNWRA paper “Supplemental Evaluation of Geophysical Information Used to Detect and Characterize Buried Volcanic Features in the Yucca Mountain Region” yielded seven results, three of which are the correct NRC documents (ML072290569, ML072290572, and ML072290575); the other four listings do not have any words highlighted in the search results and would have to be downloaded and searched to determine if they are relevant.

# Searches – 2

- Advanced search for a DOE document with title containing the words “TDMS\_Master\_3-28-07” (which was the entire title on the old LSN.net) returned one document (DN2002388002, ALA.20070530.0734) which is now entitled “CONCEPT OF OPERATIONS FOR THE YUCCA MOUNTAIN PROJECT TECHNICAL DATA MANAGEMENT SYSTEM VERSION 1.0 MARCH 31, 2007; TDMS\_Master\_3-28-07”; the abbreviated title on the LSN.net was used as an exhibit in 2007; the document profile does not indicate the document title was changed from the original LSN.net entry.
- Advanced Search for MOL.20070829.0046 by “Participant Accession Number” returned one hit; a Basic Search for MOL.20070829.0046 returned two hits and took 4+ minutes to perform; Advanced Search for MOL.20070829.0046 by “The exact phrase” returned two hits – and took 4+ minutes to perform. If one is attempting to perform a thorough search (as for all versions of a document to include those with marginalia) is there a more efficient way to perform this search?

# *Help Desk*

- Will there be a Help Desk for the LSN in a restarted proceeding that is similar to the DDMS/ EHD/ EIE Help Desk that existed during the original proceeding? That Help Desk was responsive and helpful.
- If there are no plans to include a robust Help Desk, then during a hearing at the Las Vegas facility in a restarted proceeding, users there would not have access to “live” IT assistance beginning at 1:00 p.m. local time.
- At present, the only way to report LSN errors is by going to the PDR Librarian, who then relays the information to the LSN IT technician. Response times are not usually same-day, and if the issue is one in which additional information has been requested from the user, there is no feedback unless the user specifically follows up to request it.

# *Help Desk Experiences – 1*

- After conducting a number of searches on the ADAMS LSN, I received a notice that my session had expired, and then a login screen was displayed. All functions were blocked and the only remedy was to exit the browser and start again; error reported; a few hours later, I was advised that the problem was cleared.
- On another occasion, I was caught in a loop between “preparing desktop” and the “Welcome to ADAMS Public LSN Search” page; error reported; two hours later, I was told to retry access.
- After conducting a search for documents, I discovered that I could not print the search results using normal methods and requested assistance. One week later requested follow up; the LSN IT response: “will explore it as a future option.” A cut-and-paste work around was provided two weeks later to the public via updated LSN FAQs, and then the following day was provided to me via email. Work around is not satisfactory.

# *Help Desk Experiences – 2*

- Received an error message when attempting to display 100 search results per page in a large number of search results; LSN IT confirmed they were able to replicate the error, were “actively looking into the cause of the error message” and suggested that I “narrow [my] search results by filtering on information source” because “the additional filtering criteria enables the search engine to more efficiently manage the search results, thus reducing the likelihood of generating the error message you received.”
- Received an error message when attempting to narrow the results by year, and received another error message when reporting to PDR via email form; PDR advised they were experiencing intermittent outages; two weeks after my report, the LSN IT technician responded that they were not able to recreate the error, and that the NRC network was not experiencing any network connectivity issues at the time of my report.
- The prior three reports were submitted on different dates but the responses from the LSN IT were all sent to me on the same day; are responses to users sent in batches, and/or is the LSN IT only on duty every other Friday?

# State of Nevada LSN Library Problems List

KG Golshan  
Tom Wellock

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# *Concerns Being Addressed*

- Error Messages
  - Returns greater than 3000 results.
- Dates and Time Zones

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# *Concerns That May be Addressed*

- Increased Computing Power
  - Site Traffic
  - Speed
  - Scrolling
- Page Jumping
- Canceling a Search
- Previewing in pdf
- Printing Search Results
- Index enhancement



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# Help Desk

If the adjudication is restarted and the LSN (or a functional equivalent) is reinstated, then a Help Desk will be established to support system users.

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# *Working with the Existing System*

- Preview Mode (text version)
  - Close Button
  - Avoid document downloads
- Document numbers and pdf names chosen by participants
- Facet Tree, Chart, and Time Series
  - Adjust windows or minimize
- Advanced Searches: Field Query terms

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## *Specific Search Concerns*

- Document Dates: Time Zones
- Accessing Related Records
  - Convert title search to basic search
  - Related record numbers supplied by participants

Break  
*(Enter Time)*

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# Comment and Discussion

## I. Comments from LSNARP Members

1. LSNARP Members in the Room
2. LSNARP Members connected through GoToMeeting
3. LSNARP Members on the Telephone

## II. Comments from Members of the Public

1. Members of the Public in the Room
2. Members of the Public connected through GoToWebinar
  - “Raise Your Hand” - comment through audio
  - Typed “Questions” to be read by Facilitator
3. Members of the Public on the Telephone

# Day One Wrap Up

**Break**  
*(Enter Time)*

**Optional ADAMS LSN Library  
Orientation to Follow Break**

# Licensing Support Network Advisory Review Panel Meeting

February 27 - 28, 2018

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# Agenda

## February 27, 2018

- Introductions
- Meeting Process & Overview
- Break
- Status of Yucca Mountain Adjudicatory Process
- History of the LSN and Introduction of LSN Reconstitution/Replacement Options Paper
- Status of EIE/EHD and Exhibit Submission Gap
- Lunch
- Option 1, Traditional Discovery
- Option 2, NRC ADAMS LSN Library
- Break
- Wrap-Up
- Break
- ADAMS LSN Library Orientation

## February 28, 2018

- Recap of Day One
- Recap of Meeting Process
- Option 3, Move to the Cloud
- Lunch
- Option 4, Rebuild the Original LSN
- Break
- Replacement/Reconstituted LSN Options Summary
- Comment and Discussion on All Options
- Member Views on Options
- Wrap Up/Path Forward

# Recap of Day One

# Recap of Meeting Process

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# Comment and Discussion

## I. Comments from LSNARP Members

1. LSNARP Members in the Room
2. LSNARP Members connected through GoToMeeting
3. LSNARP Members on the Telephone

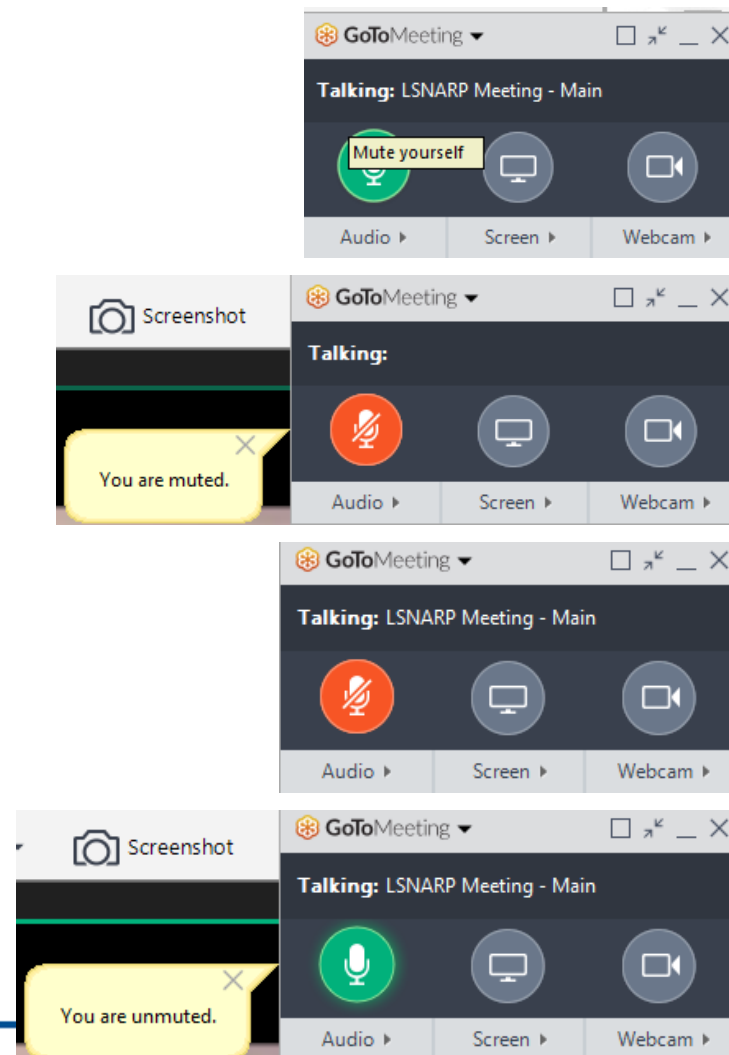
## II. Comments from Members of the Public

1. Members of the Public in the Room
2. Members of the Public connected through GoToWebinar
  - “Raise Your Hand” - comment through audio
  - Typed “Questions” to be read by Facilitator
3. Members of the Public on the Telephone

# GoToMeeting LSNARP Member Participation

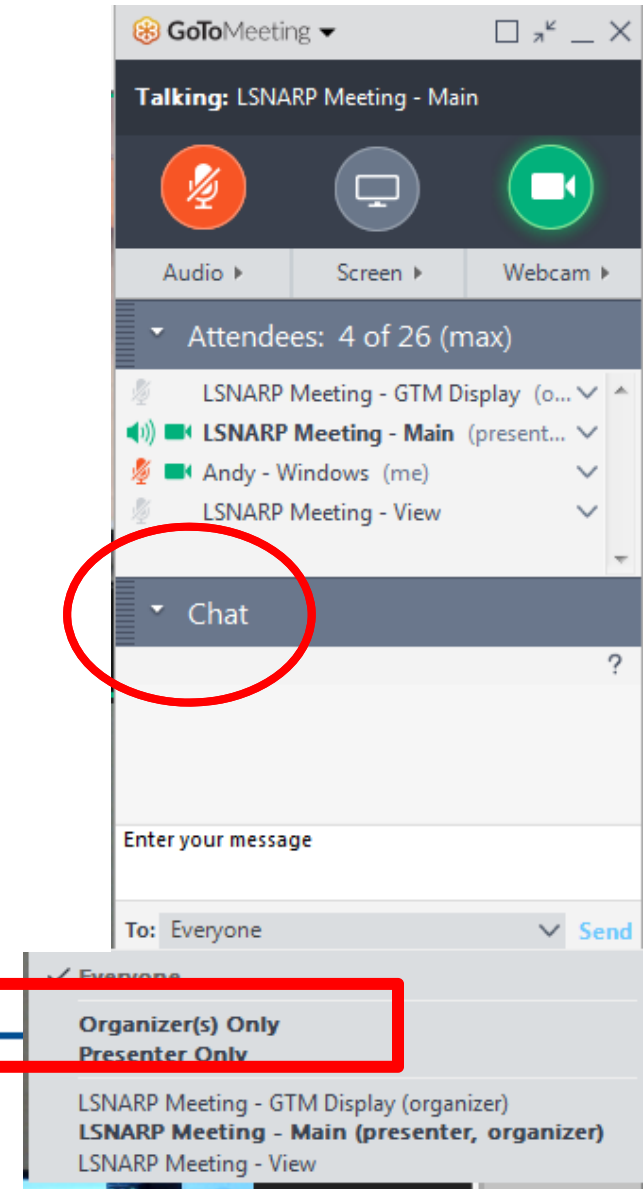
# GoToMeeting – Audio Mute/UnMute

- “Self” mute your audio by clicking on the microphone icon
- Unmute your audio when you are called
- Pause a moment before speaking as there is a brief delay when audio is unmuted



# GoToMeeting – Chat

- If you do not have a web camera or need to communicate with the IT staff, please use the chat feature
- Be sure to send chat requests to “Organizer(s) Only”

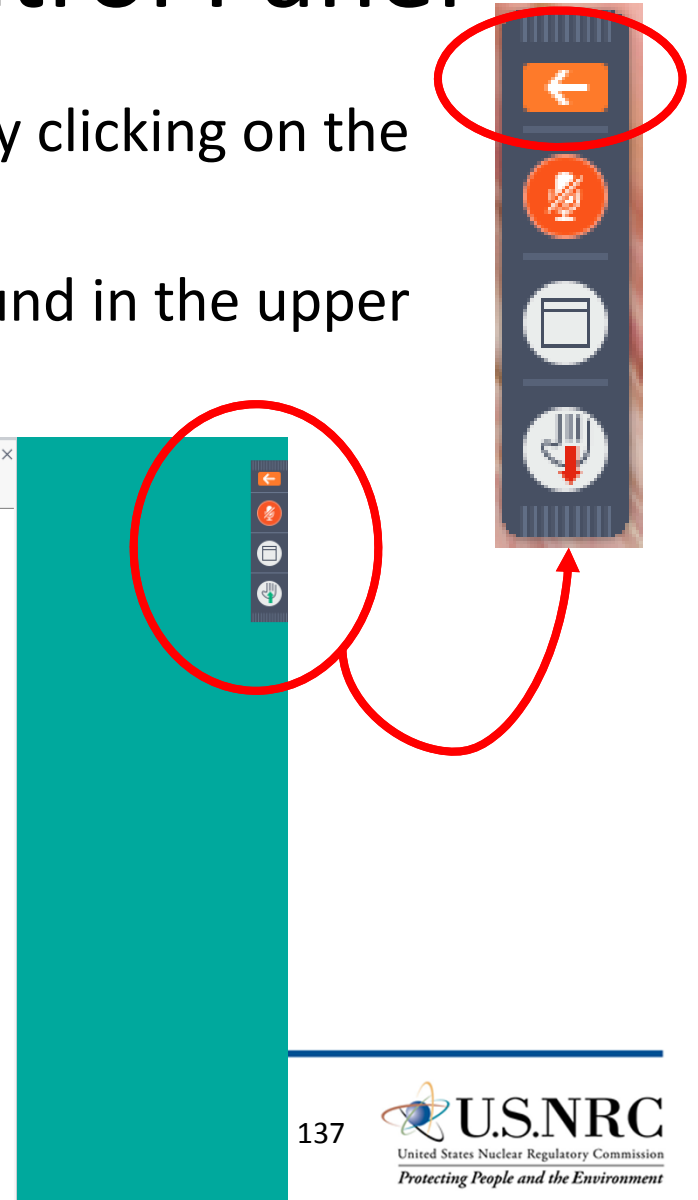
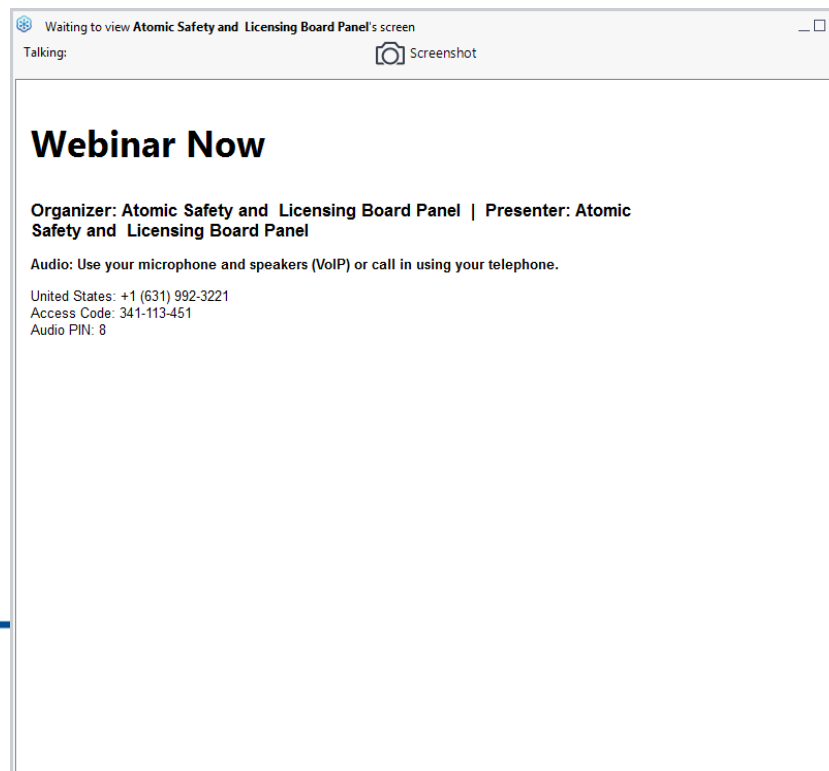


# GoToWebinar Public Participation Options



# GoToWebinar - Control Panel

- Open the GotoWebinar Control Panel by clicking on the “Orange” arrow
- The “Orange” arrow can typically be found in the upper right area of your computer screen



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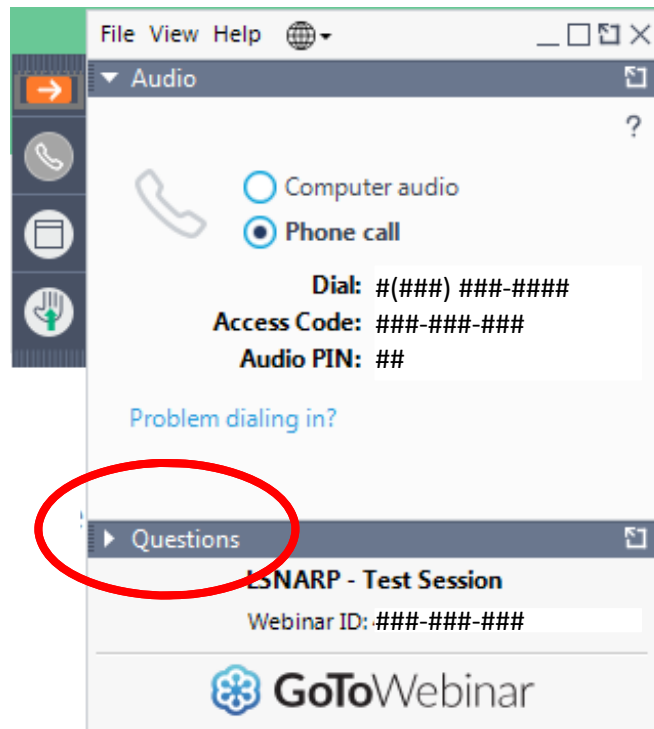
# Verbal Question

- If you are using your computer audio and have a microphone or are using the GoToWebinar provided phone number, you can ask a question verbally
- From the GoToWebinar tool bar, click on “Raise Your Hand”
- The hand will display an “Up Arrow”
- When it is time for public comments and you have “Raised” your hand, your audio connection will be unmuted

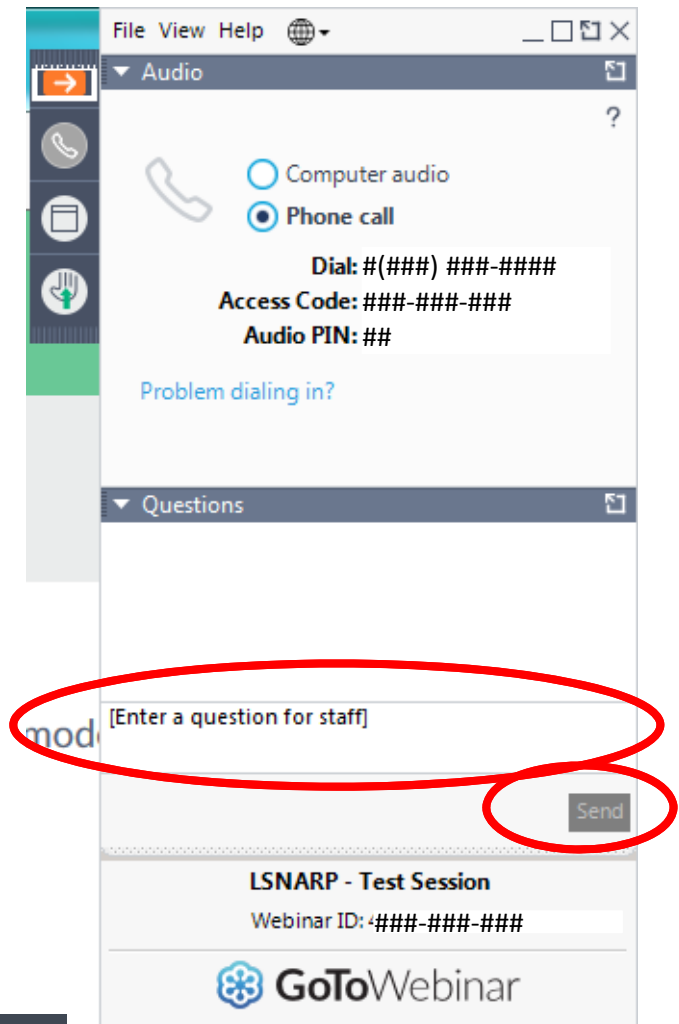


# Typed Question

Open the “Questions” panel



Type in your question and press “Send”  
iOS, Android, etc. display a Question Mark



# Option 3

## Move to the Cloud

KG Golshan, Branch Chief  
Office of the Chief Information Officer  
Business Application Delivery Branch

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# Option Assumptions

- NRC will decommission Public ADAMS LSN Library
  - Current copies of public LSN records will remain in possession of NRC for Federal records keeping purposes
- Any cloud-based solution provider must follow the guidelines set by Federal Risk and Authorization Management Program and shall be (FEDRamp) certified.

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# General Description

- Two Alternatives
  - Alternative One - NRC-Maintained Cloud-Based System
  - Alternative Two - HLW Participant-Maintained Cloud-Based System
    - a) NRC-Provided Search Portal
    - b) NRC-Maintained Web Page of Participant Links
- Both Alternatives
  - Move the headers/documents from the Public ADAMS LSN Library to cloud-based storage
  - Indexing, searching, and retrieval systems are cloud-based

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# Key Differences Between Alternatives

- Alternative One – NRC-Maintained Cloud-Based System
  - NRC manages cloud-based repository
  - The processes for additions, modifications, and deletions described in Option 2 (*Use of the Existing LSN Library*)
- Alternative Two - HLW Participant-Maintained Cloud-Based Storage or System
  - a) NRC-Provided Search Portal
    - Participants manage their own cloud-based repository/collection
    - NRC manages a centralized search engine (similar to original LSN)
    - Participants manage process for additions, modifications, and deletions
  - b) NRC-Maintained Web Page of Participant Links
    - Participants manage their own cloud-based repository
    - No centralized search engine
    - Participants manage process for additions, modifications, and deletions

---

# Cost and Time Estimate

- Alternative One – NRC-Maintained Cloud-Based System
  - Cost estimate (System Development)
    - Initial cost: \$1,200K - \$1,950K
    - Annual Recurring cost: \$1,100K - \$1,750K
  - Time estimate: Between 22 and 38 months

Cost Rank : 5  
Time Rank : 5



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# Cost and Time Estimate, cont'd

- Alternative Two - HLW Participant-Maintained Cloud-Based System

- a) NRC-Provided Search Portal

- System Development (NRC Search Portal)

- Initial cost: \$1,200K - \$2,000K
      - Annual Recurring cost: \$600K - \$1,100K
      - Time estimate: Between 24 and 42 months

**Cost Rank : 5**  
**Time Rank : 6**

- NRC Staff Collection (as a Participant)

- Initial cost: \$350K - \$600K
      - Annual Recurring cost: \$525K - \$900K
      - Time estimate: Between 16 and 28 months

- Non-NRC Staff HLW Participant Collections

- Initial cost: Undetermined
      - Annual Recurring cost: Undetermined
      - Time estimate: Undetermined

Time estimates are undetermined as each participant may have different IT policies in place for the procurement and implementation of an IT solution

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# Cost and Time Estimate, cont'd

- Alternative Two - HLW Participant-Maintained Cloud-Based System

- b) NRC-Maintained Web Page of Participant Links

- System Development (NRC Link Page)

- Initial cost: \$400K - \$675K
      - Annual Recurring cost: \$250K - \$425K
      - Time estimate: Between 4 and 7 months

**Cost Rank : 2**  
**Time Rank : 2**

- NRC Staff Collection (as a Participant)

- Initial cost: \$350K - \$600K
      - Annual Recurring cost: \$525K - \$900K
      - Time estimate: Between 16 and 28 months

- Non-NRC Staff HLW Participant Collections

- Initial cost: Undetermined
      - Annual Recurring cost: Undetermined
      - Time estimate: Undetermined

Time estimates are undetermined as each participant may have different IT policies in place for the procurement and implementation of an IT solution

# Implementation Risk Factor Score

Option	Risk Score <i>(Range: 6 – 54)</i>
Alternative One - NRC-Maintained Cloud-Based System	23
Alternative Two (a) - HLW Participant-Maintained Cloud-Based System with NRC-Provided Search Portal	29
Alternative Two (b) - HLW Participant-Maintained Cloud-Based System with NRC-Maintained Web Page of Participant Links	29
Risk factors Acquisition, Technical Complexity, Technical Obsolescence, IT Policy, Technical Expertise, Standardization	

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# Common Pros/Cons

Pros	Cons
Leverages current efficiency and scalability of cloud	Close coordination with all parties may be time consuming.
Takes advantage of existing Internet search and other cloud resources	
Allows for prompt processing of large volumes of documents	

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# Unique Pros/Cons

- Alternative One - NRC-Maintained Cloud-Based System

Pros	Cons
Continues standardization of LSN accession numbering scheme	Complexity of implementation
Locates documentary material in a single repository	Cost of developing centralized cloud-based search portal
Automated audit capabilities available for the entire collection	Additional costs associated with federal records responsibility for new headers/documents
	Rudimentary search capability, depending on the cloud offering
	Document header information <b>may</b> not be viewable
	Parties are required to keep their collections up-to-date in the cloud

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# Unique Pros/Cons, cont'd

- Alternative Two (a) - HLW Participant-Maintained Cloud-Based System with NRC-Provided Search Portal

Pros	Cons
Mimics original LSN concept and intent as decentralized, including cost shared by parties	Complexity and uncertainty of implementation
Continues standardization of LSN accession numbering scheme	Rudimentary search capability
No NRC records responsibility for new headers/documents	Document header information <b>may</b> not be viewable
Possibly a simpler process for a participant to make additions, modifications, or deletions to its collection	No automated audit capabilities for the entire collection

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# Unique Pros/Cons, cont'd

- Alternative Two (b) - HLW Participant-Maintained Cloud-Based System with NRC-Maintained Web Page of Participant Links

Pros	Cons
Simplified approach to maintenance of header/document collections	No consolidated search capability
No NRC records responsibility for new headers/documents	Document header information may not be viewable
Simpler process for a participant to make additions, modifications, or deletions to its collection	No standardization of LSN accession numbering scheme
	No automated audit capabilities for the entire collection

# Rank Summary

Option	Cost	Time	Risk	Pros/Cons	Total
Option 1 - Traditional Discovery	1	1	1	7	10
Option 2 - Use of Existing Public ADAMS LSN Library / Alternative One - EIE System Modification	4	4	2	1	11
Option 2 - Use of Existing Public ADAMS LSN Library / Alternative Two - Semi-Manual Process	3	3	2	2	10
Option 3 - Move to the Cloud / Alternative One - NRC Maintained Cloud-Based System	5	5	4	6	<b>20</b>
Option 3 - Move to the Cloud / Alternative Two (a) - HLW Participant-Maintained Cloud-Based System with NRC Maintained Search Index	5	6	7	4	<b>22</b>
Option 3 - Move to the Cloud / Alternative Two (b) - HLW Participant-Maintained Cloud-Based System with Participant Maintained Search Index	2	2	5	4	<b>13</b>
Option 4 - Rebuild the Original LSN	7	7	6	3	23



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# Comment and Discussion

## I. Comments from LSNARP Members

1. LSNARP Members in the Room
2. LSNARP Members connected through GoToMeeting
3. LSNARP Members on the Telephone

## II. Comments from Members of the Public

1. Members of the Public in the Room
2. Members of the Public connected through GoToWebinar
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3. Members of the Public on the Telephone

**Lunch Break Until 1:30 p.m. (EST)**

# Option 4

## Rebuild the Original LSN

Margie Janney  
Acting LSN Administrator

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# Assumptions

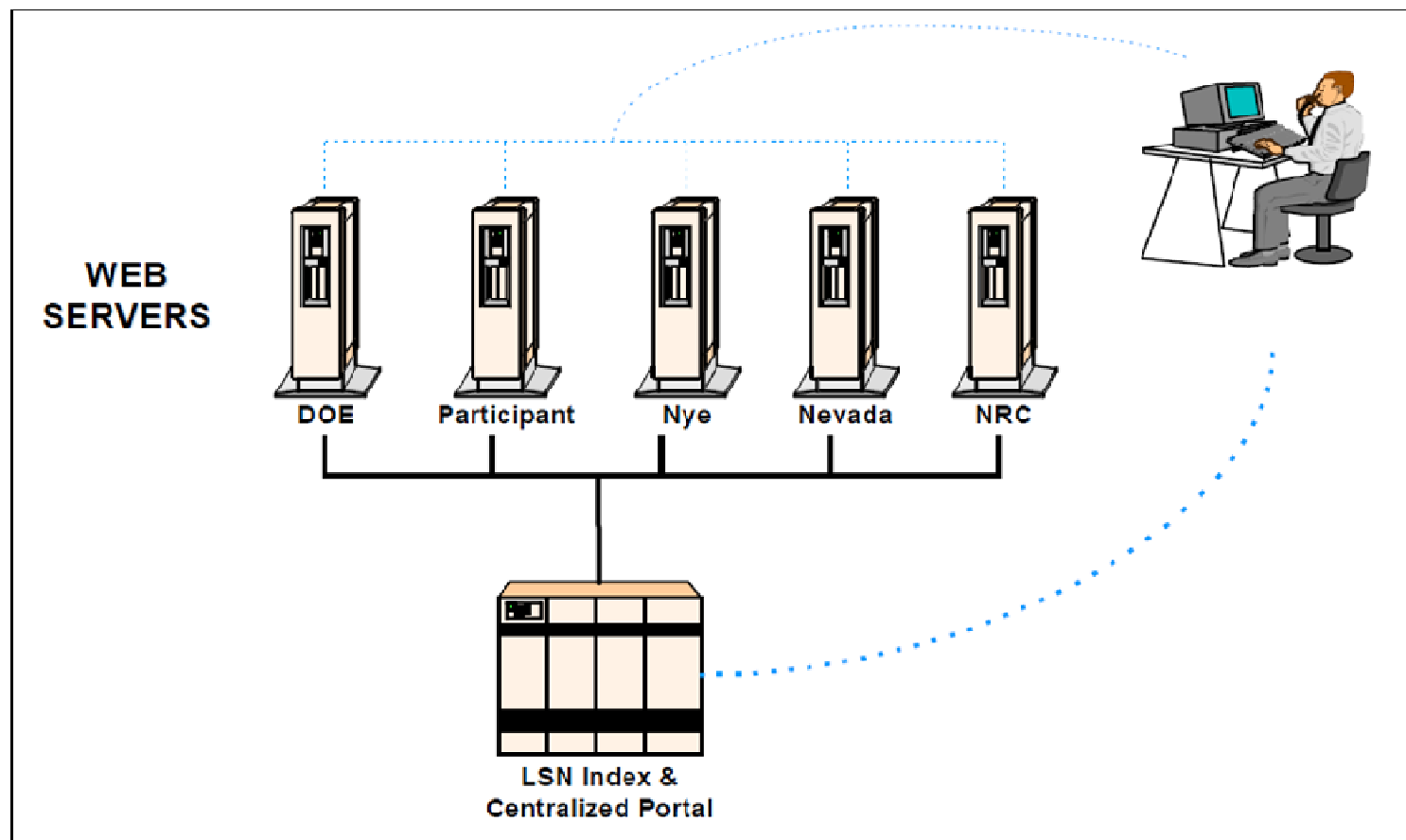
- Basis for development is Project Definition and Analysis Document for the LSN
- Participant web sites will be crawled by the LSN
- NRC will decommission ADAMS LSN Library
  - Copies of those records will remain in possession of NRC for Federal records management purposes

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# General Description

- Distributed system like Google
- 3 major functions:
  - Auditing
  - Indexing
  - Searching & retrieving
- 5 major subsystems
  - Fetch participant documents and headers
  - Audit participant sites
  - Search LSN content
  - Administer LSN
  - Access LSN web site

# General Depiction



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# Search and Retrieval

- NRC provides search interface
- Searches NRC-maintained index of participants' headers documents
- Search interface redirects user to the participant's collection to present the document for viewing.

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# Cost and Time Estimates

- Rebuild the Original LSN
  - System Development
    - Initial cost: Between \$2,600K - \$4,400K
    - Recurring cost: Between \$850K - \$1,500K
    - Time estimate: Between 30 and 42 months
  - Each HLW Participant Collection (Including the NRC Staff)
    - Initial cost: Undetermined
    - Recurring cost: Undetermined
    - Time estimate: Undetermined



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# Implementation Risk Factor Score

Option	Risk Score <i>Range: (6 – 54)</i>
Option 4 - Rebuild the Original LSN	31

Risk Factors: Acquisition, Technical Complexity, Technical Obsolescence, IT Policy, Technical Expertise, Standardization

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# Implementation Risk Factor Score

Risk Factor	Impact on Option	Likelihood of Occurrence	Risk Scores ( <i>Impact x Likelihood</i> )
Acquisition	High (3)	High (3)	9
Technical Complexity	Moderate (2)	Moderate (2)	4
Technical Obsolescence	Moderate (2)	Moderate (2)	4
IT Policy	High (3)	High (3)	9
Technical Expertise	Moderate (2)	Moderate (2)	4
Standardization	Low (1)	Low (1)	1
Total Score			31

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# Pros/Cons

Pros	Cons
Simpler process for a participant to make additions, modifications, or deletions to its collection	Extended implementation
Continues standardization of LSN accession numbering scheme	High cost
Robust search engine	Conflicts with Federal IT policy
Allows for prompt processing of large volumes of documents	

# Rank Summary

Option	Cost	Time	Risk	Pros/Cons	Total
Option 1 - Traditional Discovery	1	1	1	7	10
Option 2 - Use of Existing Public ADAMS LSN Library / Alternative One - EIE System Modification	4	4	2	1	11
Option 2 - Use of Existing Public ADAMS LSN Library / Alternative Two - Semi-Manual Process	3	3	2	2	10
Option 3 - Move to the Cloud / Alternative One - NRC Maintained Cloud-Based System	5	5	4	6	20
Option 3 - Move to the Cloud / Alternative Two (a) - HLW Participant-Maintained Cloud-Based System with NRC Maintained Search Index	5	6	7	4	22
Option 3 - Move to the Cloud / Alternative Two (b) - HLW Participant-Maintained Cloud-Based System with Participant Maintained Search Index	2	2	5	4	13
Option 4 - Rebuild the Original LSN	7	7	6	3	23

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# Comment and Discussion

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3. Members of the Public on the Telephone

# Replacement/Reconstituted LSN Options Summary

Margie Janney  
Acting LSN Administrator

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# Recap - High Level Overview

- Option 1 – Traditional Discovery
  - Existing public ADAMS LSN library used to access previously submitted documentary material
  - New material exchanged among the parties using traditional discovery methods
- Option 2 – Use of Existing Public ADAMS LSN Library
  - Uses the already developed existing public ADAMS LSN library
  - Intake/modification processes would be developed using the EIE or a semi-manual process
- Option 3 – Move to the Cloud
  - Previously submitted material moved from the existing public ADAMS LSN library to a cloud-based system
  - Intake/modification process moved to a cloud-based system for new material
- Option 4 – Rebuild the Original LSN

# Cost Estimate - Comparison

Option	Rank	System Development		NRC Staff (as a participant)		Non-NRC Staff Participant	
		Initial	Annual Recurring	Initial	Annual Recurring	Initial	Annual Recurring
Option 1 - Traditional Discovery	1	N/A*	N/A	N/A	N/A	N/A	N/A
Option 2 - Use of Existing Public ADAMS LSN Library Alternative One - EIE System Modification	4	\$900K - \$1,525K	\$800K - \$1,500K	N/A	N/A	N/A	N/A
Option 2 - Use of Existing Public ADAMS LSN Library Alternative Two - Semi-Manual Process	3	\$600K - \$1,100K	\$800K - \$1,500K	N/A	N/A	N/A	N/A
Option 3 - Move to the Cloud Alternative One - NRC Maintained Cloud-Based System	5	\$1,200K - \$1,950K	\$1,100K - \$1,750K	N/A	N/A	N/A	N/A
Option 3 - Move to the Cloud Alternative Two (a) - HLW Participant-Maintained Cloud-Based System with NRC Maintained Search Index	5	\$1,200K - \$2,000K	\$600K - \$1,100K	\$350K - \$600K	\$525K - \$900K	Unknown	Unknown
Option 3 - Move to the Cloud Alternative Two (b) -HLW Participant-Maintained Cloud-Based System with Participant Maintained Search Index	2	\$400K - \$675K	\$250K - \$425K	\$350K - \$600K	\$525K - \$900K	Unknown	Unknown
Option 4 - Rebuild the Original LSN	7	\$2,600K - \$4,400K	\$850K - \$1,500K	Unknown	Unknown	Unknown	Unknown

\*N/A indicates there are no applicable IT System development, implementation, or maintenance costs.



# Time Estimate - Comparison

Option	Rank	System Development	NRC Staff (as a participant)	Non-NRC Staff Participant
Option 1 - Traditional Discovery	1	N/A	N/A	N/A
Option 2 - Use of Existing Public ADAMS LSN Library Alternative One - EIE System Modification	4	8 Months to 15 Months	N/A	N/A
Option 2 - Use of Existing Public ADAMS LSN Library Alternative Two - Semi-Manual Process	3	7 Months to 12 Months	N/A	N/A
Option 3 - Move to the Cloud Alternative One - NRC Maintained Cloud-Based System	5	22 Months to 38 Months	N/A	N/A
Option 3 - Move to the Cloud Alternative Two (a) - HLW Participant-Maintained Cloud-Based System with NRC Maintained Search Index	6	24 Months to 42 Months	16 Months to 28 Months	Undetermined
Option 3 - Move to the Cloud Alternative Two (b) -HLW Participant-Maintained Cloud-Based System with Participant Maintained Search Index	2	4 Months to 7 Months	16 Months to 28 Months	Undetermined
Option 4 - Rebuild the Original LSN	7	30 Months to 52 Months	Undetermined	Undetermined

\*N/A indicates there is time required for IT System development, implementation, or maintenance.

# Risk Score - Comparison

Option	Rank	Risk Score (Impact x Likelihood)
Option 1 - Traditional Discovery	1	Not Applicable
Option 2 - Use of Existing Public ADAMS LSN Library Alternative One - EIE System Modification	2	15
Option 2 - Use of Existing Public ADAMS LSN Library Alternative Two - Semi-Manual Process	2	15
Option 3 - Move to the Cloud Alternative One - NRC Maintained Cloud-Based System	4	23
Option 3 - Move to the Cloud Alternative Two (a) - HLW Participant-Maintained Cloud-Based System with NRC Maintained Search Index	7	37
Option 3 - Move to the Cloud Alternative Two (b) -HLW Participant-Maintained Cloud-Based System with Participant Maintained Search Index	5	29
Option 4 - Rebuild the Original LSN	6	31

# Pros/Cons - Comparison

Option	Rank	Pros/Cons*
Option 1 - Traditional Discovery	7	-3
Option 2 - Use of Existing Public ADAMS LSN Library Alternative One - EIE System Modification	1	4
Option 2 - Use of Existing Public ADAMS LSN Library Alternative Two - Semi-Manual Process	2	3
Option 3 - Move to the Cloud Alternative One - NRC Maintained Cloud-Based System	6	0
Option 3 - Move to the Cloud Alternative Two (a) - HLW Participant-Maintained Cloud-Based System with NRC Maintained Search Index	4	2
Option 3 - Move to the Cloud Alternative Two (b) -HLW Participant-Maintained Cloud-Based System with Participant Maintained Search Index	4	2
Option 4 - Rebuild the Original LSN	3	1

\* Numeric score for system benefit determined by subtracting the number of Cons from the number of Pros.

# Rank Summary

Option	Cost	Time	Risk	Pros/Cons	Total
Option 1 - Traditional Discovery	1	1	1	7	10
Option 2 - Use of Existing Public ADAMS LSN Library / Alternative One - EIE System Modification	4	4	2	1	11
Option 2 - Use of Existing Public ADAMS LSN Library / Alternative Two - Semi-Manual Process	3	3	2	2	10
Option 3 - Move to the Cloud / Alternative One - NRC Maintained Cloud-Based System	5	5	4	6	20
Option 3 - Move to the Cloud / Alternative Two (a) - HLW Participant-Maintained Cloud-Based System with NRC Maintained Search Index	5	6	7	4	22
Option 3 - Move to the Cloud / Alternative Two (b) - HLW Participant-Maintained Cloud-Based System with Participant Maintained Search Index	2	2	5	4	13
Option 4 - Rebuild the Original LSN	7	7	6	3	23

# Member Views On Options

# Meeting Wrap Up and Path Forward