

## **Summary Highlights of NRC Training Session for Prospective Parties Who Plan to Submit Documents to the High-Level Waste Proceeding**

July 22, 2005  
Las Vegas, Nevada

### Description of Meeting

This meeting was the first training session provided by the U.S. Nuclear Regulatory Commission (NRC) to potential parties on submitting documents electronically to the High-Level Waste (HLW) proceeding. The purpose of this meeting was to discuss:

- Document submittal requirements and the guidance attached to the last revision of 10 CFR, Part 2, Subpart J
- Desk reference guide prepared by NRC on converting files to Portable Document Format (PDF)
- The types of support that NRC will provide
- The types of problems encountered to date.

The NRC also discussed its requirements related to submitting documents with hyperlinks and the preferred options for electronic signatures. Action items are detailed in the last paragraph of this document. The agenda and attendance list are provided as Attachments 1 and 2, respectively. Copies of the presenters' handouts and related materials are provided as Attachment 3. Highlights of the training session are discussed below.

### Meeting Summary

#### **1) Introduction**

The NRC provided an overview of the session and the information to be presented. The staff explained the training was geared to actual submitters and invited attendees to participate in testing, provide feedback, and ask questions. The training was conducted by the NRC's Office of Information Services staff and focused on the general process of submitting adjudicatory documents during the pre-hearing and hearing phases of the Department of Energy's (DOE) License Application (LA) review, should an application be submitted and accepted.

#### **2) Overview of the Document Submission Process**

The NRC staff provided a presentation consisting of background information and an overview of the submission process. The staff provided a high level graphic representation of the submission process entitled, "Electronic Submission Process". This graphic identifies the process as well as the Information Technology (IT) systems involved at each step. As part of the background presentation, NRC staff provided additional documentation that included 10 CFR Part 2, Subpart J and its revision.

#### **3) Electronic Information Exchange (EIE) Submittal Process**

The NRC staff provided a presentation on the EIE submittal process that allows the NRC to exchange material electronically with stakeholders and other Federal agencies via the

Internet. The staff discussed where potential parties can get instructions via the web site, how to request a digital ID Certificate, how to download the viewer for EIE forms, and how to submit documents. The staff presented examples of EIE forms, how to attach documents, how to check the service list, how to sign the document electronically, and how to submit the document. The staff then discussed receiving acknowledgement of service distribution messages and then how to retrieve documents using EIE.

The DOE asked a number of questions concerning EIE including:

- The number of messages being received from the Pre-Application Presiding Officer (PAPO)
- Who establishes the service list
- Access to Sensitive/Unclassified information
- Electronic signature
- Viewing a log of submitted documents
- The use of EIE for responses to request for additional information during the review of any potential license application.

The NRC staff stated that the Atomic Safety and Licensing Board Panel (ASLBP) order establishes the service list for submitted documents and then the judge will issue a specific order identifying individual access to Protective Order Files (POF). Staff also explained there was no log of who submitted which documents on EIE. All documents could be searched using the Electronic Hearing Docket (EHD). (See Action Items)

The State of Nevada and participating local governments had questions concerning:

- The deadline for submitting documents
- When all information would be available to the public
- Whether the NRC is using the same process involving submission of HLW adjudicatory documents via EIE
- Would the license application be placed on Licensing Support Network (LSN)
- Additional training.

The NRC staff stated that documentary material will be made available through the LSN, the NRC will be using the same process, and the (LA) will be submitted both on paper and Compact Disc (CD). (See Action Items)

The Las Vegas Paiute Tribe was concerned with compatibility of Macintosh computers to our systems for document access. (See Action Items)

Several participants questioned whether all documents submitted on EIE would also need to be submitted on the LSN. (See Action Items)

#### **4) How to Submit Large and/or Complex Documents**

The NRC staff provided a presentation on submission of large and complex documents. The staff provided a definition and also discussed file size limitations, multiple transmissions through EIE, courtesy copies of submissions and the content of large and complex documents. The NRC staff presented examples of transmittal letters and stepped through the process for submitting large and/or complex documents. The NRC provided copies of the rule and the accompanying guidance.

The State of Nevada and local governments had questions concerning public access to information on CD. The NRC staff stated that the public can request information through the NRC Public Document Room (PDR).

The DOE asked questions regarding the distribution of documents submitted to the NRC to those on DOE's "Courtesy Copy" list. The NRC staff stated that the submitter is responsible for ensuring copies were sent to anyone on its distribution list who are not NRC employees.

## **5) Guidance for Submission of Electronic Docket Materials**

The NRC staff provided a presentation on its Guidance for Submission of Electronic Docket Materials. This presentation included the framework for information usability and the reference for electronic document preparation. The NRC staff presented referenced file specifications, PDF requirements, byte serving, PDF parameter settings, PDF output options, alternative file format, file linkages (i.e. hyperlinks), resolution and size.

The DOE had questions on whether:

- JPEG was an acceptable alternative compression method
- The NRC will guarantee the integrity of a submission containing Sensitive Unclassified Information
- It is acceptable for a submission to contain hyperlinks to other documents.

There was also discussion concerning electronic signature. The NRC staff stated that we did guarantee the integrity of documents submitted using the PDF format. The NRC staff explained that the submitter should clearly identify Sensitive Unclassified Information in the transmittal letter and mark the information accordingly. Furthermore, it bears noting that Safeguards Information (SGI), classified information, and Restricted Data may not be submitted via EIE. NRC staff explained that the person who signed the document had to be the submitter if "Electronically Signed By" was included as part of the document. If "Original Signed By" was included as part of the document, then the submitter had to keep the original signed document. (See Action Items)

The State of Nevada and local governments asked if the (PDF) settings were the same for the LSN as those for EIE. (See Action Items)

## **6) Conversion of Files to PDF and NRC Support**

The NRC staff provided a presentation on the Desk Reference Guide to assist document submitters with converting documents to PDF in conformance with NRC's "Guidance for Submission of Electronic Docket Materials under 10 CFR Part 2, Subpart J". This guide provides correct configuration settings for different software applications used to generate a PDF file. The staff presented the software set up and configuration for Adobe Acrobat Distiller/PDFMaker and Adobe Preflight for Adobe Acrobat 7 Professional. The Desk Reference Guide also contains the configuration settings for Adobe Acrobat 5 and Adobe Acrobat 6 Professional. The NRC staff presented conversion information for Microsoft Word, searchable text (hidden text), and Preflight error tests. The final part of this presentation included Support and Contact Information.

## **7) Meeting Summary**

The NRC staff reviewed the action items. The staff also encouraged potential parties to participate in testing the EIE submission process and thanked everyone for their feedback and participation. The staff informed meeting participants and members of the public that a follow-up to the action items and the meeting summary would be provided to attendees. The meeting summary also will be posted on the NRC Internet web site.

The DOE, the State of Nevada, and local governments thanked NRC for providing the training and stated they would like to test the submission process.

## **8) Action Items**

1. Find out if JPEG compression is an acceptable alternative to ZIP compression.
2. Determine if navigational links between segmented files are acceptable to the NRC.
3. Confirm the NRC staff response that submitters are responsible for providing courtesy copies of submitted documents to individuals or agencies on submitter's distribution lists.
4. Additional training sessions:
  - Schedule an additional training session for potential document submitters in the Washington, D.C. area, and invite staff from the Nuclear Information Resource Services, Public Citizens, and the Natural Resources Defense Council.
  - Coordinate with the Lincoln and other Nevada counties to schedule additional training sessions for potential document submitters
  - Coordinate with the Local Paiute and Shoshone Indian Tribes to determine if there is a need for additional training.
5. Provide a response to DOE regarding the use of EIE for responses to requests for additional information during the review of any license application.
6. Check to see why parties on a service list were receiving dual emails with an attached PDF during the recent PAPO proceeding.
7. Check Macintosh compatibility for viewing documents from our web site.
8. Create a change history for the US Nuclear Regulatory Commission Desk Reference Guide for PDF Document Generation and a procedure to inform parties and potential parties of the changes.
9. Post Adobe and Pre Flight job options file on NRC's web site.
10. Provide additional information on the extent to which documents submitted via EIE may also need to be submitted to the LSN and provide further guidance on electronic signature process.

11. Determine if the PDF settings for LSN are the same as those for EIE.

ATTENDANCE LIST FOR NRC  
 NRC Training Session for Prospective Parties Who Plan  
 to Submit Documents to the High-Level Waste Proceeding  
 July 22, 2005

NAME	ORGANIZATION	TELEPHONE/E-MAIL ADDRESS
R. A. ATKINSON	BSC	702-274-7974 Richard-Atkinson@ymp.gov
MYRLE RICE	White Pine Lincoln Counties	702-263-6583
Chris Lapidike	DOE/Hunter & Williams	804-787-8926 clapidike@hunter.com
Harry Leake	DOE	702-794-1457 Harry-leake@ymp.gov
TIM GUNTER	DOE	702-794-1343 timothy.gunter@ymp.gov
Chris Howard	Inyo County	760-872-2904 choward@inyowater.org
Atef Elzeftawy	Las Vegas Paiute Tribe	LVPT 4 Paiute Dr. 89106 LV, NV
Paul Meacham	BSC	702-295-5601 paul_meacham@ymp.gov
Susan Lynch	State of Nevada	775-687-3744 SZELEE@nuc.state.nv.us
Judy Treichel	NV NWTf	702-248-1127 judynwtf@aol.com
IAN ZABARTE	W. SHOSHONE GOVT	(702) 879-3737 IANZABARTE@BIGFOOT.COM

ATTENDANCE LIST FOR NRC  
 NRC Training Session for Prospective Parties Who Plan  
 to Submit Documents to the High-Level Waste Proceeding  
 July 22, 2005

NAME	ORGANIZATION	TELEPHONE/E-MAIL ADDRESS
LEA RASURA	LINCOLN COUNTY NUC. OVERSIGHT	775-726-3511 jcciac@co.lincoln.nv.us
Vincent Everett	NRC Region IV	817 860 8198 JVE@NRC.GOV
Maggie Plusta	City of Las Vegas	702 229 5918 mplusta@lasvegasnevada.gov
Lynn Scattolini	NRC	301-415-8729 LBS@NRC.GOV
S. Tina Ghosh	NRC	301-415-5000 stgl@nrc.gov
LAWRENCE E. KASKA	NRC	301-415-7275 lek@nrc.gov
JOHN KUTZER	YMP	702-295-2551 john.kutzer@ymp.gov
Jake Wooley	OCRWM/DOE	702-821-7100 Jake.Wooley@ymp.gov
IRENE NAVIS	CLARK COUNTY <del>NRC</del>	702-455-5129 in@co.clark.nv.us
Calvin Meyers	Moapa Band of Paiutes	702 865 2077 moapa.paiute@hotmail.com
APRIL GIL	DOE/ORD	702 794-5578 april_gil@ymp.gov

ATTENDANCE LIST FOR NRC  
NRC Training Session for Prospective Parties Who Plan  
to Submit Documents to the High-Level Waste Proceeding  
July 22, 2005

NAME	ORGANIZATION	TELEPHONE/E-MAIL ADDRESS
<i>David Cummings</i>	<i>NRC</i>	<i>301-415-1520</i>



## AGENDA

### U.S. NUCLEAR REGULATORY COMMISSION (NRC) TRAINING SESSION FOR PROSPECTIVE PARTIES WHO PLAN TO SUBMIT DOCUMENTS RELATED TO THE PROCEEDING FOR THE PROPOSED HIGH-LEVEL WASTE REPOSITORY AT YUCCA MOUNTAIN

July 22, 2005

Pacific Enterprise Plaza  
Building No. 1  
3250 Pepper Lane  
Las Vegas, NV

9:30 AM – 3:30 PM (Pacific Time)

INTERESTED PARTIES MAY PARTICIPATE IN THE MEETING VIA TELECON BY CALLING  
1-800-638-8081, Passcode 7290# or 301-231-5539, Passcode 7290#.

1. Opening Remarks – Introduction
2. Background
3. 10 CFR Part2, Subpart J, Document Submission Requirements and Guidance
4. Desk Reference Guide for PDF document generation
5. Discussion of problems encountered to date, and any perceived problems
6. Questions
7. Necessary follow up actions

U.S. NRC Training Session for Prospective  
Parties Who Plan to Submit Documents to the  
High-Level Waste Proceeding  
July 22, 2005





# Disclaimer

Information contained herein is for informational and educational purposes solely and is not an endorsement of any product contained in these materials. Any copyrighted materials, referred to herein, are subject to the protections of copyright law.

# Opening Remarks and Introductions

John J. Linehan  
High Level Waste Business and Program  
Integrator  
(301) 415-7780  
JL2@nrc.gov





# Agenda

- **Overview of the Document Submission Process**
- EIE Submittal Process
- How to Submit Large and Complex Documents
- Guidance for Submission of Electronic Docket Materials
- Conversion of Files to PDF and NRC Support
- Discussion of Submitters' Concerns/Q&A's/Public Comments
- Closing Remarks/Follow-up Actions

# Overview of the Document Submission Process

Lynn B. Scattolini  
Office of Information Services  
(301) 415-8729  
[LBS@nrc.gov](mailto:LBS@nrc.gov)





# Office of Information Services (OIS)

- Responsible for assuring integration of all Information Technology/Information Management elements necessary to support the high-level waste (HLW) licensing process
- Provides help desk services to document submitters
- Processes adjudicatory documents in support of the HLW proceeding



# Background

- The Commission's regulations in 10 C.F.R. Part 2, Subpart J, provide for the use of an electronic information management system to provide documents related to the high-level radioactive waste (HLW) repository licensing proceeding





# Overview of the Process

- Party makes its documentary material available to the LSN for discovery
- Party converts its filing(s) to Portable Document Format (PDF)
- Party submits its filing(s) electronically via Electronic Information Exchange (EIE), if practical; otherwise, on optical storage media



# Overview of the Process

- E-mail, with link to EIE file(s), sent to service list for immediate access
- NRC enters submittal into its document management system and copies it to the Electronic Hearing Docket (EHD) and the Digital Data Management System (DDMS)
- Submittals are made available to the participants and the public through EHD, as appropriate



# Overview of the Process

- Majority of the documents can easily be transmitted via EIE
- NRC has a help desk to support parties who are submitting documents; during pre-licensing phase, # is 1-800-397-4209
- NRC has reference librarians to assist the public in retrieving documents (the PDR)



# Agenda

- Overview of the Document Submission Process
- **EIE Submittal Process**
- How to Submit Large and Complex Documents
- Guidance for Submission of Electronic Docket Materials
- Conversion of Files to PDF and NRC Support
- Discussion of Submitters' Concerns/Q&A's/Public Comments
- Closing Remarks/Follow-up Actions

# EIE Submittal Process

Ron Deavers

Office of Information Services

(301) 415-7301

RXD@NRC.GOV





# EIE Submittal Process

- Instructions provided on the NRC web site at [www.nrc.gov/site-help/eie.html](http://www.nrc.gov/site-help/eie.html)
- Request a Digital ID Certificate
- Download the viewer for EIE forms
- Quick Start Guide
- How to submit documents



# How to Submit Documents

- On the NRC web site at [www.nrc.gov/site-help/eie.html](http://www.nrc.gov/site-help/eie.html), choose the link titled [High-Level Waste Hearing Submittals Under 10 CFR Part 2, Subpart J](#) (under the “Document Submittal sub-heading)
- Enter your private key at the prompt
- Select the ASLBP number from the list presented



# How to Submit Documents

## Complete the EIE Form

**High Level Waste Submittal Form**

Hearing Form

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ASLBP #	<input type="text" value="E2E Test"/>	LSN #	<input type="text"/>
Author Name	<input type="text"/>	Document Date	<input type="text"/>
Author Affiliation	<input type="text"/>	Document Title	<input type="text"/>
Document Type	<input type="text" value="Select a Type"/>		
Panel Judges	<input type="text"/>	Party Identifier	<input type="text"/>
Service List	<input type="text" value="Click For Service List &gt;&gt;"/>		

Check if this is part of a multi-part submission  
[Select A Bundle](#)   
 Check if this is the final part of your multi-part submission.  
(For example, Part 3 of 3)

---







# How to Submit Documents

## Check the Service List

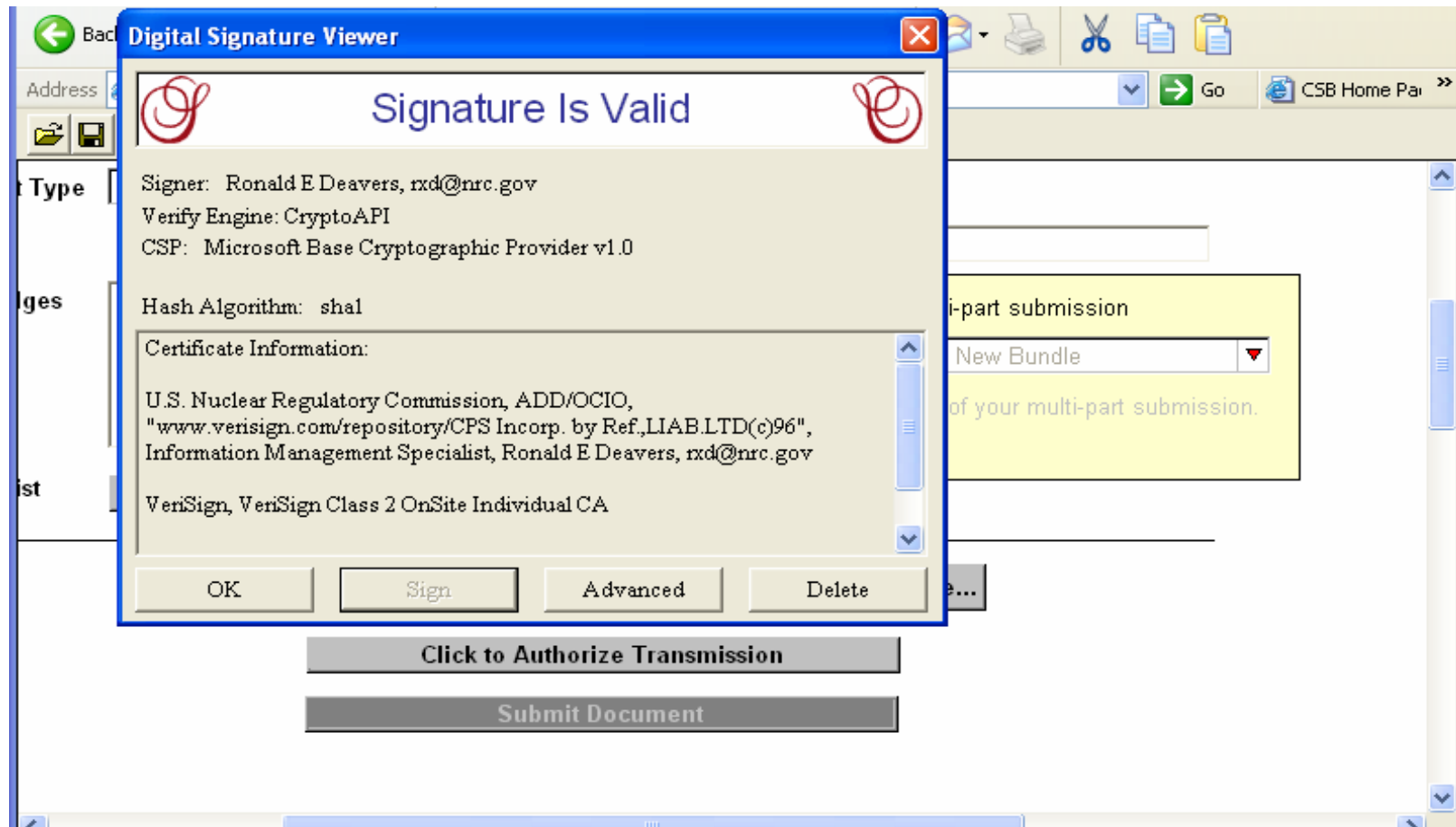
<< Back to Main Form    Check All Spelling

**Service List Recipients**    \* Note: All EIE submittals are sent to the Office of the Secretary and NRC's Document Processing Center

Last Name	First Name	Email	Notify
Crouse	Ray	rwc2@nrc.gov	<input checked="" type="checkbox"/>
Deavers	Ron	rxid@nrc.gov	<input checked="" type="checkbox"/>
DeWoody	Beth	ecd@nrc.gov	<input checked="" type="checkbox"/>
Hall	Pat	pth@nrc.gov	<input checked="" type="checkbox"/>
Hearing Docket	Hearing Docket	hearingdocket@nrc.gov	<input checked="" type="checkbox"/>
Hung	Daniel	dhung@iasys.com	<input checked="" type="checkbox"/>
Ishmael	Bill	wfi@nrc.gov	<input checked="" type="checkbox"/>
Julian	Emile	elj@nrc.gov	<input checked="" type="checkbox"/>
Pomykala	Dan	dpp@nrc.gov	<input checked="" type="checkbox"/>



# How to Submit Documents Sign the Document





# How to Submit Documents

## Submit the Document

Hearing Form

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ASLBP #	<input type="text" value="E2E Test"/>	LSN #	<input type="text"/>
Author Name	<input type="text" value="Author name"/>	Document Date	<input type="text" value="07/22/2004"/>
Author Affiliation	<input type="text" value="NRC"/>	Document Title	<input type="text" value="Demonstration Document"/>
Document Type	<input type="text" value="Legal-Board Notification"/>		
Panel Judges	<input type="text"/>		
Service List	<input type="text" value="Click For Service List &gt;&gt;"/>		
	<input type="checkbox"/> Check if this is part of a multi-part submission		
	Select A Bundle <input type="text" value="New Bundle"/>		
	<input checked="" type="checkbox"/> Check if this is the final part of your multi-part submission. (For example, Part 3 of 3)		

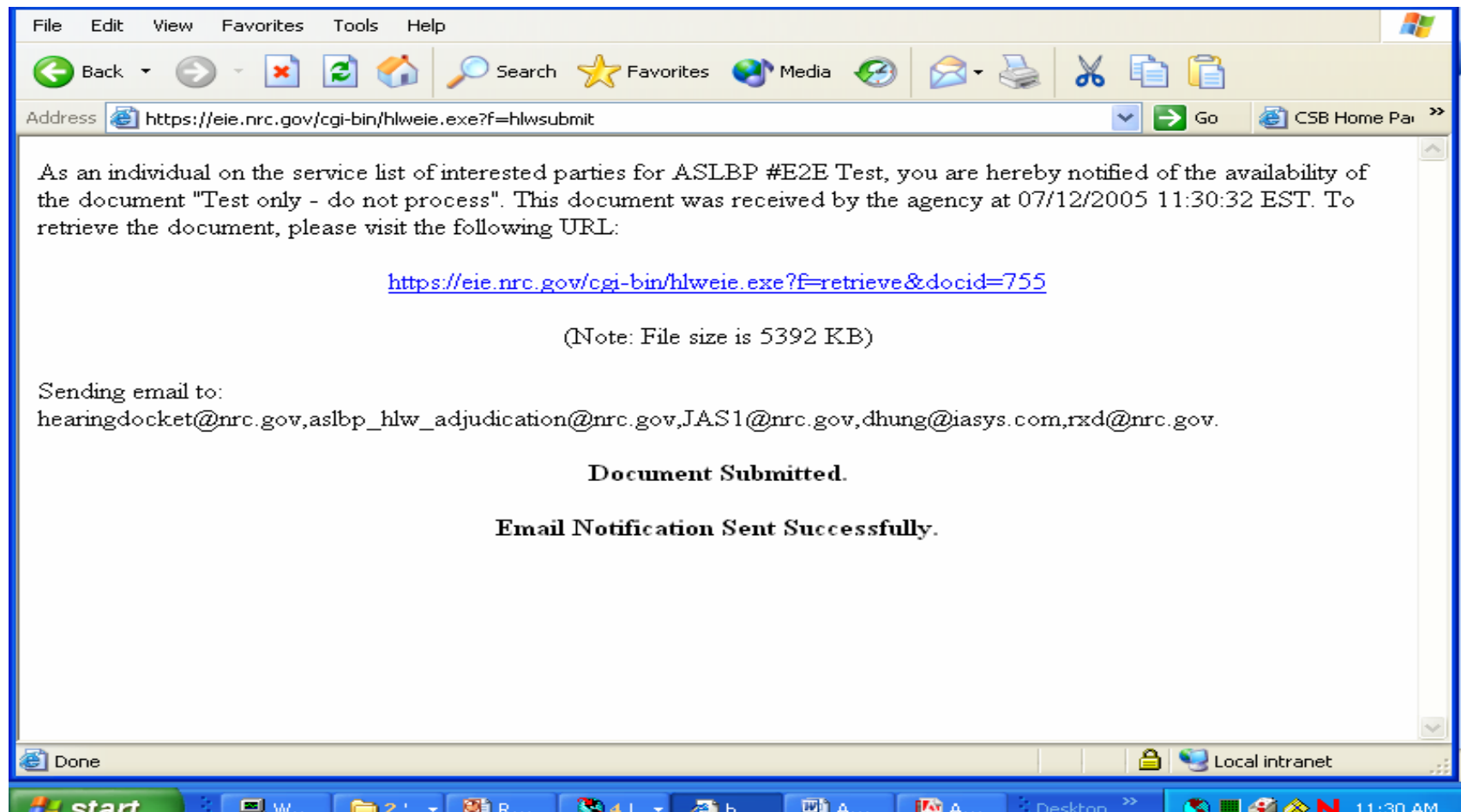
---

<input type="button" value="Attach File..."/>	<input type="button" value="Save File..."/>	<input type="button" value="View..."/>	<input type="button" value="Remove File..."/>
<input type="text" value="Ronald E Deavers, rxd@nrc.gov"/>			
<input type="button" value="Submit Document"/>			

8.5 x 11 in <

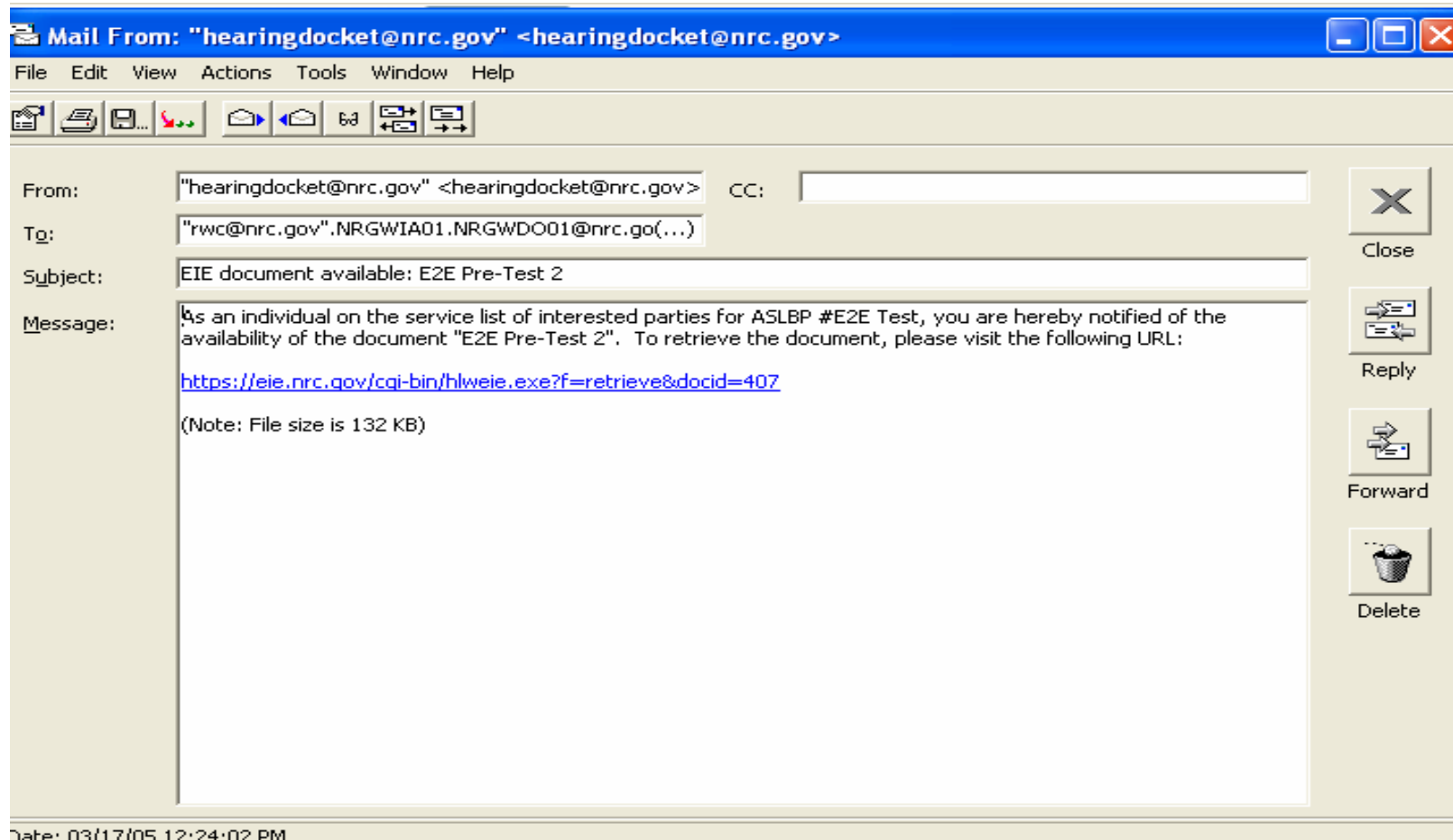


# How to Submit Documents Receive Acknowledgement Message





# How to Submit Documents Receive Service Distribution Message





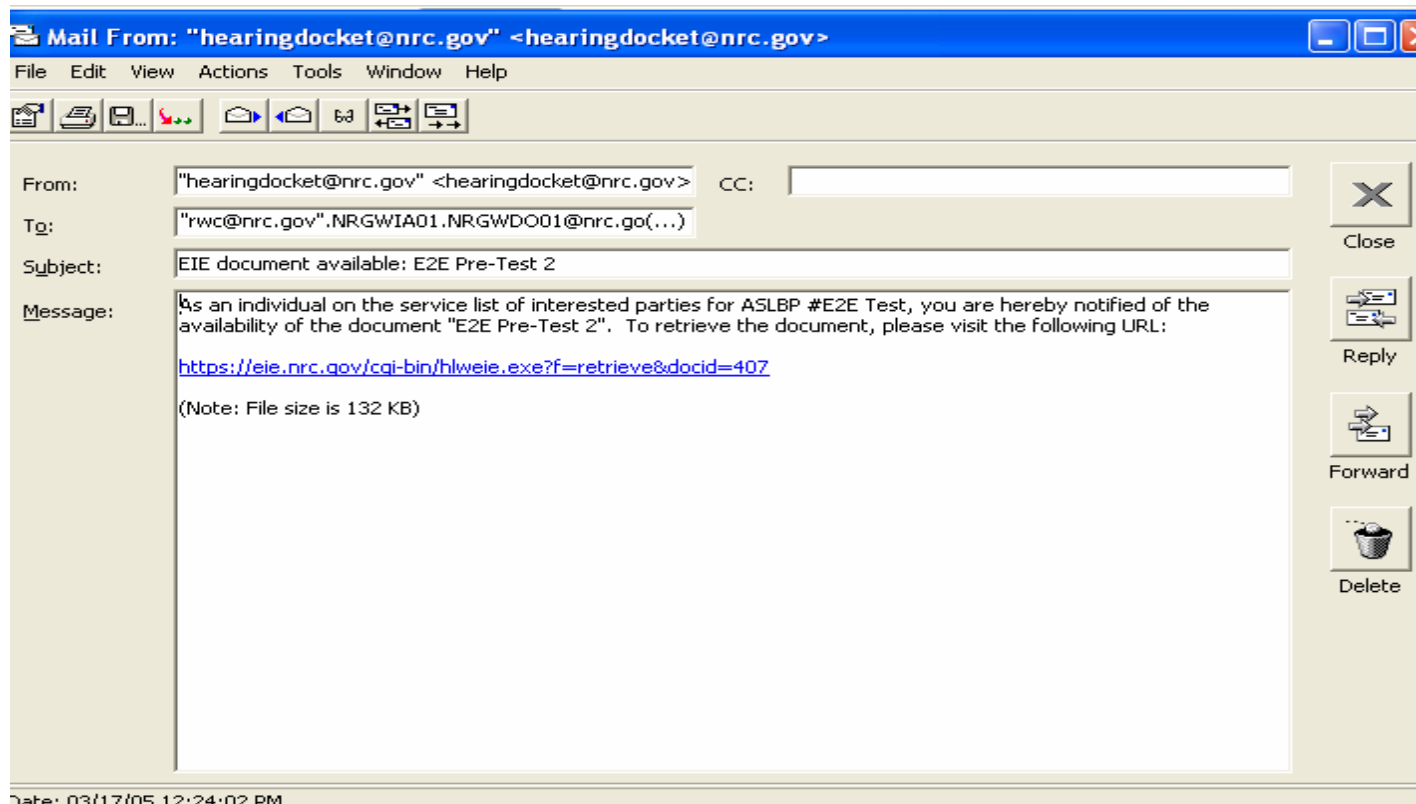
# EIE Submittal Process Summary

- Process developed and implemented provides:
  - Secure, consistent document delivery
  - Complete or partial service for the proceeding
  - Attachment of single or multiple files
  - Electronic Signature



# How to Retrieve Documents Using EIE

- Click on the url



- Enter your private key at the prompt





# How to Retrieve Documents Using EIE

- Click on “View” to display the file online

Hearing Form

ASLBP #	<input type="text" value="E2E Test"/>	LSN #	<input type="text"/>
Author Name	<input type="text" value="Author name"/>	Document Date	<input type="text" value="07/22/2004"/>
Author Affiliation	<input type="text" value="NRC"/>	Document Title	<input type="text" value="Demonstration Document"/>
Document Type	<input type="text" value="Legal-Board Notification"/>		
Panel Judges	<input type="text"/>		
Service List	<input type="text" value="Click For Service List &gt;&gt;"/>		
<input type="checkbox"/> Check if this is part of a multi-part submission			
Select A Bundle <input type="text" value="New Bundle"/>			
<input checked="" type="checkbox"/> Check if this is the final part of your multi-part submission. (For example, Part 3 of 3)			

8.5 x 11 in <<

- Click on “Save File” to save the file to your computer



# Agenda

- Overview of the Document Submission Process
- EIE Submittal Process
- **How to Submit Large and Complex Documents**
- Guidance for Submission of Electronic Docket Materials
- Conversion of Files to PDF and NRC Support
- Discussion of Submitters' Concerns/Q&A's/Public Comments
- Closing Remarks/Follow-up Actions

# How to Submit Large and/or Complex Documents

Lynn B. Scattolini  
Office of Information Services  
(301) 415-8729  
LBS@nrc.gov





# How to Submit Large and/or Complex Documents

- Rule issued on 4/14/89 required that all filings be “**transmitted electronically**”
- Majority of the documents are small, textual files that can easily be transmitted via EIE
- A small number are either large and/or complex



# Large Documents

- Large documents consist of electronic files that, because of their size, create challenges for both the NRC staff, potential parties and the public when transmitting, viewing, or downloading the document
- Could contain embedded photographs, tables, and other graphics



# Complex Documents

- Complex documents consist (entirely or in part) of electronic files having substantial portions that are neither textual nor image in nature, and are very large files that cannot be logically divided.
- Could include maps, executable programs and audio or video files



# Complex Documents

- Due to their file size, complex documents may preclude easy transmission, retrieval, and use; or
- May require specialized software and/or hardware for faithful display and subsequent use



# How to Submit Large and/or Complex Documents

- NRC performed electronic submission, download, and retrieval tests to establish optimal file size standard





# Large Documents

- Textual- or graphic-oriented files
- Greater than 50 Mbytes (cumulative)
- Use multiple EIE transmissions # 50 Mbytes each and include transmittal letter with first transmission
- Provide a courtesy paper copy of the transmittal letter and the complete submission on optical storage media via delivery service



# Complex Documents

- Combination of electronic objects
- Any size
- Use dual submission method
  - Transmittal letter and all electronic PDF files # 50 Mbytes
  - Paper copy of transmittal letter with entire submission on optical storage media via expedited deliver service



# Content of Transmittal Letter

## Basic Information – First Page

- Organization and/or individual name/address (author)
- Docket number (WM-00011)
- Subject line
- Request for withholding from public disclosure (if appropriate)



# Content of Transmittal Letter

## Basic Information – Last page

- A complete listing of the document components that make up the submittal in the order in which they appear in the document
- If applicable, the total number of optical storage media submitted
- A detailed statement of any deviation from PDF
- A disclaimer statement for each file that may have links to another file(s) or the Internet
- A list of parties served with the submission



# Content of Transmittal Letter

## List of Document Components

- Include filename and size of file
- Sensitivity level (e.g., publicly available, proprietary)
- Indicate if component submitted via EIE and/or optical storage media
- Associated LSN number (if applicable)
- Description for alternative file formats (audio, video files, etc) or physical objects



# Example of Alternative File Format Description

## **004 Analytical Code Used for DOE Site Characterization Plan, Chapter 4 Groundwater Level Analysis (Description submitted via EIE) LSN-DEN004567823**

This enclosure provides the analytical code used for the analysis of information presented in Chapter 4 of DOE's Site Characterization. Code is run on a UNIX PC utilizing ABC operating system.



# Example of Physical Object Description

## **005 Core Sample 3, Area 16 (Description submitted via EIE)**

Core Sample 3 was taken from Area 16 on the southeastern slope of Yucca Mountain and displays strata from . . . . .



# Example of Alternative File Format Description

## **006 Videotape of MMDDYYYY Meeting to Discuss Core Sample Evaluations (Description submitted via EIE, video file submitted on optical storage media) LSN-DEN000987654**

This is a video recording of the MMDDYYYY meeting between the U.S. Department of Energy, the Center for Nuclear Waste Regulatory Analyses, and the U.S. Nuclear Regulatory Commission to discuss procedures used to perform core sample evaluations of Area 22 on the southwestern slope of Yucca Mountain.

### **Technical Parameters/Special Instructions**

This video file was created using XXX software running on a 900 MHz personal computer utilizing Windows XP Video Viewer 123, which is widely available for free on the Internet. File size is 236 MB. Total run time is approximately 1 hour and 20 minutes.



# Large Submittal Transmittal Letter Example

United States Department of Energy  
Office of the General Counsel  
Hearing Division  
Washington, DC 20585

September 18, 2005

United States Nuclear Regulatory Commission  
Atomic Safety and Licensing Board  
Attn: Document Control Desk  
11555 Rockville Pike  
Rockville, MD 20852

WM-00011(PRE)

Enclosed are DOE's Response to Interrogatories Related to Quality Control Procedures

Questions concerning this submittal may be directed to:  
US Department of Energy  
Hearing Division  
Attn: S. Smith (202) 555-xxxx  
e-Mail: SESmith@usdoe.gov  
Washington, DC 20585

J. Doe, Attorney for DOE

cc: Provide list of parties served

**Document Components:**

001 DOE Transmittal Letter.pdf 1024 bytes (EIE)  
002 Evaluation Quality Control (1 of 4).pdf 48,321,678 bytes (EIE)  
003 Evaluation Quality Control (2 of 4).pdf 47,421,178 bytes (EIE)  
004 Evaluation Quality Control (3 of 4).pdf 49,223,167 bytes (EIE)  
005 Evaluation Quality Control (4 of 4).pdf 37,522,178 bytes (EIE)

# Complex Submittal Transmittal Letter Example

United States Nuclear Regulatory Commission  
Office of the General Counsel  
Hearing Division  
Washington, DC 20555

September 30, 2005

United States Nuclear Regulatory Commission  
Atomic Safety and Licensing Board  
Attn: Document Control Desk  
11555 Rockville Pike  
Rockville, MD 20852

WM-00011(PRE)

Enclosed are NRC Motion in Support of DOE's Site Characterization Plan - Estimates on Groundwater Travel in Area 16 of the Yucca Mountain Facility and Notice of Appearance for J. Jones, Esq.

Questions concerning this submittal may be directed to:  
United States Nuclear Regulatory Commission  
Office of the general Counsel  
Hearing Division  
Attn: Jane Doe, (301) 415-xxxx  
e-Mail: xxx@nrc.gov  
11555 Rockville Pike  
Rockville, MD 20852

Jane A. Doe, Attorney for the NRC

cc: Provide list of parties served

# Complex Submittal Transmittal Letter Example (Cont.)

## **Document Components:**

001 NRC Transmittal Letter.pdf 1024 bytes (EIE)  
002 NRC Motion in Support of DOE Analysis.pdf, 15,679,411 bytes (EIE)  
003 Notice of Appearance for J. Jones, Esq.pdf, 1,056,911 bytes (EIE)  
004 Description Analytical Code DOE Site Plan.pdf, 142,846 bytes (EIE), LSN-#####  
005 Description Core Sample 3.pdf, 1,032,116 bytes (EIE), LSN-#####  
006 Description Video - Jan. 21, 2003.pdf, 156,936 bytes (EIE), LSN-#####

## **OSM#1:**

Located in the OSM root:

000 Table of Contents.pdf

Located in the "documents" folder:

001 NRC Transmittal Letter.pdf 1024 bytes (EIE)  
002 NRC Motion in Support of DOE Analysis.pdf, 15,679,411 bytes (EIE)  
003 Notice of Appearance for J. Jones, Esq.pdf, 1,056,911 bytes (EIE)  
004 Description Analytical Code DOE Site Plan.pdf, 142,846 bytes (EIE), LSN-#####

## **Document Components: cont'd**

005 Description Core Sample 3.pdf, 1,032,116 bytes (EIE), LSN-#####  
006 Description Video - Jan. 21, 2003.pdf, 156,936 bytes (EIE), LSN-#####

## **OSM#2**

Located in the OSM root:

000 Table of Contents.pdf

Located in the "Analytical Code" folder:

001 DOE Site Characterization Plan Analysis.exe 123,311,123 bytes, (Description submitted via EIE) LSN-#####

Located in the "Video" folder:

002 Video Recording of Jan. 21, 2003 Meeting.wmv, 236,561,440 bytes, (Description submitted via EIE), LSN-#####



# How to Submit Large and/or Complex Documents

- A filing of a complex or a large document is not complete until all portions of the document have been submitted



# Other Submission Requirements

- Must have a minimum resolution of 300 dots per inch, with limited exceptions
- Must be in the appropriate PDF output formats, with rare exceptions
- Must not rely on hyperlinks to other documents or web site or to another PDF for completeness of a filing.
- Must be free of author-imposed security restrictions



# Other Submission Requirements

- NRC considered comments from LSNARP in developing proposed rule changes that incorporate submission requirements and accompanying guidance document
- NRC issued proposed rule changes and accompanying guidance on 11/26/03 and final on 6/14/04



# Content of Rule

- Commission stated most important technical standards for participants in Section 2.1013c(1) of the final rule, while including the majority of the detailed technical specifications in the guidance document



# Agenda

- Overview of the Document Submission Process
- EIE Submittal Process
- How to Submit Large and Complex Documents
- **Guidance for Submission of Electronic Docket Materials**
- Conversion of Files to PDF and NRC Support
- Discussion of Submitters' Concerns/Q&A's/Public Comments
- Closing Remarks/Follow-up Actions



# Guidance for Submission of Electronic Docket Materials

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*Attachment 3*



# Overview

- “Guidance for Submission of Electronic Docket Materials under 10 CFR Part 2, Subpart J” available at NRC’s Web site ([www.nrc.gov/reading-rm/ehd/ml041560341.pdf](http://www.nrc.gov/reading-rm/ehd/ml041560341.pdf))
- Framework for information usability
- Reference for electronic document preparation



# File Specifications

- File format
  - Portable Document Format (PDF)
    - Byte serving
  - Alternative formats
- File size and segmentation
- File naming and content



# Portable Document Format (PDF)

- Freely available format integrated with popular document authoring applications
- Content and pagination are “locked-down” to provide an exact image of the document
- Full-text searchable
- Accepted by National Archives for records retirement
- Generally smaller file size in comparison to other graphic file formats
- Supports byte serving technology



# Byte Serving

- Technology implementation
  - Optimize PDF files
  - Configure web server
  - Enable Acrobat® Reader options
- Information is “served” to user’s computer on as-needed basis
- Time required for initial display of information is significantly shorter
- Download of information after display is equal to non-byte serving configurations



# PDF Parameter Settings

- Optimize for fast web access – byte serving
- Embed all fonts
- 300 dpi minimum resolution



# PDF Output Options by File Type

- Formatted Text and Graphics
  - Textual documents (text files with embedded graphics) output from native applications
- Searchable Image (Exact)
  - Textual documents converted from scanned documents
- PDF Image Only
  - Graphic, image, and forms-oriented documents



# Alternative File Formats

- Oversized image files
  - Maps, photographs, charts
- Spreadsheets
  - Excel, Quattro Pro, Lotus
  - Versions





# Alternative File Formats

- Video/audio
  - Windows Media Player compatible
  - Popular playback devices
- Executable programs
  - Computer simulation, data files
- Commercially available software
  - Provide all information necessary to review submission
- Non-commercially available software
  - Fully distributable run-time version



# File Parameters for All File Formats

- Compression
  - No “zip” files
  - PDF compression acceptable
- Security
  - Full access required
  - Encryption not necessary or acceptable
- File linkages
  - Links between files not maintained
  - Links within a single file acceptable



# File Linkages – Hyperlinks

- Electronic submissions to the hearing docket cannot rely on the use of any hyperlinks to other electronic files or websites for completeness of filing
- Any such documentary material must be submitted as a filing or attachment to a filing



# File Linkages - Hyperlinks

- If a submittal contains hyperlinks, then it must include a disclaimer
  - This submittal contains PDFs, one or more of which contains hyperlinks to other PDFs or to the Internet. These hyperlinks are either inoperable or are not essential to the use of the filing. Any material referenced by hyperlinks to the Internet that was essential for use of this filing has been submitted as part of the filing. Any material referenced by a hyperlink to another PDF that was essential for the use of this filing has either been included by reference or submitted as part of this filing.



# Resolution

- Minimum 300 dpi
  - Conforms to National Archives guidelines for records retirement
- Limited exceptions
  - Scanning process for a large, one-page image that will not successfully complete
  - Images scanned before January 1, 2004



# File Size

- File size analysis focus
  - Minimize burden on parties and participants
  - Maximize information usability
- As the file size increases, so does the time necessary to transmit, retrieve, and download



# Transmission Timing Tests

<b>Transmittal</b>	<b>Total Pages</b>	<b>100m</b>	<b>640k</b>	<b>220k</b>	<b>56k</b>
<b>5 MB</b>	<b>1,699</b>	<b>7 sec</b>	<b>1 min 11 sec</b>	<b>2 min 7 sec</b>	<b>11 min 48 sec</b>
<b>25 MB</b>	<b>9,205</b>	<b>19 sec</b>	<b>5 min 18 sec</b>	<b>14 min 13 sec</b>	<b>58 min 13 sec</b>
<b>50 MB</b>	<b>18,410</b>	<b>39 sec</b>	<b>10 min 9 sec</b>	<b>30 min 14 sec</b>	<b>116 min 27 sec</b>
<b>100 MB</b>	<b>36,920</b>	<b>56 sec</b>	<b>20 min 12 sec</b>	<b>60 min 12 sec</b>	<b>235 min 39 sec</b>

- Submission of documentary material using Electronic Information Exchange proved consistently successful



# Retrieval Timing Tests

Comm Link	Network (100 mps)		DSL (640 kps)		Cable (220 kps)		Modem (56 kps)	
	Byte Serving	No Byte Serving	Byte Serving	No Byte Serving	Byte Serving	No Byte Serving	Byte Serving	No Byte Serving
5 MB	3 sec	8 sec	5 sec	1 min 8 sec	8 sec	2 min 8 sec	15 sec	11 min 46 sec
25 MB	4 sec	19 sec	6 sec	5 min 19 sec	10 sec	14 min 11 sec	21 sec	58 min 15 sec
50 MB	7 sec	38 sec	9 sec	10 min 6 sec	18 sec	30 min 10 sec	35 sec	116 min 24 sec
100 MB	10 sec	55 sec	14 sec	20 min 7 sec	27 sec	60 min 9 sec	48 sec	235 min 37 sec





# Download Timing Tests

<b>File Size</b>	<b>Network (100 Mbps)</b>	<b>DSL (640 kbps)</b>	<b>Cable (~ 220 kbps)</b>	<b>Modem (56 kbps)</b>
<b>5 MB</b>	<b>6 sec</b>	<b>1 min 2 sec</b>	<b>2 min</b>	<b>11 min 37 sec</b>
<b>25 MB</b>	<b>17 sec</b>	<b>5 min 2 sec</b>	<b>14 min</b>	<b>58 min 7 sec</b>
<b>50 MB</b>	<b>36 sec</b>	<b>10 min</b>	<b>30 min</b>	<b>116 min 15 sec</b>
<b>100 MB</b>	<b>52 sec</b>	<b>20 min</b>	<b>60 Min</b>	<b>235 min 30 sec</b>



# 50 MB File Size

- Allows the file to contain substantial content
  - Up to 11,000 pages of formatted text with minimal graphics
  - 1 to 120 pages of graphic content
    - Content creation method, color, resolution
- Retrieval time for 50 MB file significantly enhanced by use of byte serving for on-line display
- Download and submission time of 50 MB file is manageable and tests were consistently successful
- Large documents will require fewer segments
  - More efficient document creation, processing, retrieval, download, and submission via EIE using a 50 MB file size limit resulting in fewer files



# Segmentation of Files > 50 MB

- Segment at logical breakpoints
  - Use chapters, sections, or parts to determine the logical breakpoints
- Make maximum use of the 50 MB segment for efficient distribution and use of the information



# Electronic File Naming Conventions

- 49 Characters including the extension
- Reflect the document content
- First three characters
- Retain format extension



# Files with Special Printing Requirements

- Require paper sizes larger than 11x17
- Special Features
- Software and configuration



# Sensitive or Classified Information

- Sensitive unclassified (trade secrets, privacy, confidential information)
  - Clearly mark and identify in a transmittal letter
- Classified (i.e., National Security Information or Restricted Data)
  - May not be submitted via EIE
  - Requirements in 10 CFR 95.37, 95.39, 95.41



# Applicable Submittal Types

Submittal Type	Submittal Size	File Characteristics	Method
<b>Simple</b>	Less than 50 megabytes (MB)	One or more textual or graphic-oriented electronic files in Portable Document Format (PDF)	Use a single EIE transmission to submit the file(s).
<b>Large</b>	Greater than 50 MB	Textual or graphic-oriented electronic files in PDF that can logically be segmented into 50 MB files	<ul style="list-style-type: none"> <li>•Use multiple EIE transmissions (#50 MB each) to submit the files with a transmittal letter</li> </ul> <p style="text-align: center;">— <b>and</b> —</p> <ul style="list-style-type: none"> <li>•Deliver a courtesy copy of the files submitted via EIE on OSM.</li> </ul>
<b>Complex</b>	Any	<p>Any combination of the following electronic object categories:</p> <ul style="list-style-type: none"> <li>•Textual or graphic-oriented electronic files in PDF</li> <li>•Electronic files that can not be segmented into 50 MB files</li> <li>•Other electronic objects, such as computer programs, simulations, video, audio, data files, and files with special printing requirements</li> </ul>	<p>Use the Dual-Submittal Method:</p> <ul style="list-style-type: none"> <li>•Use one or more EIE transmissions (#50 MB each) to submit a transmittal letter and (<b>if applicable</b>) single or multiple segmented PDF files</li> </ul> <p style="text-align: center;">— <b>and</b> —</p> <ul style="list-style-type: none"> <li>•Deliver the balance of the submission, <b>together with all associated files transmitted via EIE</b>, on optical storage media for a complete submission. Note: if documentary material is only being submitted on OSM, the transmittal letter is still sent via EIE.</li> </ul>



# Document Signing

- Scanned signature pages
  - PDF Searchable Image Exact
- Preferred Options
  - Original Signed By \_\_\_\_\_
    - Submitter keeps the original
  - Electronically Signed By \_\_\_\_\_
    - Digital signature using Electronic Information Exchange
  - PDF Formatted Text and Graphics





# Summary

- 50 MB adopted as the optimal file size
- PDF adopted as the optimal file format
  - Supports universal file access and document integrity
  - Freely available format integrated with document authoring applications; content and pagination are “locked-down”
  - Full text searchable
  - Generally smaller file size in comparison to other graphic file formats



# Summary

- Byte Serving
  - Time required for initial display of information is significantly shorter
- PDF Parameter Settings and Output Options
- Alternative File Formats
- File Linkages – Hyperlinks
  - Within a single PDF file only
  - Disclaimer



# Summary

- 50 MB Optimal File Size
  - Minimize burden on parties and participants
  - Maximize information usability
- File Naming Conventions
  - One document may include more than one file
- Sensitive or Classified Information
  - Clearly marked
  - 10 CFR requirements
- Document Signing
  - PDF Formatted Text and Graphics



# Agenda

- Overview of the Document Submission Process
- EIE Submittal Process
- How to Submit Large and Complex Documents
- Guidance for Submission of Electronic Docket Materials
- **Conversion of Files to PDF and NRC Support**
- Discussion of Submitters' Concerns/Q&A's/Public Comments
- Closing Remarks/Follow-up Actions

# Conversion of Files to PDF and NRC Support

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# Conversion of Files to PDF and NRC Support

- Introduction
- Brief description of the Desk Reference Guide for PDF document generation
- Support and Contact Information
- FAQs
- Open Discussion & Questions



# Introduction

NRC prepared this Desk Reference Guide to:

- Assist its customers and Federal agencies to generate PDF documents that comply with NRC's "Guidance for Submission of Electronic Docket Materials under 10 CFR Part 2, Subpart J" and the E-Rule (specifically Section 2.1, 2.5, 2.6 and 2.9)
- Provide correct configuration settings for different applications to create a PDF document
- Answer any questions or concerns relating to converting native application files to PDF



# Desk Reference Guide

Guide contains information on:

- Software/hardware requirements for
  - Windows
  - Macintosh
- Software set up and configuration
  - Setting up and configuring Adobe Acrobat Distiller/PDFMaker and setting preferences
    - Adobe Acrobat 5
    - Adobe Acrobat 6 Professional
    - Adobe Acrobat 7 Professional
  - Setting up and configuring Adobe Preflight
    - Adobe Acrobat 6 Professional
    - Adobe Acrobat 7 Professional





# Desk Reference Guide

- Conversion Information
  - Converting MS-Office Suite 2002/2003 to PDF
    - MS-Word
    - MS-Access
    - MS-Excel
    - MS-PowerPoint
    - MS-Project
    - MS-Publisher
  - Converting Corel Office Suite 2002 to PDF
    - WordPerfect 10
    - Presentation 10
    - Quattro Pro 10



# Desk Reference Guide

- Conversion Information (continued)
  - Converting TIFF image to PDF
- Conduct self-test & verification, checks for...
  - Fast Web View
  - Hidden text error
  - Embedded fonts



# Desk Reference Guide

- Software/Hardware requirements for  
- Windows

Adobe Acrobat Distiller 5.0/6.0/or 7.0

MS-Office Suite 2002/2003

Corel Office Suite 2002 (if applicable)

Intel Pentium Processor

MS-Windows 95 OSR 2.0, Windows 98 SE, Windows Millenium Edition, Windows NT 4.0 SP5-, Windows 2000 and XP

Minimum 32MB of RAM

Minimum 24MB of available hard-disk space

1024x768 screen resolution

CD-ROM drive

Scanner



# Desk Reference Guide

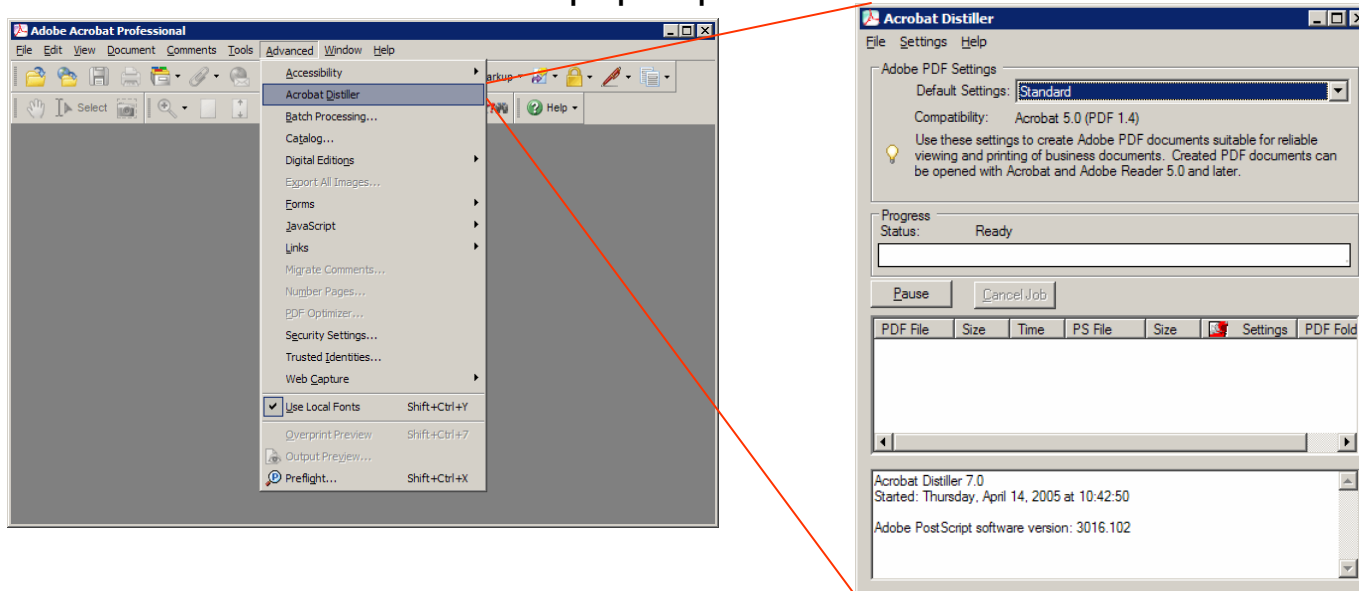
- Software/Hardware requirements for
  - Macintosh
    - Adobe Acrobat Distiller 5.0/6.0/or 7.0
    - MS-Office Suite 2002/2003
    - Corel Office Suite 2002 (if applicable)
    - PowerPC G3/G4/G5 Processor
    - Mac OS 8.6,9.x or OS X
    - Minimum 32MB of RAM (64MB is recommended)
    - Minimum 24MB of available hard-disk space (130MB is recommended)
    - 1024x768 screen resolution
    - CD-ROM drive
    - Scanner



# Conversion of Files to PDF

## Demo1

- Setting up and configuring Adobe Acrobat Distiller 7
  - While in Adobe Acrobat 7 Professional, select **Advanced/Acrobat Distiller**
  - The **Acrobat Distiller** window pops up.

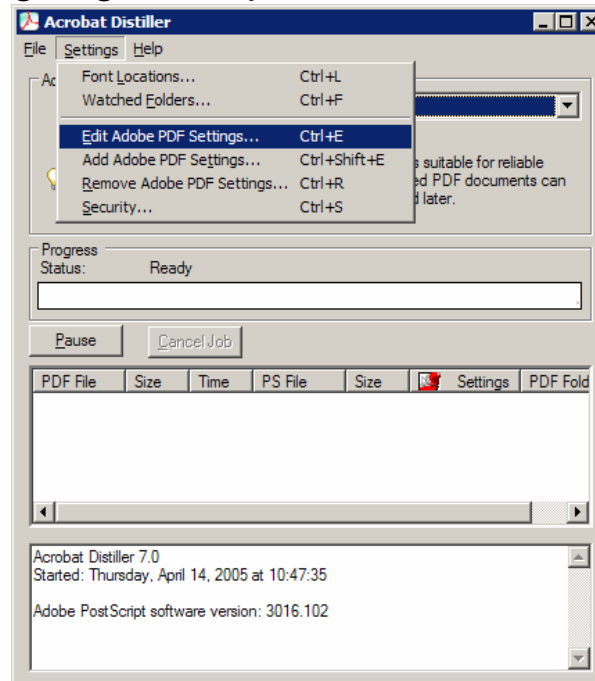




# Conversion of Files to PDF

## Demo1

- Setting up and configuring Adobe Acrobat Distiller 7
  - Change the settings by going to the pulldown menu and selecting **Settings** , **Edit Adobe PDF Settings**.

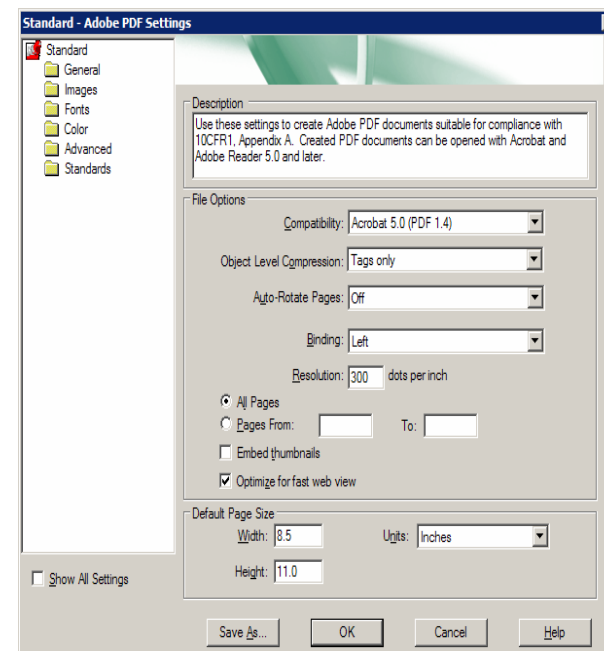




# Conversion of Files to PDF

## Demo1

- Setting up and configuring Adobe Acrobat Distiller 7
  - The **Standard - Adobe PDF Settings** window pops up. On the default **General** folder, change the following settings.
    - In the **Description** section enter: Use these settings to create Adobe PDF documents suitable for compliance with NRC regulation. Created PDF documents can be opened with Acrobat and Adobe Reader 5.0 and versions.
    - From the dropdown menu, set **Compatibility** to Acrobat 5.0 (PDF 1.4)
    - Keep Tags only as the **Object Level Compression** default.
    - Set **Auto-Rotate Pages** to Off.
    - Keep Left as the **Binding** default.
    - Set **Resolution** to 300 dots per inch.
    - Verify that **All Pages** is selected.
    - Verify that **Optimize for fast web view** is checked.





# Conversion of Files to PDF

## Demo1

- Setting up and configuring Adobe Acrobat Distiller 7
  - Select the **Images** folder and change the fields for all sections as follows:

- **Color Images**

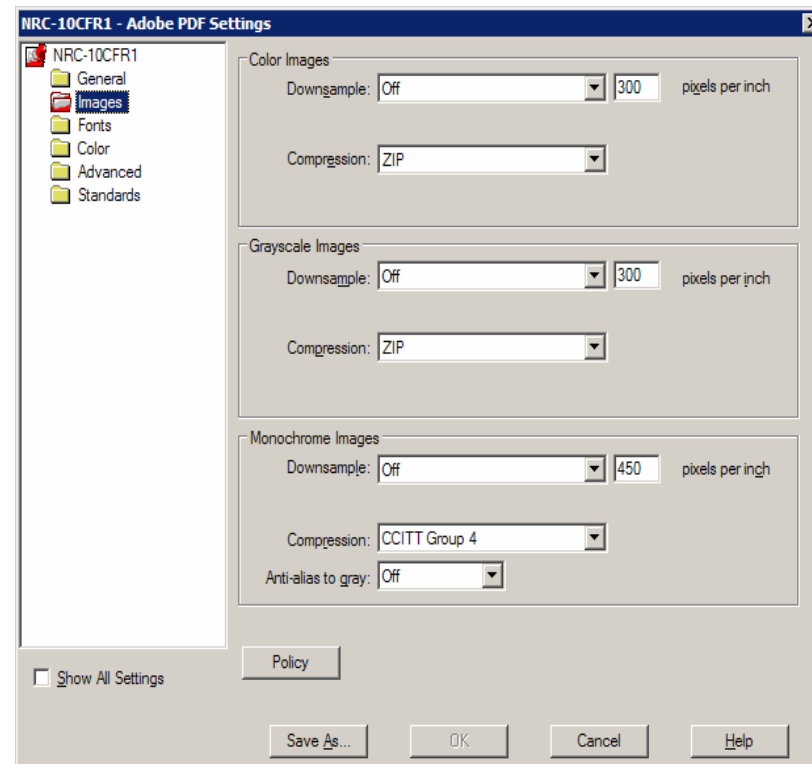
Downsample: Off  
Compression: ZIP  
300 ppi

- **Grayscale Images**

Downsample: Off  
Compression: ZIP  
300 ppi

- **Monochrome Images**

Downsample: Off  
Compression: CCITT Group 4  
Anti-alias to gray: Off  
450 ppi







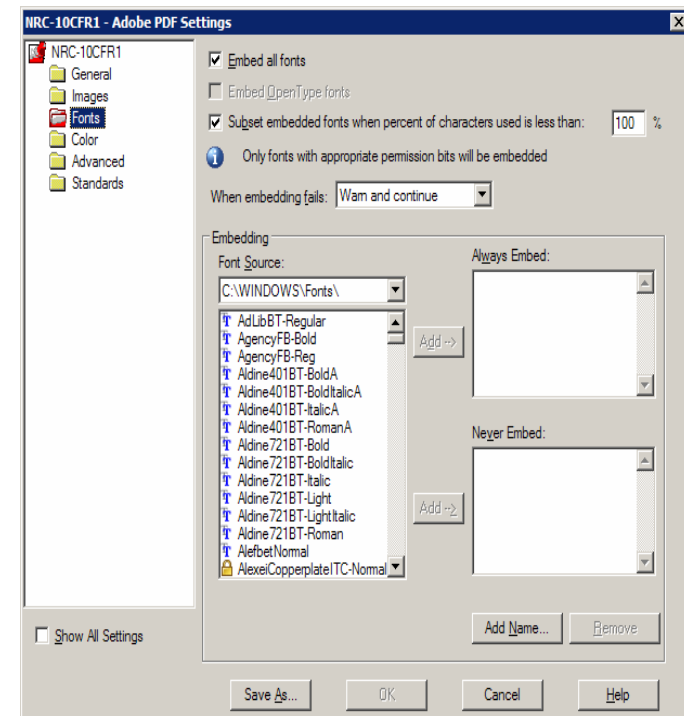
# Conversion of Files to PDF

## Demo1

- **Setting up and configuring Adobe Acrobat Distiller 7**

- Click on the **Fonts** folder and **C**

- Verify that the **Embed all fonts** box is checked.
- Verify that **Subset embedded fonts when percent of characters used is less than** is checked and set at 100%.
- Keep Warn and continue as the default for **When embedding fails**.
- In the **Embedding** section, verify that **Font Source** is set to C:\WINDOWS\Fonts\ and remove everything in **Never Embed** (if there is anything) by selecting everything in the **Never Embed** field and clicking on **Remove**.





# Conversion of Files to PDF

## Demo1

- Setting up and configuring Adobe Acrobat Distiller 7

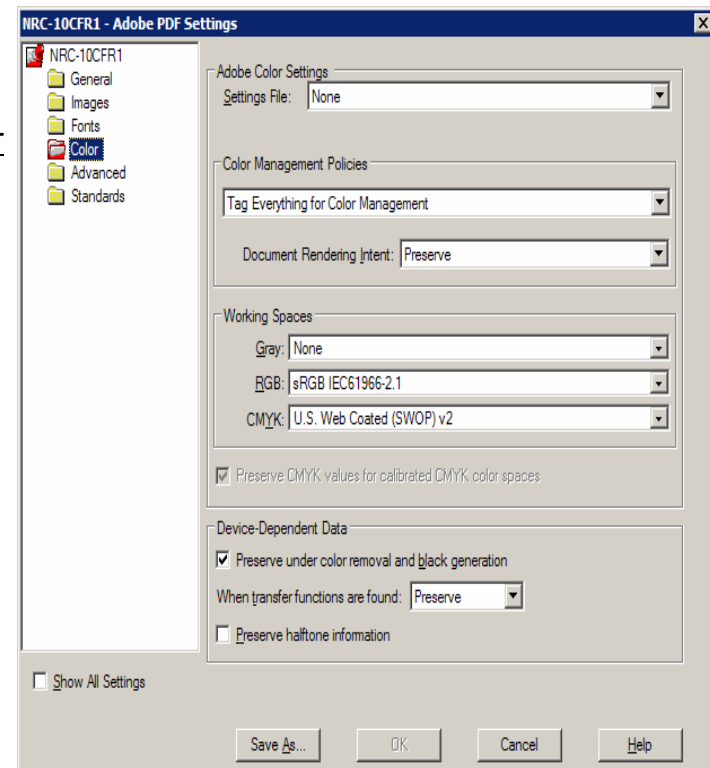
- Click on the **Color** folder.

In the **Adobe Color Settings** section

- Make sure **Settings File** is set to None.
- Change **Color Management Policies** to Tag Everything for Color Management.
- Keep **Document Rendering Intent** set to Preserve.
- For the **Working Spaces** subsection
  - Set **Gray** to None.
  - Keep **RGB** set to sRGB IEC61966-2.1.
  - Keep **CMYK** set to U.S Web Coated (SWOP) v2

In the **Device-Dependent Data** section

- Click on **Preserve under color removal and black generation option** and make sure it is checked.
- Set **When transfer functions are found** to Preserve.

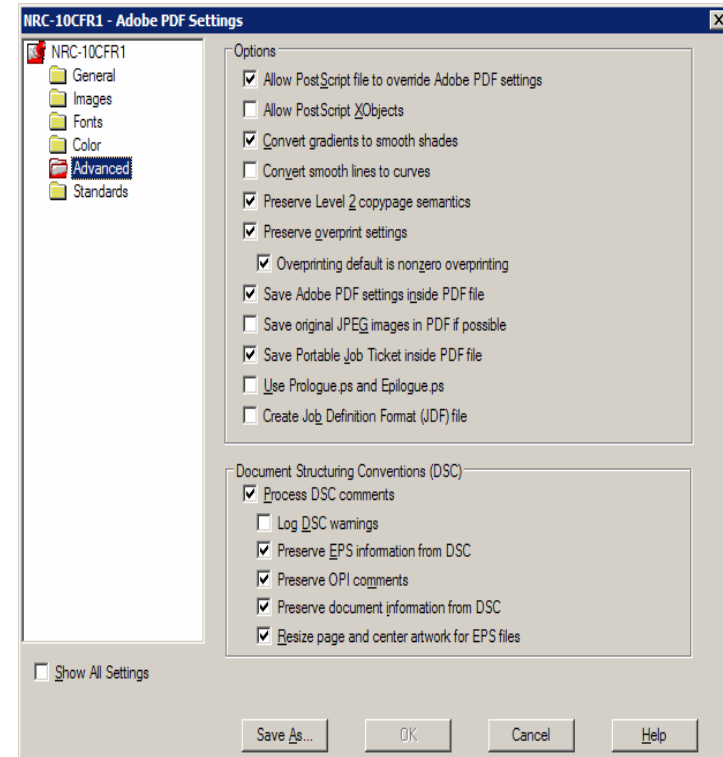




# Conversion of Files to PDF

## Demo1

- **Setting up and configuring Adobe Acrobat Distiller 7**
  - Click on the **Advanced** folder and make sure the following items in the **Options** section are selected and checked:
    - Allow PostScript file to override Adobe PDF settings
    - Convert gradients to smooth shades.
    - Preserve Level 2 ccopypage semantics.
    - Preserve overprint settings.
    - Overprinting default is nonzero overprinting.
    - Save Adobe PDF settings inside PDF file .
    - Save Portable Job Ticket inside PDF file.
  - Checked and enabled the following in the **Document Structuring Conventions** section:
    - Process DSC comments.
    - Preserve EPS information from DSC.
    - Preserve OPI comments.
    - Preserve document information from DSC.
    - Resize page and center artwork for EPS files.

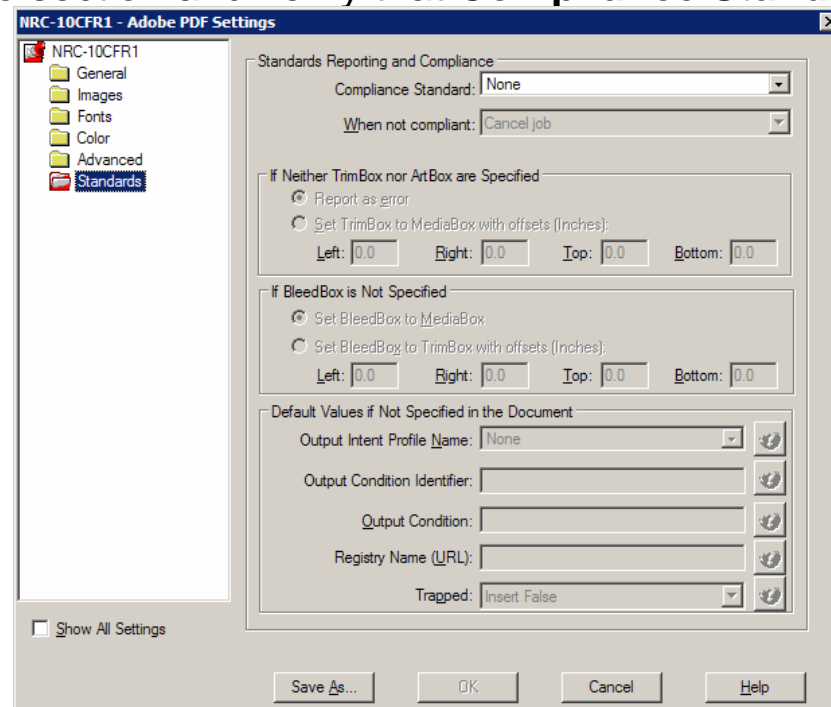




# Conversion of Files to PDF

## Demo1

- Setting up and configuring Adobe Acrobat Distiller 7
  - Click on the **Standards** folder. Leave everything as is in the **Standards Reporting and Compliance** section and verify that **Compliance Standard** is set to None.

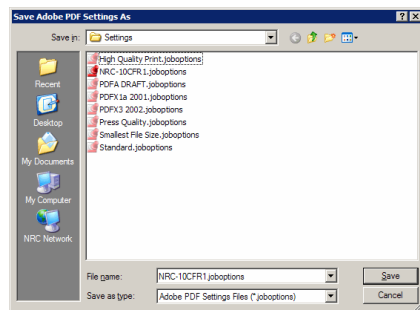




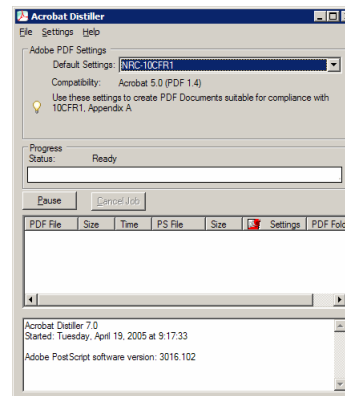
# Conversion of Files to PDF

## Demo1

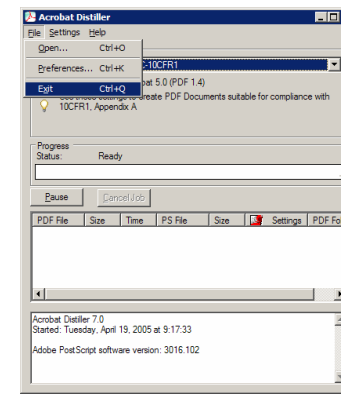
- **Setting up and configuring Adobe Acrobat Distiller 7**
  - Click on the **Save as** button in the bottom left corner of the window to save the changes.
  - In the **File Name** field, enter NRC-10CFR1.joboptions as a new profile name (or whatever name you want to call it).
  - Click on the **Save** button to save the newly configured profile.
  - Click on **OK** to get back to the Distiller window.
  - Select **File/Exit** or click on the **X** button to close Adobe Acrobat Distiller.



(a)



(b)



(c)



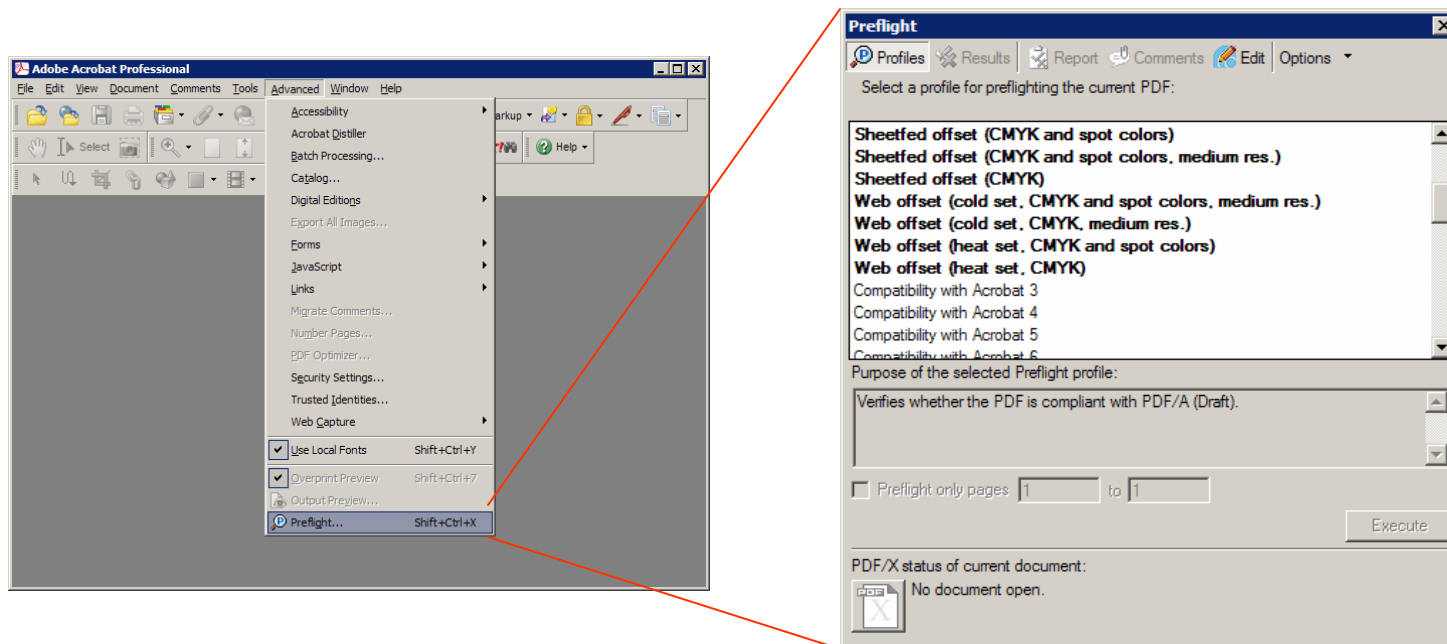
# Conversion of Files to PDF

## Demo2

- Setting up and configuring Adobe Preflight
  - While in Adobe Acrobat 7 Professional, select **Advanced/Preflight**.

The **Preflight** window pops up.


- From the **Preflight** window, select any profile and click on **Edit** from the menu bar.

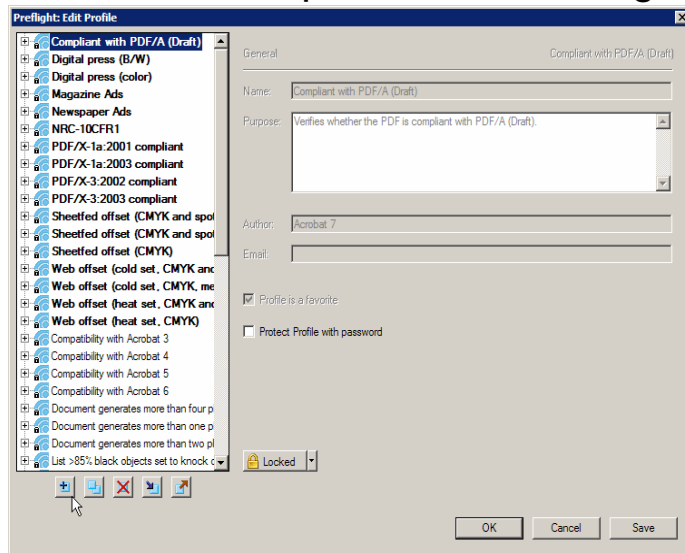




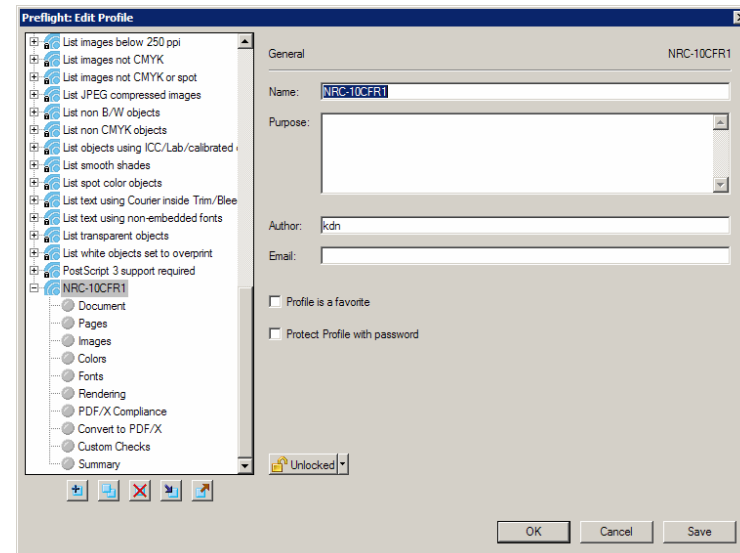
# Conversion of Files to PDF

## Demo2

- **Setting up and configuring Adobe Preflight**
  - In the **Preflight: Edit Profiles** window, click on the  icon to create a new profile designate to NRC.
  - Give the new profile a name, e.g. “NRC-10CFR1”.



(a)



(b)



# Conversion of Files to PDF

## Demo2

- Setting up and configuring Adobe Preflight
  - Edit the subcomponents as follows:
  - Click on OK.

The screenshot shows the 'Preflight: Edit Profile' dialog box for profile 'NRC-10CFR1'. The left sidebar lists various preflight checks, with 'Document', 'Images', and 'Fonts' highlighted in red. Three callout boxes provide details for these sections:

- Document:** The PDF document requires at least:
  - Acrobat 4.0 (PDF 1.3)
  - Acrobat 5.0 (PDF 1.4)
  - Acrobat 6.0 (PDF 1.5)
  - Acrobat 7.0 (PDF 1.6)The PDF document is encrypted. The PDF document is damaged and needs repair.
- Images:** Resolution of color and gray scale images is:
  - lower than 300 pixels per inch (ppi)
  - higher than 0 pixels per inch (ppi)Resolution of bitmap images is:
  - lower than 300 pixels per inch (ppi)
  - higher than 0 pixels per inch (ppi)Images are uncompressed. Images use lossy compression. Images use OPI.
- Fonts:** Font is not embedded. Font is embedded (as a subset or completely). Font type is: Type 1, CID (Type 1), Type 3, TrueType, CID (TrueType), Open Type. A font is used which is: in this list or not in this list.



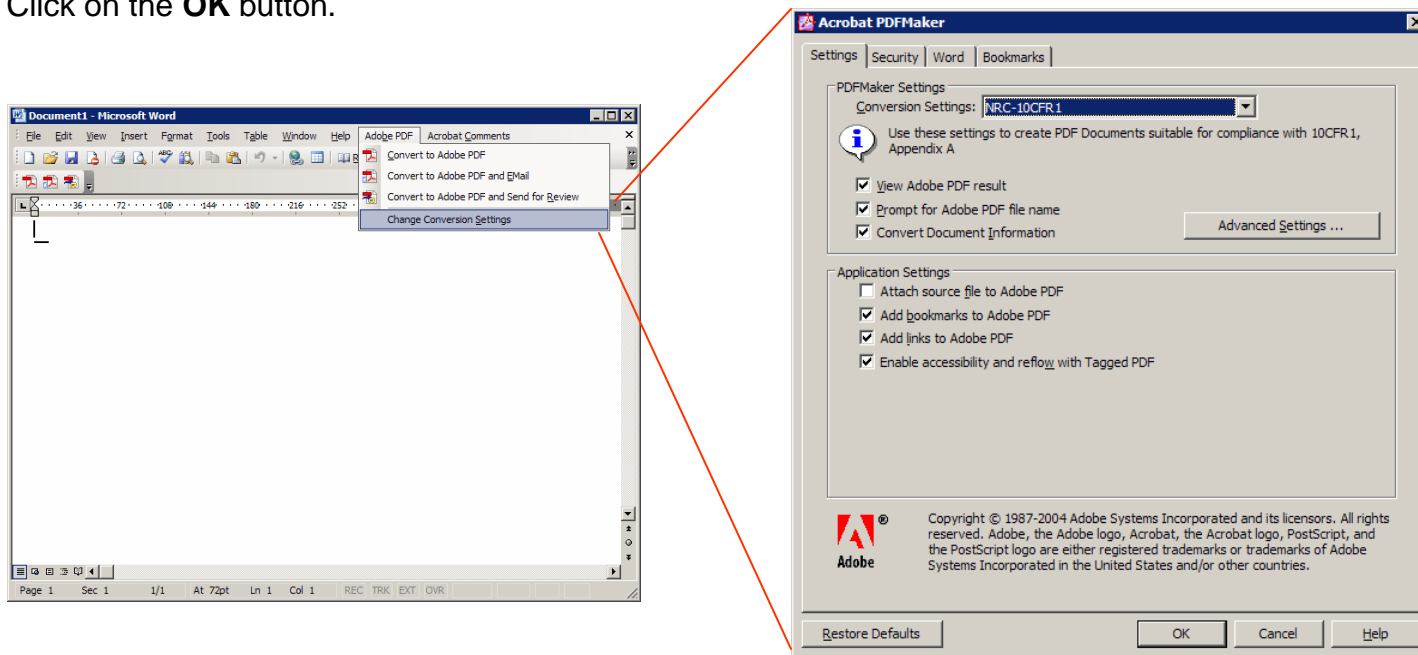


# Conversion of Files to PDF

## Demo3

- Convert MS-Word to PDF

- Launch MS-Word
- From the main menu, select **Adobe PDF/Change Conversion Settings**
- The **Acrobat PDFMaker** window pops up. In the Conversion Settings field of the **PDFMaker Settings** section, click on the dropdown arrow and select the newly created profile, e.g., “NRC-10CFR1”
- Click on the **OK** button.



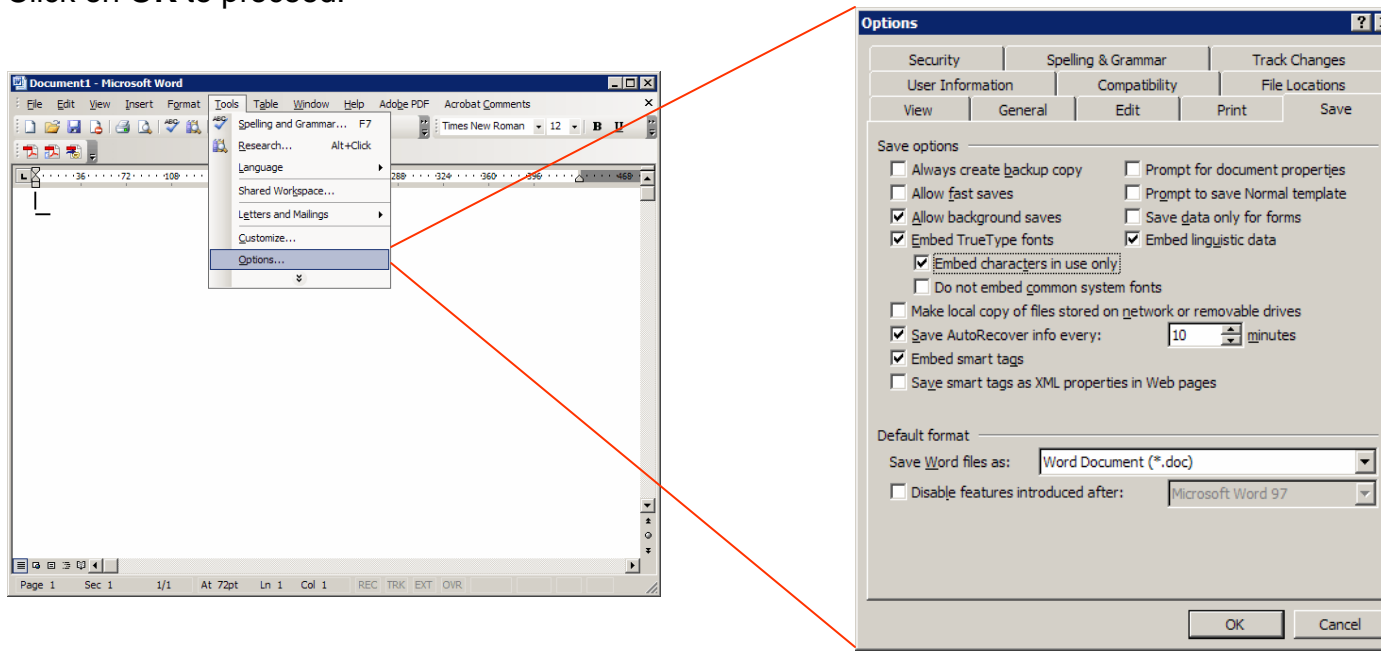


# Conversion of Files to PDF

## Demo3

- Convert MS-Word to PDF

- To ensure fonts will be embedded during the conversion process, from the main menu, select **Tools/Options**
- Click on the **Save** tab in the **Options** window and enable **Embed True Type fonts** and **Embed characters in use only** options.
- Disable **Do not embed common system fonts** option.
- Click on **OK** to proceed.




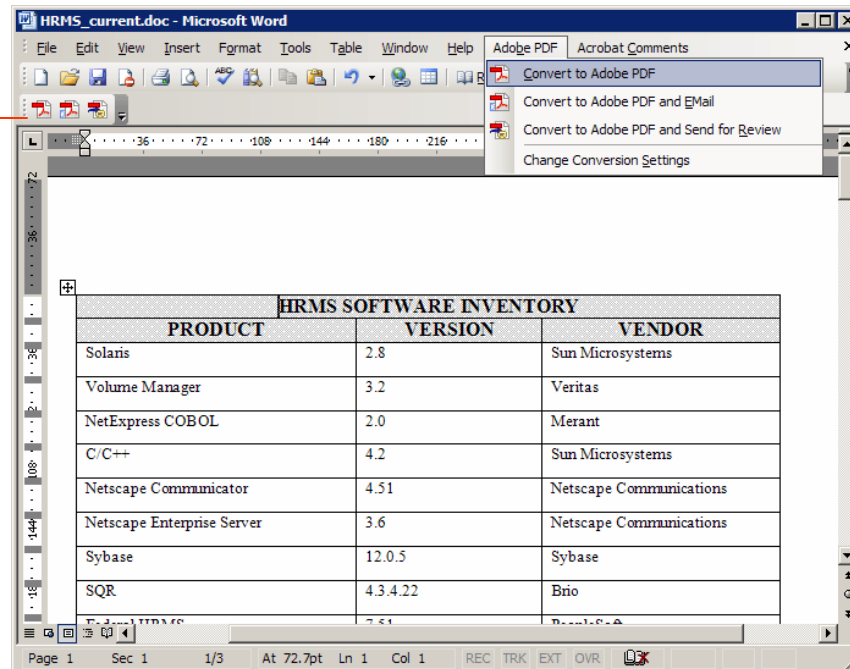


# Conversion of Files to PDF

## Demo3

- **Convert MS-Word to PDF**

- Open a Word document by selecting **File/Open** from the main menu.
- Disable all hyperlinks to other PDFs, email addresses, or to the Internet.
- From the main menu, click on the **Adobe PDF/Convert to Adobe PDF** or from the  icon.



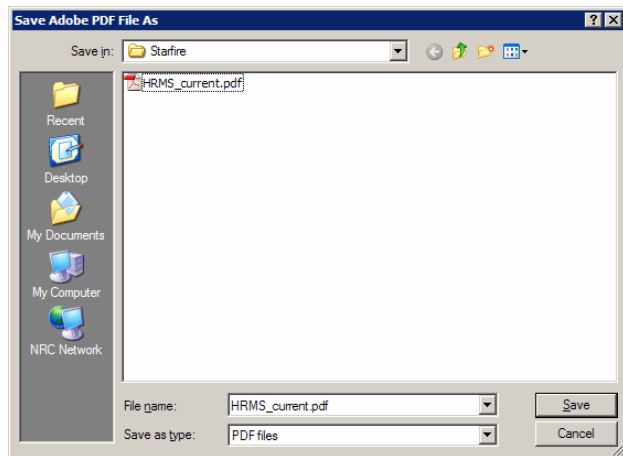


# Conversion of Files to PDF

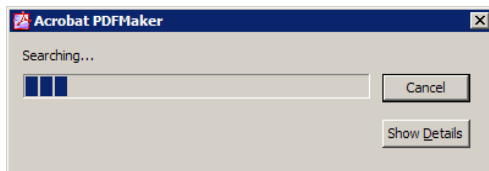
## Demo3

- Convert MS-Word to PDF

- A **Save Adobe PDF File As** window pops up. Enter the name you want in the **File Name** field, then click on the **Save** button



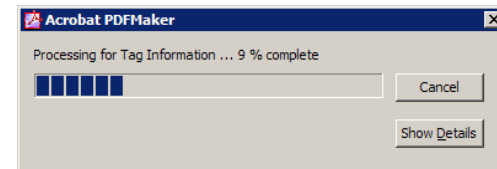
- A series of popup windows show the conversion status.



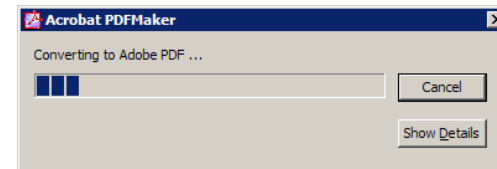
(a)



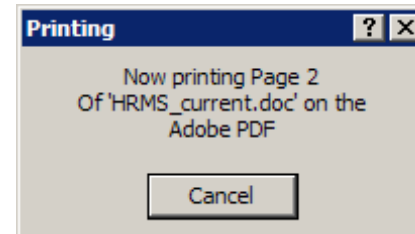
(b)



(c)



(d)



(e)



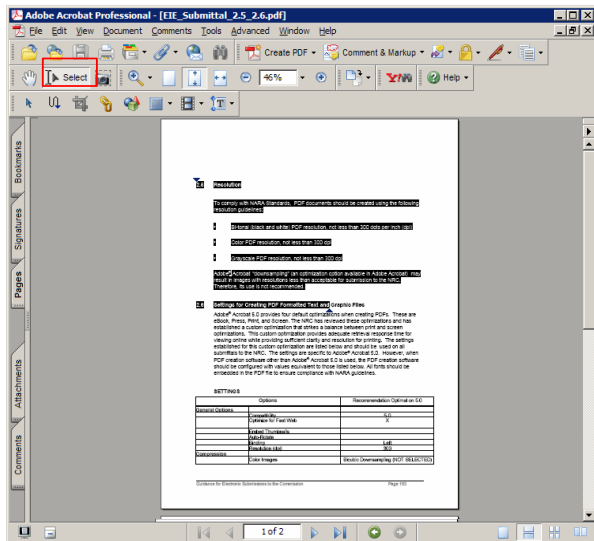
# Conversion of Files to PDF

## Demo4

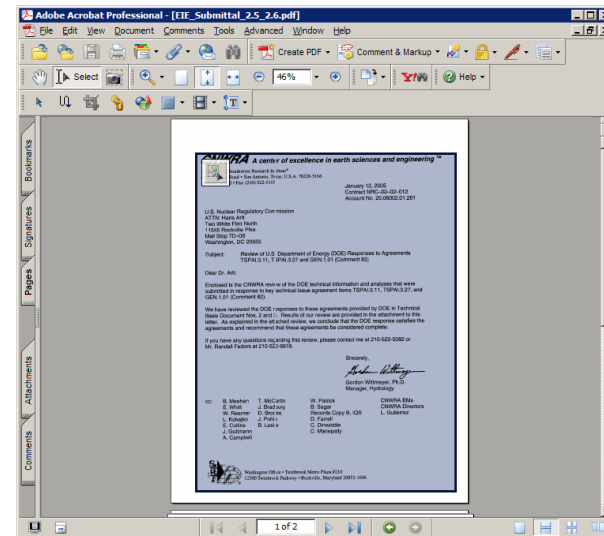
- Searchable text (hidden text)

- Verify that OCR (Optical Character Recognition) has been applied correctly to the image-only scanned pages.

- Open the PDF document in Adobe Acrobat Professional.
- Click on the **Select** button to use the Select function.
- Place the cursor at the first character of the page. Hold down the left mouse button and drag downward through the page.
  - If all the text is highlighted as you move the mouse cursor down over it, the images have been OCR-ed correctly (or have "hidden text"), figure a.
  - If the image is not set for searchable text, only whole pages or whole areas can be selected similar to the figure b.



(a)



(b)

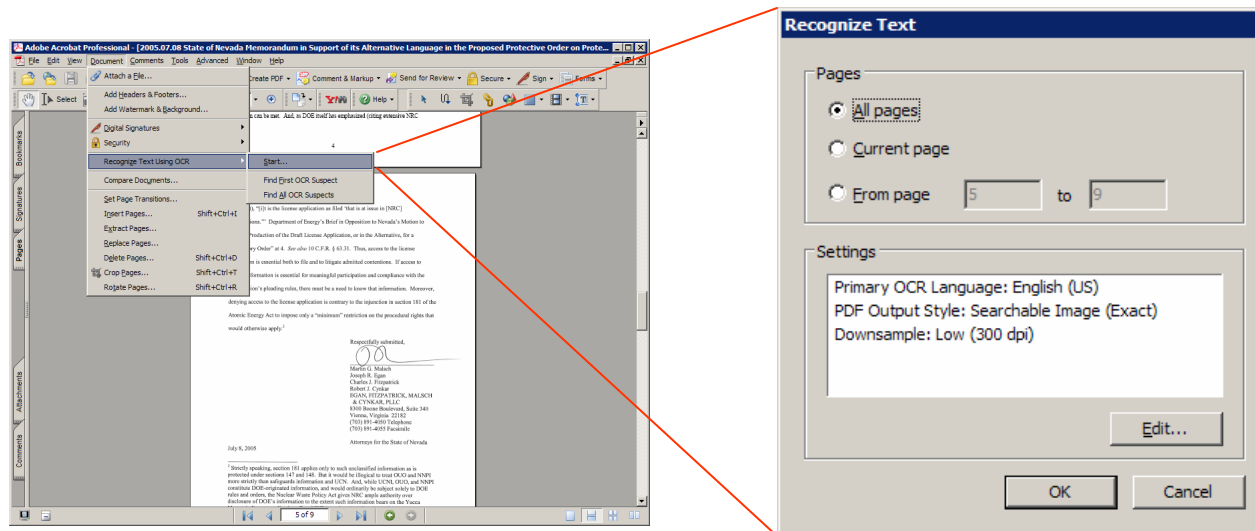


# Conversion of Files to PDF

## Demo4

- **Searchable text (hidden text)**

- Follow these steps to ensure the images will have hidden text, or OCR-ed correctly.
  - Open the PDF document in Adobe Acrobat Professional.
  - From the main menu, select **Document/Recognize Text Using OCR/Start**.
  - The **Recognize Text** window pops up. Make sure **Downsample** is set to 300dpi
  - Click on the **OK** button to start the OCR process.
  - Once the process is completed (the cursor is back). Make sure you save the file over the existing file. Follow the instructions on the previous slide to verify if the text is searchable.





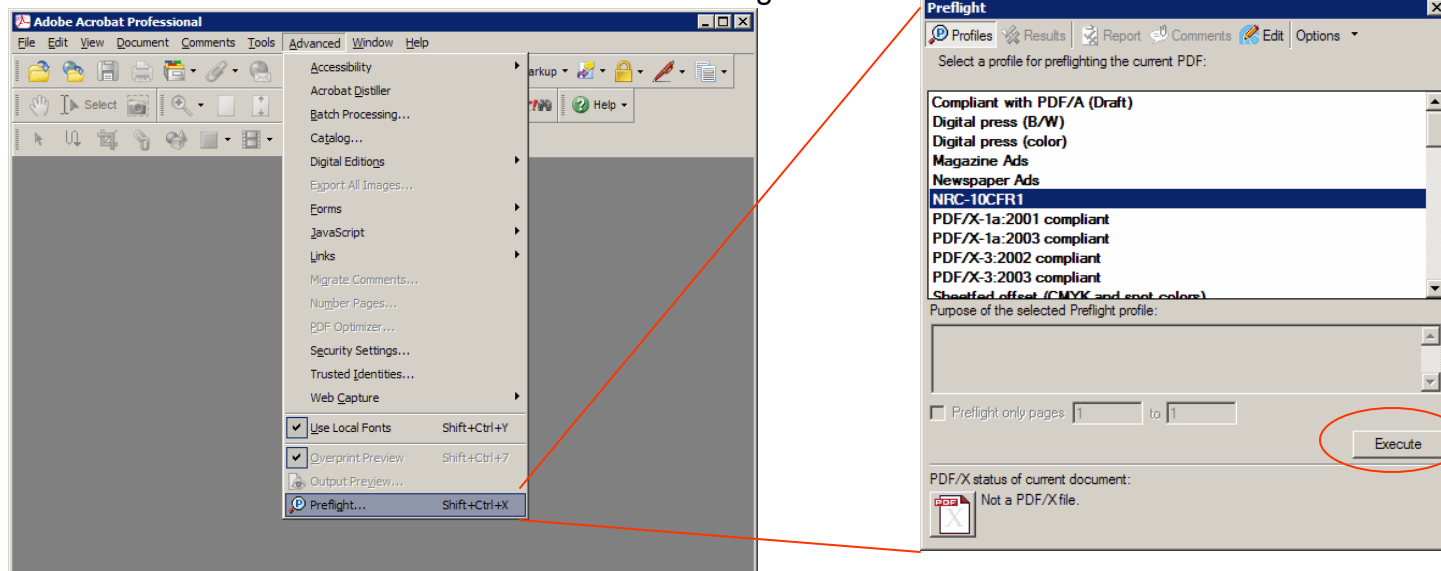
# Conversion of Files to PDF

## Demo5

### • Preflight Error Tests

- Verify that the newly PDF file will comply with NRC's E-Rule by follow these steps:

- Open the PDF document in Adobe Acrobat Professional.
- From the main menu, click on **Advanced/Preflight**.
- Select the correct profile use for testing, i.e. NRC-10CFR1.
- Click on the **Execute** button to start checking the document for errors.



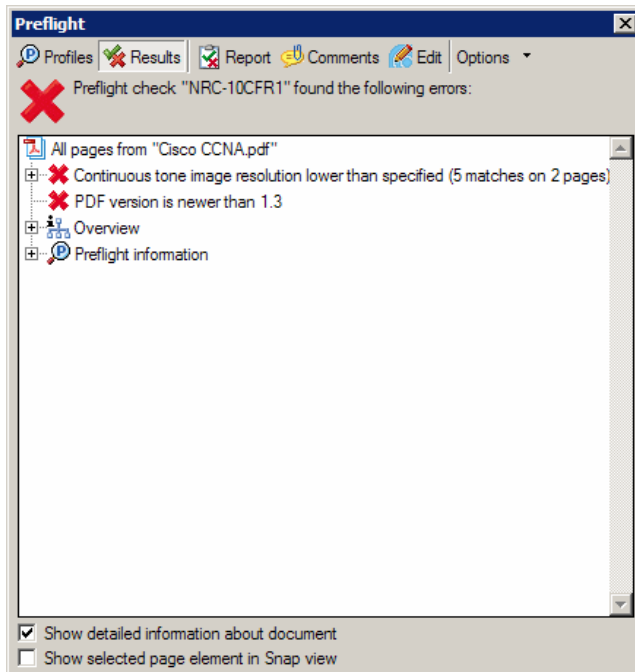


# Conversion of Files to PDF

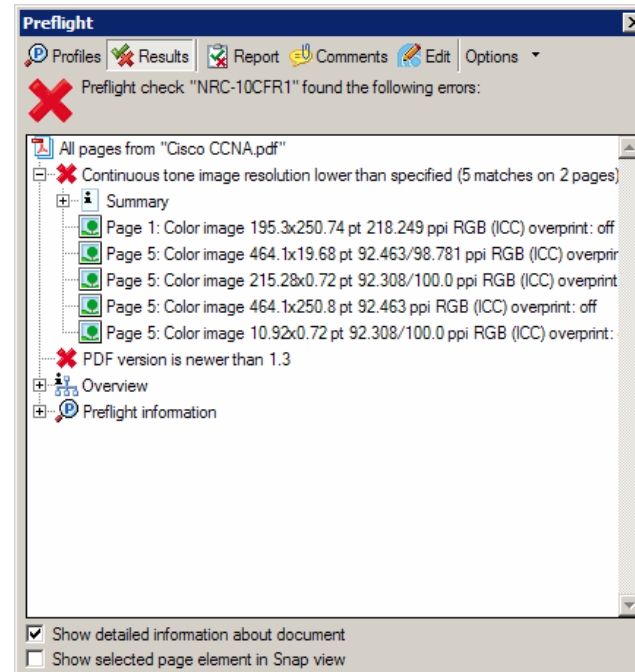
## Demo5

- Preflight Error Tests

- Below is an example of an output error that the document contains poor quality images and does not meet the 300dpi requirement specified in the E-Rule.



(a)



(b)





# Support and Contact Information

- Problems with EIE Web related issues, contact the Web group by completing the form request at <http://www.nrc.gov/site-help/feedback.html>
- For EIE-EHD related issues, contact the technical support group via the Web at <http://www.nrc.gov/reading-rm/ehd/contactus.html>  
NRC will continue to assist HLW submitters with any technical questions or concerns during the pre-licensing, pre-hearing and actual hearing phases.
  - Pre-licensing phase: 8:30 am – 4:15 pm eastern time, Mon-Fri (except Holidays). Contact PDR (Public Document Room) at 1-800-397-4209
  - Pre-hearing phase: 24 hours, Mon-Fri (except Holidays) Contact information will be provided when appropriate.
  - Hearing phase: 24x7 (except Holidays) Contact information will be provided when appropriate.



# FAQs

1. *"I received email notification from NRC support staff telling me my recent EIE submittal was rejected because it was not set for **Fast Web View**. How do I fix that?"*
  - Follow the instructions in Section 4.1, "Setting up and configuring Adobe Acrobat Distiller/PDFMaker and setting preferences" of the Desk Reference Guide for PDF document generation, and make sure under the **General** tab, the **Optimize for fast web view** option is checked. Then recreate the PDF document. If you don't want to recreate the PDF document, take the following steps if you're using Adobe 6 or higher.
    - Open Adobe Acrobat Professional.
    - From the main menu, select **Advanced** and click on **Batch Processing**.
    - In the **Batch Sequences** window, select **Fast Web View** and click on **Edit Sequence**.
    - In the **Edit Batch Sequence** window, click on the **Output Options** button and then click on the **Fast Web View** option to enable the feature.
    - Click on the **OK** button to get back to the **Batch Sequences** window. With **Fast Web View** option selected, click on the **Run Sequence** option.
    - You are prompted to choose a PDF document to process.
    - Go to the main menu and click on **File/Document Properties** and verify that **Fast Web View** is set to

**Yes.**

- Take the following steps if you're using Adobe 5.
  - Open Adobe Acrobat.
  - From the main menu, select **File** and click on **Batch Processing**.
  - Select **Fast Web View**, then click on the **OK** button to bring up the **Select Files to Process** window.
  - You are prompted to choose a PDF document to process.
  - Go to the main menu and click on **File/Document Properties/Summary** and verify that **Fast Web View** is set to **Yes**.



# FAQs

2. *"I'm using MS-Word. I followed your instructions in Section 5.1 to embed all fonts, but am I still getting rejection notifications saying that fonts are not embedded in my document when I use File/Print/Adobe PDF?"*
  - If you use the **Print to Adobe PDF** feature, follow the instructions in Section 5.1, **Convert MS-Word document to PDF**. Remember to uncheck **Do not send fonts to "Adobe PDF"** in the **Adobe PDF Document Properties**.
  
3. *"Why can't I submit my document using the EIE's **High-Level Waste Hearing** form. The button **Submit Signed Documents to NRC** button is grayed out?"*
  - You must first click on **Secure Transmission Authorization** (a required field). This will enable the **Submit Signed Documents to NRC** button so you can submit your document
  
4. *"I just scanned several images and converted into PDF. I have no way of checking the images to ensure that they meet the 300 dpi requirement. Any suggestions?"*
  - You can run a resolution test yourself by using Preflight (bundled with Adobe Acrobat 6/7 Professional ONLY). If you're puzzled or if this is your first time trying to convert images to PDF, send a several-page PDF document to our technical support staff at [kdn@nrc.gov](mailto:kdn@nrc.gov). We will tell you by email whether the document meets the 300dpi requirement.
  
5. *"Your guide has no information about scanners and the preferred method of scanning. Will you be adding instructions to support scanning?"*
  - No. There are too many different scanners with proprietary software. Submitters may use any scanners and scanning software with the resolution set to scan no less than 300 dpi.



# Agenda

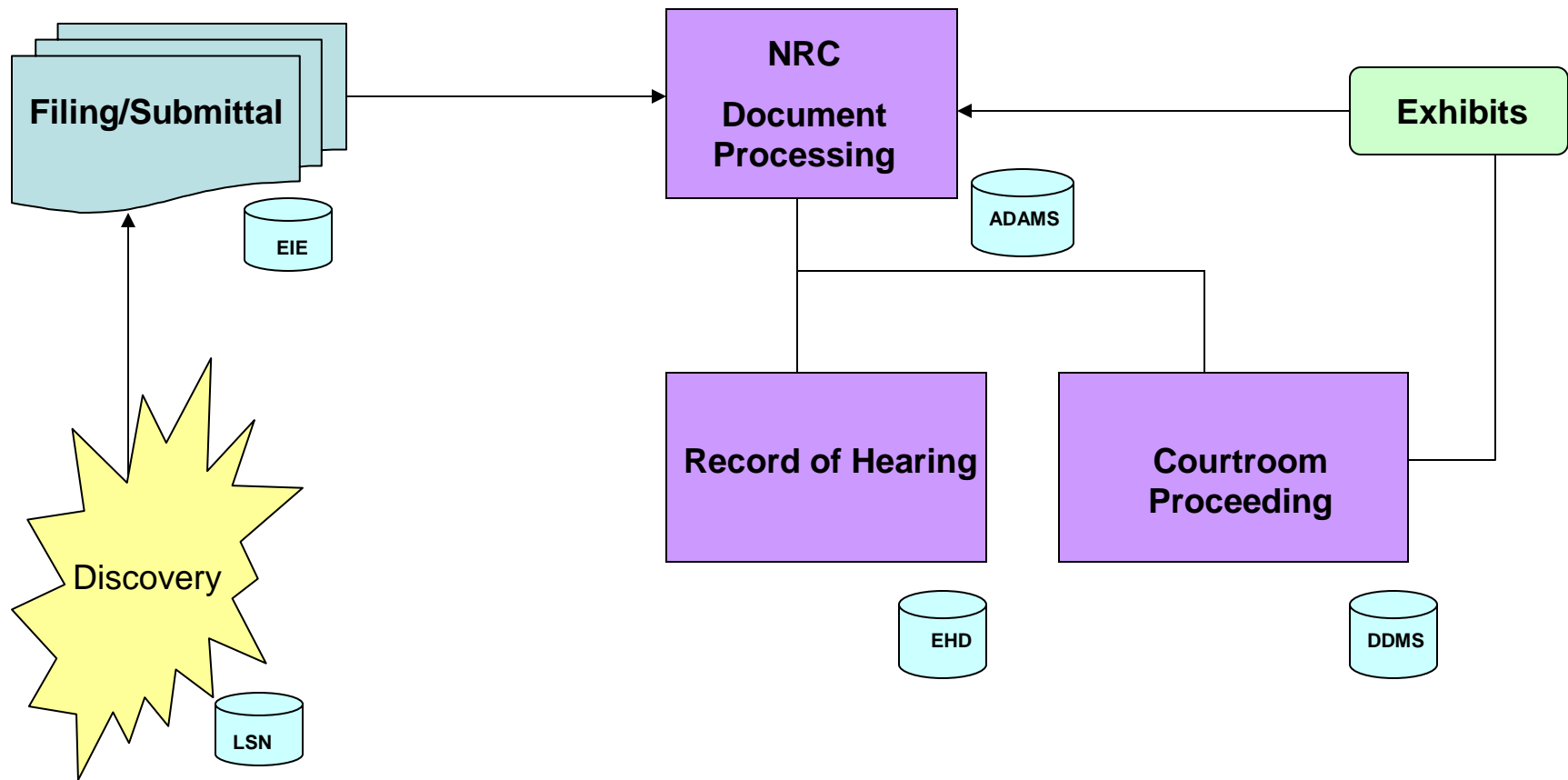
- Overview of the Document Submission Process
- EIE Submittal Process
- How to Submit Large and Complex Documents
- Guidance for Submission of Electronic Docket Materials
- Conversion of Files to PDF and NRC Support
- **Discussion of Submitters' Concerns/Q&A's/Public Comments**
- Closing Remarks/Follow-up Actions



# Agenda

- Overview of the Document Submission Process
- EIE Submittal Process
- How to Submit Large and Complex Documents
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- **Closing Remarks/Follow-up Actions**

# Electronic Submission Process



**US Nuclear Regulatory Commission  
Guidance for Submission of Electronic Docket Materials  
Under 10 CFR Part 2, Subpart J**

**June 2, 2004**

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## **1.0 INTRODUCTION**

### **1.1 Background**

In accordance with the provisions of Title 10, Part 2, Subpart J, of the *Code of Federal Regulations* (10 CFR Part 2, Subpart J), the U.S. Nuclear Regulatory Commission (NRC) maintains an electronic docket for the adjudicatory proceeding associated with the anticipated application for a license to receive and possess high-level waste (HLW) at a geologic repository at Yucca Mountain. The High-Level Waste Electronic Hearing Docket (HLW-EHD) will contain the official record of documentary and other materials submitted in the pre-license application phase and post-docketing phase of the Yucca Mountain licensing proceeding, in accordance with the provisions of 10 CFR 2.1010(d) and 2.1013(c). Specifically, those provisions require that all filings submitted and all orders and decisions issued during the course of the proceeding must be transmitted electronically to participants in the proceeding, the presiding officer, and the Office of the Secretary of the Commission (SECY).

The NRC has analyzed and evaluated the capabilities of current information technologies and the various document and record management processes executed by the Agency to handle the anticipated submittals. Based on those analyses, the NRC anticipates that many electronic submittals in the HLW adjudicatory proceeding will be “large documents” consisting of hundreds of pages of textual and graphic-oriented materials with electronic file sizes more than several hundred megabytes(MB).

To provide for the integrity and accessibility of the large and complex electronic documents in the HLW proceeding, the NRC is providing this guidance document to facilitate 1) submittal processing, 2) ready access to, and use of, such submittals by participants in the HLW proceeding, 3) public access to the HLW-EHD, and 4) the eventual transfer of these docket materials to National Archives and Records Administration (NARA). (Attachment B to this guidance presents a glossary of related terms.)

### **1.2 Scope**

This guidance document addresses the electronic transmission and submission of documentary materials to the NRC by all participants in HLW adjudicatory proceeding conducted under 10 CFR Part 2, Subpart J.<sup>1</sup>

Electronic submittals may be textual documents, graphic-oriented documents (e.g., maps, photographs, charts, handwritten documents), or other large or complex

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<sup>1</sup>The U.S. Department of Energy (DOE) should also use this guidance in submitting its license application and related materials for NRC review. DOE need not submit its license application via Electronic Information Exchange.

electronic objects (e.g., computer programs, computer simulations, spreadsheets, audio and/or video files, data files). Examples of documents submitted in the pre-license application and post-docketing phase of the adjudicatory proceeding include:

- Licensing Support Network Certifications and filings challenging those certifications
- Other adjudicatory documents (e.g., intervention petitions, motions, responses, transcripts, exhibits, decisions, and orders)
- DOE License Application and supporting materials
- DOE Environmental Impact Statement
- DOE responses to NRC requests for additional information

Generally, this guidance provides for service of adjudicatory docket materials via the Internet using the NRC's Electronic Information Exchange (EIE) (see Section 4.0) in an electronic format that "locks down" the content and pagination of documentary material for ease of citation in the proceeding, thereby ensuring document integrity when accessed on computer desktops. This guidance also provides instructions for electronic submittals (including large submittals segmented into manageable file sizes) via (a) the Internet (Section 4.0) and/or (b) physical delivery on Optical Storage Media (OSM) (e.g., CD-ROM (Compact Disk, Read Only Memory)) (Section 5.0).

Physical delivery of OSM is permitted, in part, in recognition that it may not be practical to submit some large and complex electronic files via the Internet.<sup>2</sup> *Any OSM delivered to the NRC should contain a complete copy of the electronic submission, including any and all associated files that were also transmitted by EIE.*

Failure to comply with this guidance may result in a submittal being rejected.

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<sup>2</sup> The following electronic files may not be suitable for submission via the Internet:

- multimedia files (e.g., audio and/or video files, simulations);
- executable programs, including database files, spreadsheet;
- data files specific to commercially available software
- data files specific to non-commercially available software

## 2.0 APPLICABLE SUBMITTAL TYPES

The NRC anticipates that electronic documentary submittals will fall into three general categories based on the submittal type, size, and characteristics. The following table describes these categories and summarizes the applicable submission methods.

**Submittal Description Table**

Submittal Type	Submittal Size	File Characteristics	Method
Simple	Less than 50 MB	One or more textual or graphic-oriented electronic files in Portable Document Format (PDF)	Use a single EIE transmission to submit the file(s) with a transmittal letter.*
Large	Greater than or equal to 50 MB	Textual or graphic-oriented electronic files in PDF that can logically be segmented into 50 MB or less files	<ul style="list-style-type: none"> <li>Use multiple EIE transmissions (<math>\leq 50</math> MB each) to submit the files with a transmittal letter.</li> <li>— <b>and</b> —</li> <li>Deliver a courtesy copy of the files submitted via EIE on OSM</li> </ul>
Complex	Any	Any combination of the following electronic object categories: <ul style="list-style-type: none"> <li>Textual or graphic-oriented electronic files in PDF</li> <li>electronic files that can not be segmented into 50 MB or less files</li> <li>Other electronic objects, such as computer programs, simulations, video, audio, data files, and files with special printing requirements</li> </ul>	Use the Dual Submittal Method: <ul style="list-style-type: none"> <li>Use one or more EIE transmissions (<math>\leq 50</math> MB each) to submit a transmittal letter and (if <b>applicable</b>), single or multiple segmented PDF files.</li> <li>— <b>and</b> —</li> <li>Deliver the balance of the submission, <b>together with all associated files transmitted via EIE</b>, on OSM for a complete submission. Note: if documentary material is only being submitted on OSM, the transmittal letter is still sent via EIE.</li> </ul>

\* A submittal of a single file less than 50 MB does not require a transmittal letter.

### 3.0 PARAMETERS FOR ELECTRONIC FILE SUBMISSION

This section describes how documentary material should be constructed for submission to the NRC.

#### 3.1 File Formats

Electronic documentary materials submitted in the HLW adjudicatory proceeding should be submitted in PDF (a freely available format) or otherwise meet the specifications delineated in this section. Scanning of the best available copy of a paper document to create a Searchable Image (Exact) PDF file creates an accurate electronic copy of the original document.

The following table defines the particular PDF output file formats and their use when submitting electronic documents to the NRC:

**Preferred PDF Output File Format General Information Table**

File Format	Version	Filename Extension	Recommended Use
Adobe® Acrobat Portable Document Format (PDF) Formatted Text and Graphics (Formerly known as PDF Normal). Options should be set according to the settings described in Attachment A	Current or 2 previous ***	pdf	Textual documents converted from native applications only *, **
Adobe® Acrobat PDF Searchable Image (Exact) [formerly known as PDF Original Image with Hidden Text]. Options should be set according to the settings described in Attachment A	Current or 2 previous ***	pdf	Textual documents converted from scanned documents
Adobe® Acrobat PDF Image Only. Options should be set according to the settings described in Attachment A	Current or 2 previous ***	pdf	Preferred format for graphic-, image-, and forms-oriented documents ( <i>not</i> for capture of text)

\* Textual documents scanned from original paper copies converted to PDF Formatted Text and Graphics result in capture of only a text file that contains OCR conversion errors. This inaccurate representation of the original document is not acceptable for capture by the NRC as an archival record. If the native format of a document is not available for creating a PDF file, the NRC recommends that Searchable Image (Exact) PDF be generated from a scanned image of the document. This will create a PDF file that contains a 100% accurate representation of the original document which will be acceptable for transfer to the National Archives.

\*\* Adobe® PDF Formatted Text and Graphics files that contain embedded images of text will not be accepted. These files are usually a result of cutting and pasting images of text instead of the text itself, from one document to another while creating documents using word processing applications. This practice results in a picture of the text being created that is not full text searchable. However, images of text that are intended as a graphical representation only and are not meant to convey the information contained in the text will be accepted

\*\*\* The acceptable versions of PDF output files include the current market (non-beta) version distributed by the

software vendor, the version distributed directly previous to the current version, and the version distributed two versions previous to the current version.

Note: Adobe has recently established a fourth PDF output file format (PDF Searchable Image (Compact)) that uses compression techniques to reduce file sizes of images. This is not an acceptable format for submission to the NRC.

Adobe® Acrobat 5.0 provides four default optimizations when creating the Formatted Text and Graphics PDF. These are eBook, Press, Print, and Screen. The NRC has reviewed these optimizations and has established a custom optimization that strikes a balance between print and screen optimizations. This custom optimization provides adequate retrieval response time for viewing online while providing sufficient clarity and resolution for printing. The settings contained within this custom optimization are in Attachment A and can be saved locally for use on all submittals to the NRC. The parameter values listed in Attachment A are specific to Adobe® Acrobat 5.0, however, when PDF creation software other than Adobe® Acrobat 5.0 is used, the PDF creation software should be configured with parameter values equivalent to those listed in Attachment A. All fonts should be embedded in the PDF file to ensure compliance with NARA guidelines.

Images originally created in a Tagged Image File Format (TIFF) that are primarily graphic-oriented in nature should be converted into PDF for submission to NRC using the PDF Image Only format as described above.

When submitting an electronic file using one of the acceptable formats listed in the tables above, the file name should contain the three-character default extension in which the file was created (e.g., a document prepared as “license\_amendment.pdf” should be submitted with the “.pdf” file extension).

### Spreadsheet Formats

The NRC requires that the results of spreadsheet applications be converted to one of the acceptable PDF file formats. The NRC staff may also request spreadsheet data to perform additional calculations/analyses. Spreadsheet data may be submitted using the following acceptable formats.

### **Acceptable File Extensions General Information Table**

<b>File Format</b>	<b>Version</b>	<b>Filename Extension</b>	<b>Preferred Use</b>
Microsoft® Excel®	Current or 2 previous *	xls	Spread Sheet calculations
Corel® QuattroPro	Current or 2 previous *	wb3	Spread Sheet calculations
Lotus® 1-2-3	Current or 2 previous *	wk3/wk4	Spread Sheet calculations

\* The acceptable versions of spreadsheets include the current market (non-beta) version distributed by the

software vendor, the version distributed directly previous to the current version, and the version distributed two versions previous to the current version.

## Graphic-oriented and Large and Complex Electronic Objects

To the extent practical, textual files, graphic-oriented files, and other electronic objects (e.g., spreadsheets, audio and/or video files) should be submitted electronically as PDF files. In rare instances PDF conversion may not be successful due to technical reasons (e.g., fatal hardware, software, or operating systems errors that prevent completion of the conversion). In addition, if the applicable file size and resolution restrictions (see Sections 3.2, 3.7 ) cannot be met for a given graphic-oriented file or other electronic object, do not submit that file or object in PDF. Submission of non-PDF files should include a detailed statement for each file that explains why PDF is not practical.

The NRC recommends submitting oversize image files that, for technical reasons do not successfully convert to PDF, in a non-proprietary format that does not utilize lossy compression (e.g., tagged image file format, also known as TIFF). Similarly, the NRC recommends submitting video and audio files in a format compatible with commercially available playback devices.

Electronic objects specific to highly specialized software applications such as special-purpose computer programs, simulations, and data files are acceptable in their native file format. Submission of these specialized electronic objects that are specific to commercially available software should include the following information about the software:

- software title and version
- compatible computer operating system
- hardware requirements (including the minimum recommended hardware configuration)
- a list of user-controlled parameters used with the software.

Submission of these specialized electronic objects that are specific to non-commercially available software should include (1) a freely distributable “run-time” version of all software components that the submitter used to create the files, and (2) the following information:

- validation reports on the software used to create the files
- compatible computer operating system
- software and hardware installation/configuration parameters
- hardware requirements (including the minimum recommended hardware configuration)
- other information to ensure seamless access to and review, duplication, and printing of the files.

## **3.2 File Size Limitations**

Large files create challenges for users when transmitting, viewing, or downloading documents. Submitters should limit file sizes to 50 MB for electronic submittals and divide larger electronic files into segments of 50 MB or less at logical breaks in the document (e.g., at individual chapters) as described in Section 3.3.

Compression techniques that are not inherent in authoring software used to produce PDF or TIFF files may not be used.

The 50 MB file size will allow participants in the adjudicatory proceeding and the general public to access electronic files in the HLW-EHD via the Internet. Test results indicate that 50 MB is a reasonable file size for downloading files across wide area networks or from the Internet via phone lines. In addition, larger files (greater than 50 MB) are difficult for end-users to navigate.

While we do not recommend a minimum file size, small files that are components of a larger document should be combined into one file to facilitate efficient distribution and use of the documentary material. For example, if a document consists of 15 separate 2 MB files, those 15 files should be combined to result in one 30 MB file.

## **3.3 Segmentation of Large Documents**

Large documents with file sizes greater than 50 MB should be divided in file segments of 50 MB or less at logical breakpoints such as:

- a. Chapters
- b. Sections
- c. Subsections
- d. Appendices
- e. Exhibits or attachments
- f. Charts, Tables, Formulae
- g. For large transcripts, the end of a witness' testimony or session recess

If the recommended file size cannot be achieved, consider moving the graphics (which are often large files) to an appendix or attachment. Any graphic or other Binary Large Object (BLOB) that exceeds the 50 MB limit and that cannot logically be divided, should not be segmented. In this case, the graphic or BLOB cannot be sent via EIE (see Section 4.0) and should be provided on OSM in accordance with guidance in Section 5.0.

When OSM are submitted, use electronic folders to organize the contents at the chapter level consistent with the file name guidance outlined in Section 3.5. In addition

to the limit on file name length, the Joliet Extension to ISO 9660 allows an overall limit on length of path of 255 characters, including the file name and extension. The numeric portion of the file name should be sequential across all folders. Therefore:

- Each Chapter will have its own folder which should then contain all files associated with that Chapter, including sections, subsections, and graphics (either embedded within those sections/subsections or provided separately).
- The sections/subsections should be placed in logical sequential order within a folder.
- Separate folders may be created for appendices, exhibits, or attachments. Each item should have the file name reflect the folder where it resides, if practical in conjunction with complying with the file name guidance in Section 3.5.

If multiple OSM are submitted (either alone or as a supplement to an EIE submission), place the Table of Contents for the entire submission on each OSM in a multi-set submission. Place all files submitted via EIE on the first OSM and as many additional OSM as required to store those files submitted via EIE. Submit other electronic objects such as computer programs, simulations, video, audio, data files, etc., on separate OSM and include any special software components, their configuration parameters, and any hardware configuration requirements, as applicable.

### **3.4 Transmittal Letter**

Include with each submittal, a transmittal letter<sup>3</sup> (see Attachment C) that provides explanatory information that will enable the NRC to ensure the completeness and integrity of the submission. On the first page of the transmittal letter submitters should include the following information:

- Organization or Individual Name/Address (Author)
- Docket Number (WM-00011)
- Subject Line (a non-sensitive brief, but descriptive narrative of the subject of the submission)
- Any requests for withholding from public disclosure in accordance with 10 CFR 2.790, 2.1003, 2.1006.

On the last page of the transmittal letter, submitters should provide:

- the name, mailing and e-mail addresses, and phone number of a point of contact that can resolve discrepancies in document submittals should they arise

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<sup>3</sup>A submittal of a single file less than 50 MB does not require a transmittal letter.



- a complete listing of the document components (electronic files and/or physical objects) that make up the submittal. The components should be listed in the order in which they appear in the document, and if applicable, the total number of OSM that are submitted by expedited delivery (e.g., same day courier, overnight) (see Section 3.5)
- a detailed statement of any deviation from PDF (see Section 3.1)
- a disclaimer statement for each file that may have links to another file(s) or the Internet (see Section 3.9)
- a list of parties served with the submission

Each of the listed components should indicate the following information:

- The filename (as defined in Section 3.5, including file extension)
- the size of the file
- Sensitivity level (e.g., publicly available, proprietary, classified, etc.)
- an indication of whether the component is being submitted via EIE and/or submitted on OSM
- the associated LSN number (if applicable)
- a file that provides a non-sensitive description of all electronic components characterized as “BLOBS” or other physical objects<sup>4</sup>.

The NRC will reject any submittal if there are any inconsistencies, including omission, between the transmittal letter and the files or physical objects received. In such instances, the NRC will inform the submitter of the rejection. In addition, if one or more of the optical storage devices contain classified information (i.e., National Security Information and Restricted Data); sensitive unclassified information; or non-public documents, additional Sensitive Information requirements apply as described later in Section 3.13.

### **3.5 Electronic File Naming Conventions**

OSM identified in a transmittal letter submitted via EIE should meet the ISO 9660 format. The Joliet Extension to ISO 9660 should be followed. The file naming conventions, for consistency, are applicable to files transmitted via EIE as well as PDF files submitted on OSM.

The Joliet Extension allows file names of up to 64 characters; however, documents

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<sup>4</sup>Include any special instructions or information necessary to view or use the information, such as special instructions regarding the use of OSM, computer operating system or software requirements for data files, computer models, etc. (See Attachment D.)

submitted via EIE are programmatically provided a unique sequential number assigned to each of the files contained in the submission and a date of receipt for each file. This is a 15-character unique number. Documents submitted to the NRC should therefore have filenames that are limited to 49 characters in length (including the ".", spaces, and the three-character filename extension). This 49 character limit is subject to the following criteria:

- The first three characters of the file name should always be used to identify the sequence of the file in the organization of the document. For example, a document may be comprised of 3 separate files. The name of the first file for the document would start with "001," the name of the second file that comprises the document would start with "002" and so on for as many files as necessary to comprise the document. For consistency, if a document is comprised of only one file, the file name should still begin with "001."
- The filenames should reflect, to the extent possible within the remaining characters, the section number and title of the file/segment being submitted, per the following:

‘section number’ ‘title’.pdf

(Where ‘section number’ reflects the lowest level of document breakpoint and ‘title’ is a meaningful reference to the actual document title.)

- The default three-character file extension associated with the format in which the document was created needs to be retained (Example: for files created to conform to PDF, “.pdf”).

**File Naming Example Table:**

Document Title	File Name
<b>Multiple File Documents</b>	
Chapter 1, Section 1 Estimate of Long-Term Geochemical Behavior	001_1.1 Estimate of Long-Term Geochem Behavior.pdf
Chapter 2, Section 2 Estimate of Long-Term Geochemical Behavior	002_2.2 Estimate of Long-Term Geochem Behavior.pdf
Appendix A Estimate of Long-Term Geo-chemical Behavior	003_Ap A Estimate - Long-Term Geochem Behavior.pdf
<b>Single File Documents</b>	
Attachment II, CAL-EBS-NU-000017 Rev 003 Calculation, Radiolytic Specie Generation from Internal Waste Package Criticality	001_Att 2 CAL-EBS-NU-000017 R003.pdf
List and Schedule for Model Validation Reports related to Criticality	001_List_Sched for MVRs related to Criticality.pdf

### 3.6 Security/Access Settings

Submissions should not contain any security settings, password protections, or any other attributes that will exclude full NRC access to and use of the files. NRC's internal security and archival processes will maintain the integrity of the materials that are submitted.

Encrypted documents are not acceptable for submittal to the NRC and will be rejected.

### 3.7 Resolution

To meet the expectations of the document users, and to comply with NARA Standards, PDF documents should be created using the following resolution guidelines:

- Bi-tonal (black and white) PDF resolution, not less than 300 dpi
- Color PDF resolution, not less than 300 dpi
- Grayscale PDF resolution, not less than 300 dpi

Also see Attachment A for additional guidance on Adobe Acrobat settings.

Adobe® Acrobat "downsampling" (an optimization option available in Adobe Acrobat) may result in images with resolutions less than acceptable for submission to the NRC. Therefore, its use is not recommended.

The 300 dpi minimum resolution also applies to non-PDF graphic-oriented electronic files (e.g., TIFF images).

In special situations, the submitter may use flexibility with respect to the minimum resolution for color and grayscale images.

#### **Resolution Flexibility**

<b>Special Situation</b>	<b>Bi-tonal Resolution</b>	<b>Color Resolution</b>	<b>Grayscale Resolution</b>
A document created after January 1, 2004 contains an image scanned before January 1, 2004	300 dpi	150 dpi	150 dpi
A document created after January 1, 2004 will not successfully scan color and grayscale images at 300 dpi resolution	300 dpi	150 dpi	150 dpi
A document created before January 1, 2004	300 dpi	150 dpi	150 dpi

In these cases, the submitter should maintain the integrity of the scanned image, the quality of the graphic presentation, and a readable representation of the original work capable of being duplicated and/or reproduced.

### **3.8 Files with Special Printing Requirements**

Documents that contain electronic files with special printing requirements, such as requiring the use of a plotter or other special equipment to print, oversize drawings or graphics that require a paper size larger than 11 inches by 17 inches, or other enhancements such as 3D images, etc., may only be submitted electronically via OSM as separate files. If special software components (e.g., printer drivers) are necessary, include those components, their configuration parameters, and any hardware configuration requirements on the same OSM.

### **3.9 File Linkages**

Files containing objects (e.g., pictures, tables, spreadsheets, and images of text) using link protocols such as Object Linking and Embedding (OLE), Dynamic Data Exchange (DDE), or any other object linking between electronic files are not practicable for the NRC to accept because the relationships among links in multiple file submissions are lost when captured in ADAMS or other agency electronic record keeping systems.

However, links within a single electronic PDF file are acceptable, if those links are created using PDF authoring software. Multiple linked PDF files may be combined into a single PDF file using utilities often included in PDF authoring software.

Electronic submissions to the hearing docket cannot rely on the use of any hyperlinks to other electronic files or web sites to generate additional documentary material. If the submittal contains such hyperlinks, then it must include a disclaimer to the effect that the hyperlinks are either inoperable or are not essential to the use of the filing. However, hyperlinks within a single electronic PDF file are acceptable and require no disclaimer provided that such links are created with PDF authoring software. Attachment E illustrates the various types of hyperlinks and the need for disclaimers.

If the submittal relies on Internet based material, then the Internet based material must be submitted as part of the filing. If the submittal contains hyperlinks to material in another electronic file, and such hyperlinks are necessary to access that material, then either a reference to the material must be provided or the material itself must be submitted.

#### Required Disclaimers

For a submittal that consists of a single PDF of less than 50 megabytes, include the following in the body of the submittal if the PDF contains hyperlinks to other PDFs or to the Internet.

"This PDF contains hyperlinks to other PDFs or to the Internet. These hyperlinks are either inoperable or are not essential to the use of the filing. Any material

referenced by hyperlinks to the Internet that was essential for use of this filing has been submitted as part of the filing. Any material referenced by a hyperlink to another PDF that was essential for the use of this filing has either been included by reference or submitted as part of this filing."

For a submittal that consists of more than one PDF, include the following in the transmittal memorandum if one or more PDFs contain hyperlinks to other PDFs or to the Internet.

"This submittal contains PDFs, one or more of which contains hyperlinks to other PDFs or to the Internet. These hyperlinks are either inoperable or are not essential to the use of the filing. Any material referenced by hyperlinks to the Internet that was essential for use of this filing has been submitted as part of the filing. Any material referenced by a hyperlink to another PDF that was essential for the use of this filing has either been included by reference or submitted as part of this filing."

### **3.10 Viruses**

Files received by the NRC will be checked for viruses prior to acceptance. Macros in files such as Microsoft® Excel are sometimes detected as viruses. Therefore, the use of macros should be limited because a file identified as having a virus will be rejected and the submitter notified of the rejection.

### **3.11 Copyrighted Information**

Submitting information electronically to the NRC shall be deemed to constitute authority for the NRC to place a copy of the information on its public document database and to reproduce and distribute sufficient copies to carry out its official responsibilities. NRC use of the information specified herein does not constitute authority for others to use the information outside applicable requirements of copyright law.

### **3.12 Accessibility (Section 508)**

Section 508 of the Rehabilitation Act and the accessibility standards set forth in implementing regulations requires that Federal Agencies' electronic and information technology is accessible to people with disabilities. Tools and plug-ins are now available to allow PDF files to comply with Section 508, but care must be taken in developing documents and converting them to PDF to ensure that the author has constructed the documents and used the appropriate tools with accessibility in mind. The submitter

should consider accessibility issues during document authoring. The use of simple layouts, consistent application of styles, accessible table formats, and the inclusion of alternate text for images improves the ability of people with disabilities to use the information.

### **3.13 Sensitive or Classified Information**

If a document contains information that is deemed sensitive unclassified, specifically proprietary (e.g. trade secrets, privileged, company confidential or financial information), personal privacy or other official use only information, it may be submitted via EIE. The document must be clearly marked (e.g., watermark) and the transmittal letter must indicate the sensitivity for each document.

If it is not practical to submit a large document containing sensitive unclassified information via EIE (see Section 1.2, 3.3, 3.4), submit the document via OSM. Submissions made on OSM must be accompanied by a transmittal letter (see section 3.4) that contains information regarding the sensitivity level of the transmitted documents. This letter should contain a listing of each file contained in the submission, with a description and the sensitivity for each file clearly marked.

When submitting documents via OSM that contain both publicly and non-publicly available files, all of the files should be included. In addition, separate OSM must be provided that contains only the publicly available files. Each OSM must be clearly labeled indicating its availability. Files contained on OSM labeled as “Publicly Available” will be released to the public.

OSM containing classified information must be processed and produced on systems approved under the provisions of 10 CFR 95.49. Each OSM must be clearly labeled as containing classified information.

The mailing package containing OSM with documents comprised of Safeguards, Proprietary, or Privacy Act Information must be processed, marked and transmitted in accordance with the requirements set forth in 10 CFR 2.790(b), 73.21(e), 73.21(g), and 73.21(h), as appropriate. Documents containing Safeguards Information may not be submitted via EIE.

OSM containing Classified Information (i.e., National Security Information or Restricted Data), must be packaged and submitted to the NRC in accordance with the requirements contained in 10 CFR 95.37, 95.39, and 95.41. Documents containing classified information may not be submitted via EIE.

If sensitive unclassified or classified documents are appended to filings in the adjudicatory proceeding, the submitter shall seek an appropriate order from the Presiding Officer pursuant to 10 CFR Part 2, Subpart J, or follow the procedures for Classified Information in 10 CFR Part 2, Subpart I.

### **3.14 Document Updates**

Document component updates will not be accepted. If changes to the submitted document are necessary, the entire document (including all of the electronic files and electronic objects that comprise the document), and all OSM sets in their entirety should be re-submitted as that version will become a new document. The subsequent transmittal letter should indicate the part(s) (e.g., chapter, section, or graphic) that has been changed as well as the general scope of the change. The submittal guidelines given in Section 3.4 of this guidance should once again be followed. The document should be identified as a new version and file identification information submitted accordingly.

## **4.0 EIE SUBMISSIONS**

Each individual that plans to transmit electronic documentary materials via EIE needs to obtain a digital signature certificate (Digital Certificate) and software plug-ins downloaded and installed on the user's computer. The NRC EIE web page (located on the Internet at [www.nrc.gov](http://www.nrc.gov) by choosing "Site Map" followed by "Electronic Information Exchange") has detailed information about EIE.

- All EIE users will be assigned a Digital Certificate in order to use EIE. A Digital Certificate is used to submit and digitally sign the form used to submit documents and will be required in order to access the EIE external server to retrieve documents, if appropriate. The EIE system requires the use of an NRC-issued Digital Certificate.
- All EIE system users will need to download and install software plug-ins. The specific plug-ins required are the Internet Form Viewer, which is a required plug-in regardless of the browser used, a signaturing plug-in for Netscape users, and a separate viewer plug-in for Microsoft® Internet Explorer users.
- Submission of documents via EIE in 50 MB or less segments is done using the NRC's EIE form. The EIE form is a document based on Extensible Mark-up Language (XML). It allows participants to sign, enclose, submit, and verify documents via the Internet. The document to be submitted or transmitted must be presented as an attachment to the form. Once the form is displayed, users will need to fill in the fields on the form and attach the document(s) for submission to the NRC. Once the fields have been filled in and the intended documents are attached, the form must be digitally signed.

- NRC regulations require that some documents be filed under oath or affirmation. There are currently two acceptable methods for providing this oath using the EIE processes.

1. Documents requiring oath or affirmation may use EIE to digitally sign the affirmation on the document. Using this process, the document must conclude with a statement to this effect:

"I declare under penalty of perjury that the foregoing is true and correct. Executed on [date]".

The electronic document *must* be digitally signed by the person affirming this statement. This person may then transmit the document directly to the NRC using EIE or may forward the document to someone else for transmission to the NRC. In the latter case, the transmitter must also sign the document to authorize the electronic transmission.

Except as set forth below, multiple documents requiring individual digital signatures by different persons cannot be sent in a single EIE transmission. The current EIE process only allows two persons to digitally sign a single transmission. Therefore, the NRC recommends that the method described below in item 2 be used for submissions that require multiple oath and affirmations.

Note: When digitally signing a document, the submitter is actually digitally signing the EIE transmission form, not the document. Signing the form is the equivalent of signing the document.

2. Oath or affirmation affidavits may also be created in hard copy and physically signed. The original paper copy may then be scanned to create a PDF Searchable Image (Exact) file of the original signature page. This page, with the rest of the PDF file of the entire attachment, may then be submitted via EIE.

Note: Although there are other methods available to electronically sign documents using word processing and other software, these are not currently acceptable for use in signing documents for submission to the NRC because they do not provide the levels of authentication, certification, and non-repudiation that are present in the EIE process.

- Verification of Receipt - The NRC EIE form is the equivalent of signing a FEDEX receipt for shipping the document and must be digitally signed. Any submission sent via EIE that is successfully received will receive a date/time stamp and EIE will return a "message received" confirmation. In the absence of this confirmation, it is the submitter's responsibility to follow-up and verify that the submittal was in fact



received. The NRC will compare the files delivered to the list identified in the transmittal letter to ensure that all files have been delivered. Where discrepancies are found between the transmittal letter and the actual files:

- If a period of 8 hours has elapsed between the beginning of the transmittal of the first file of a given EIE submission and notification of receipt of the last file of the same EIE submission, and the EIE system has not yet received all files, the NRC will reject the submittal and notify the submitter. The NRC does not anticipate that this time limit will address the transmittal of a single EIE form and its attachments; rather, this time limit is intended to address the transmittal of multiple EIE forms and their attachments in situations where the size of the submission requires more than one EIE transmission to accomplish delivery of all attachments that comprise the submission.
- In the event that the NRC identifies discrepancies between the transmittal letter and the files actually received via EIE (e.g., a file is listed, but not included; an unidentified file is sent; or the total number of attachments stated does not equal the number actually received), the NRC will reject the submission and notify the submitter.
- If the OSM received do not contain all of the files described in the transmittal letter, the NRC will reject the submittal and notify the submitter. Similarly, if the OSM do not arrive within the time specified in Section 5.0, the NRC will reject the submittal and notify the submitter.

The processes and steps described above are specific to both Netscape Navigator/Communicator 4.6 or higher and Microsoft Internet Explorer 5.0 or higher. The recommended workstation configuration requires a Pentium 900 MHZ processor (or higher) with a minimum of 128 MB of RAM, adequate available disk space<sup>5</sup>, a device for creating and/or reading OSM, and access to the World Wide Web (Web) through an Internet Service Provider (ISP). The operating system should be either Windows NT or Windows 95 (or higher). Other browser types, such as AOL or Mosaic, are not currently supported for use in the EIE system.

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<sup>5</sup> The requirement for disk space is dependent on the volume of material the participant intends to submit and/or retrieve. To calculate required disk space, multiply the size of the submittal or retrieval by 2, for example, a 33 MB file will require 66MB of available disk space.

## 5.0 OPTICAL STORAGE MEDIA SUBMISSIONS

OSM should be used in the following circumstances:

- The documentary material cannot be transmitted via EIE (e.g., file size, complex document)
- The EIE submittal exceeds 50 MB and is comprised of multiple segmented files
- A document segment cannot be submitted via EIE although the remaining document portions could be transmitted via EIE
- The document contains sensitive unclassified information (i.e., Safeguards information) or classified information (i.e., National Security information and Restricted Data).

In addition:

- The transmittal letter should be included on the OSM (see Section 3.4 for transmittal letter guidelines)
- NRC regulations require that some documents be filed under oath or affirmation. If such a document is submitted on OSM, either the transmittal letter or the first page of the document contained on the OSM must contain the oath and the signature of the person swearing to the accuracy of the information submitted. Specifically, the letter must include the following statement with the signature of the person affirming it:

"I declare under penalty of perjury that the foregoing is true and correct. Executed on [date]".

If the oath or Affirmation is submitted on the transmittal letter, it must contain the original signature of the person swearing to the accuracy of the information. If submitted as part of the document contained on the OSM, the page containing the signature must be provided as a scanned PDF Searchable Image (Exact) file along with the PDF version of the entire document being submitted.

- Include the entire submission (i.e., all files submitted separately through EIE and those submitted only on OSM). Place files submitted through EIE on OSM that is separate from the files submitted only on OSM.

Software used to produce OSM should be configured to ensure that the OSM is "read only" prior to its delivery to NRC.

All OSM content should be readable either by commercially available software, or by providing, where appropriate, executable programs that are located on the OSM.

The OSM should be labeled with the Transfer Media Configuration (e.g., drive transfer

rate) as well as any numbering, exterior marking, or labeling that should reference the submittal provided through EIE. If appropriate, the version number may also be included.

As stated in Sections 3.3 and 3.5, the acceptable OSM format must be compliant with ISO-9660, using the Joliet Extension.

Submitters should transmit OSM, along with a paper copy of the transmittal letter, by expedited delivery service. Given the paramount importance of submittal and document integrity and fidelity, expedited delivery of the OSM is essential to ensure proper coordination of the companion submittals transmitted via EIE and on OSM. In addition, to ensure that all intended information has been received, the NRC will not deem a submittal complete, "in-hand," or ready for further processing and staff review until the agency has received the last document/segment.

Subsequent to the anthrax mailings in late September 2001, incoming mail addressed to the Federal government is irradiated prior to delivery. Irradiation of electronic information media may result in damage to the media and its contents. Therefore, packages containing OSM submission should be clearly marked "CONTENTS CONTAIN OPTICAL STORAGE MEDIA DO NOT IRRADIATE."

The following address is to be used for delivering OSM to the NRC:

ATTN:           **Document Control Desk**  
                  **HLW SUBMISSION**  
                  U.S. Nuclear Regulatory Commission  
                  One White Flint North  
                  11555 Rockville Pike  
                  Rockville, MD 20852

## ATTACHMENT A - SETTINGS

The following table provides guidance on the settings to be used when using Adobe® Acrobat Distiller 5.0.5 to produce an optimal PDF for submission and subsequent use by NRC staff and the public. When PDF creation software other than Adobe® Acrobat Distiller 5.0.5 is used, the PDF creation software should be configured with parameter values equivalent to those listed below.

Options		Recommendation Optimal on 5.0
<b>General Options</b>		
	Compatibility	5.0
	Optimize for Fast Web	X
	Embed Thumbnails	
	Auto-Rotate	X
	Binding	Left
	Resolution (dpi)	300
<b>Compression</b>		
	Color Images	Bicubic Downsampling (NOT SELECTED)
	For images above	300 dpi
	Compression	ZIP
	Quality	8-bit
	Grayscale	Bicubic Downsampling (NOT SELECTED)
	For images above	300 dpi
	Compression	ZIP
	Quality	8-bit
	Monochrome	Bicubic Downsampling (NOT SELECTED)
	For images above	450 dpi
	Compression	CCITT – Group 4
	Anti-Alias to Gray	Not Selected
	Compress Text & Line Art	Selected
<b>Font</b>		
	Embed All Fonts <sup>1</sup>	X
	Subset embedded fonts when percent of characters used is less than 100 %	
	When Embedding Fails	Warn & Continue

\*\*\*Continued on next page\*\*\*

<sup>1</sup>You must check the license(s) for any font(s) you intend to embed, to verify that embedding is allowed. In some cases, the program will warn you if a font is not licensed for embedding, but this varies by vendor. Fonts must be embedded to comply with NARA guidelines.

<b>Options (cont'd)</b>		Recommendation Optimal on 5.0
<b>Color</b>		
	Setting File	None
	Color Management Policy	Tag Everything for Color Management
	Intent:	Default
	Gray	None
	RGB	SRGB IEC61966-2.1
	CMYK	US Web Coated (SWOP)v2
	Preserve Overprint Settings	X
	Preserve Under Color Removal	X
	Transfer Function	Preserve
	Preserve Halftone	
<b>Advanced Options</b>		
	Prologue.ps & Epilogue.ps	
	Allow PS to Override Job Options	X
	Preserve Level 2 Semantics	X
	Save Job Ticket	X
	Illustrator Mode	X
	Gradients to Smooth Shades	X
	ASCII Format	
	Process DSC Comments	X
	Log DSC Warnings	
	Resize for EPS	X
	Preserve EPS Info	X
	OPI Comments	X
	Preserve Doc Info from DSC	X

## **ATTACHMENT B – GLOSSARY**

### Agencywide Documents Access and Management System (ADAMS)

ADAMS is the NRC's primary records management system that contains the bibliographic header (metadata) about a record, searchable text, and an image of a record (either in PDF or TIFF formats). Two access methods for the public are offered today:

- through the Citrix server (which provides client/server-type access to ADAMS)
- a Web browser based interface to publicly available records.

### Bibliographic Header

A structured description of a document, file, or object.

### Binary Large Object File (BLOB)

A large file, typically an image or sound file, that must be handled (for example, uploaded, downloaded, or stored in a database) in a special way because of its size.

### Complex Document

A document that consists (entirely or in part) of electronic files having substantial portions that are neither textual nor image in nature, and graphic or other Binary Large Objects that exceed 50 megabytes and cannot logically be divided.

### Courtesy Copy

A non-required copy of a document provided as a useful reference copy of an official document.

### Document

A document is any written printed, recorded, magnetic, graphic matter, or other documentary material, regardless of form or characteristic.

### Documentary Material

Documentary material means any information upon which a party, potential party, or interested governmental participant intends to rely and/or to cite in support of its position in the proceeding.

### Electronic Information Exchange (EIE)

Electronic Information Exchange is the electronic transfer mechanism established by the NRC for electronic transmission of documents to the agency via the Internet, where the documents are transmitted in a verifiable and certifiable mode that includes digital signatures. EIE is a Public Key Infrastructure (PKI) system using RSA Labs' 128-bit encryption, Verisign's Public Key Certificate Services (PKCS), and PureEdge's Extensible Forms Definition Language (XFDL) webform.

### High-Level Waste Electronic Hearing Docket (HLW-EHD)

The High-Level Waste Electronic Hearing Docket is the NRC information system that receives, distributes, and stores the Commission's adjudicatory docket materials in the proceeding on the application of the Department of Energy (DOE) for license to receive and possess high-level radioactive waste at a geologic repository at Yucca Mountain. The High-Level Waste Electronic Hearing Docket was established pursuant to the requirements of 10 CFR §2.1013, to contain the official record materials of the HLW proceeding in searchable full text, and for material that is not suitable for entry in searchable full text, by header and image, as appropriate.

### File Format

A file format is the layout of a file in terms of how the data within the file is organized. A program that uses the data in a file must be able to recognize and access data within the file. A particular file format is often indicated as part of a file's name by a file name extension (suffix). Conventionally, the extension is separated by a period from the name and contains three or four letters that identify the format. Examples are: 1) word processing (.doc for MS® Word, .wpd for Corel® WordPerfect), 2) spreadsheet (.xls for MS® Excel, .wb3 for Corel® Quattro Pro), 3) "generic" (.pdf for Adobe Systems' ® Acrobat).

### Length of Path (ISO 9660, Joliet Extension))

The Joliet Extension to ISO 9660 allows filenames of 64 characters in length and is the least restrictive interchangeable format. However, the ISO 9660 standard imposes a limit on length of path to each file that cannot exceed 255 characters. Length of path is the sum of the lengths of all relevant directories, the length of the file name and extension, and the number of relevant directories.

### Licensing Support Network (LSN)

The Licensing Support Network (LSN) is a web portal that provides access to multiple document collections pertaining to the high-level waste repository. It uses "web-crawler" technology to index those various collections. It provides web-based access to the document collection structured information (bibliographic) and unstructured information (content files, image files).

### Macro

A macro (for "large"; the opposite of "micro") is any programming or user interface that, when used, expands into something larger. A macro definition defines how to expand a single language statement or computer instruction into a number of instructions. The macro statement contains the name of the macro definition and usually some variable parameter information. Macros were (and are) useful especially when a sequence of instructions is used a number of times. For example, In Microsoft Word and other programs, a macro is a saved sequence of commands or keyboard strokes that can be stored and then recalled with a single command or keyboard stroke.

### Optical Character Recognition (OCR)

Optical Character Recognition is the recognition of printed or written text characters by a computer. This involves the photo scanning of the text character-by-character, the analysis of the scanned-in image, and then translation of the character image into character codes, such as ASCII. The scanned-in image is analyzed for light and dark areas in order to identify each alphabetic letter or numeric digit. When a character is recognized, it is converted into an ASCII code. OCR can be accomplished either through software alone, or through a combination of specialized hardware and software.

### Portable Document Format (PDF)

This is Adobe® Systems, Incorporated's Acrobat document publishing software package output format. Current release is Acrobat 5.0.5. The PDF standard, though it is proprietary to Adobe, has been published, is freely available, and the capability to create PDF documents has been integrated into many other software applications. PDF documents can be generated from any application that can generate Postscript printer files (a popular printing language standard); thus anything that can be printed can be represented in PDF. When files are converted from standard applications to PDF, the information and pagination are "locked down" for the general user, who can access the content through the use of PDF viewer software. The following are definitions of the various types of PDFs:

- *Formatted Text & Graphics*  
Formerly known as "PDF Normal". This type of PDF is a popular output file format created when materials have been produced on a word processing or publishing system. It contains the full text of the page with appropriate coding to define fonts, sizes, etc. The files are relatively small; screen display and printed version are comparable in readability of content.
  
- *Searchable Image*  
Formerly known as "PDF Original Image with Hidden Text." When a document is created in this type of PDF, the resultant file consists of two layers: a bit-mapped layer and a hidden text layer. The bitmapped layer maintains the visual representation of the original document. The text layer is created through optical character recognition software (OCR). There are two "flavors" of this type of PDF:
  - *Searchable Image (Exact)*  
Formally known as 'PDF Image + Hidden Text.' This creates the largest file size, but is the more accurate of the two "flavors". When the plug-in is launched, a layer of text is placed behind the image, making the page appear exactly as it did when scanned, but now it is searchable. Thus, the Searchable Image (Exact) preserves the look of the original scanned image, making it an ideal format for meeting legal requirements.



- **Searchable Image (Compact)**  
This captures the same image as searchable image (exact), producing smaller file sizes than the Exact method. The general look and feel of the image is retained and it becomes searchable. The quality is not quite as good as the Exact method, as the compression routines used are “lossy” techniques. Because of the lossy techniques used here, the NRC will not accept any documents created in this format. This decision is consistent with guidance from NARA.
- *Image Only*  
This type of PDF is essentially a scanned image of the page in a PDF wrapper and contains no searchable text. There is no ability for text searching. The image quality is dependent on the quality of the source materials and the quality of the scanning operation.

### Segment

A segment is subpart, or subunit, of a document usually created at a logical division such as a chapter, section, or subsection of a large document.

### Submittal

An information package delivered to the NRC for a specific purpose and may consist of one or more documents

### Target File

A file required by most electronic document management systems to store and retrieve bibliographic header information.

**ATTACHMENT C - Sample Transmittal Letters and Corresponding EIE Forms**

## SIMPLE SUBMITTAL

State of Xxx  
Office of the Governor  
12345 Main Street  
Anywhere, XX 56789

September 23, 2005

United States Nuclear Regulatory Commission  
Atomic Safety and Licensing Board  
Attn: Document Control Desk  
11555 Rockville Pike  
Rockville, MD 20852

WM-00011(PRE)

Enclosed are the State of XXXX's Response to DOE Interrogatories 3 and 7 and Notice of Appearance for J. Doe, Esq.

Questions concerning this submittal may be directed to:

State of XXXX  
Office of the Governor  
Attn: Mary Smith (000) 555-xxxx  
e-Mail: MESmith@stateofXX.us  
12345 Main Street  
Anywhere, XX 56789

Sincerely,  
J. Doe  
Attorney for the State of XX

cc: Provide list of parties served

**Document Components:**

001 State Transmittal Letter.pdf 1024 bytes (EIE)  
002 State Response to 3 & 7.pdf, 15,683,112 bytes (EIE)  
003 Notice of Appearance-Doe.pdf, 1,056,011 bytes (EIE)

# High Level Waste Submittal Form

WM-00011

## Hearing Form

ASLBP #

LSN #

Affiliation

Document Date

09-23-2005

Author Name

John Doe

Document Title

State of XX Response to  
DOE Interrogatories 3 & 7

Document Type

Legal - Interrogatories and Response

[Click For Exhibit Info >>](#)

Issues

Party Identifier

Panel Judges

Check box if this is part of a  
multi-part submission

Unique ID

This is  
part of

Service List

[Click For Service list](#)

Attach File ...

Extract File...

View...

Remove File...

Click to Authorize Transmission

Submit Document

## LARGE SUBMITTAL

United States Department of Energy  
Office of the General Counsel  
Hearing Division  
Washington, DC 20585

September 18, 2005

United States Nuclear Regulatory Commission  
Atomic Safety and Licensing Board  
Attn: Document Control Desk  
11555 Rockville Pike  
Rockville, MD 20852

WM-00011(PRE)

Enclosed are DOE's Response to Interrogatories Related to Quality Control Procedures

Questions concerning this submittal may be directed to:  
US Department of Energy  
Hearing Division  
Attn: S. Smith (202) 555-xxxx  
e-Mail: SESmith@usdoe.gov  
Washington, DC 20585

J. Doe, Attorney for DOE

cc: Provide list of parties served

### **Document Components:**

001 DOE Transmittal Letter.pdf 1024 bytes (EIE)  
002 Evaluation Quality Control (1 of 4).pdf 48,321,678 bytes (EIE)  
003 Evaluation Quality Control (2 of 4).pdf 47,421,178 bytes (EIE), Proprietary  
004 Evaluation Quality Control (3 of 4).pdf 49,223,167 bytes (EIE)  
005 Evaluation Quality Control (4 of 4).pdf 37,522,178 bytes (EIE)

# High Level Waste Submittal Form

WM-00011

## Hearing Form

ASLBP #	<input type="text"/>	LSN #	<input type="text"/>
Affiliation	<input type="text"/>	Document Date	09-23-2005
Author Name	J. Doe	Document Title	Response to Interrogatories Related to Quality Control Procedures
Document Type	Legal - Interrogatories and Response	<a href="#">Click For Exhibit Info &gt;&gt;</a>	
Issues	<input type="text"/>	Party Identifier	<input type="text"/>
Panel Judges	<input type="text"/>	<input checked="" type="checkbox"/> Check box if this is part of a multi-part submission Unique ID <input type="text"/> This is part of <input type="checkbox"/> <input type="checkbox"/>	
Service List	<a href="#">Click For Service list</a>		

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## COMPLEX SUBMITTAL

United States Nuclear Regulatory Commission  
Office of the General Counsel  
Hearing Division  
Washington, DC 20555

September 30, 2005

United States Nuclear Regulatory Commission  
Atomic Safety and Licensing Board  
Attn: Document Control Desk  
11555 Rockville Pike  
Rockville, MD 20852

WM-00011(PRE)

Enclosed are NRC Motion in Support of DOE's Site Characterization Plan - Estimates on Groundwater Travel in Area 16 of the Yucca Mountain Facility and Notice of Appearance for J. Jones, Esq.

Questions concerning this submittal may be directed to:  
United States Nuclear Regulatory Commission  
Office of the general Counsel  
Hearing Division  
Attn: Jane Doe, (301) 415-xxxx  
e-Mail: xxx@nrc.gov  
11555 Rockville Pike  
Rockville, MD 20852

Jane A. Doe, Attorney for the NRC

cc: Provide list of parties served

### Document Components:

001 NRC Transmittal Letter.pdf 1024 bytes (EIE)  
002 NRC Motion in Support of DOE Analysis.pdf, 15,679,411 bytes (EIE)  
003 Notice of Appearance for J. Jones, Esq.pdf, 1,056,911 bytes (EIE)  
004 Description Analytical Code DOE Site Plan.pdf, 142,846 bytes (EIE), Proprietary  
005 Description Core Sample 3.pdf, 1,032,116 bytes ( EIE), LSN-#####  
006 Description Video - Jan. 21, 2003.pdf, 156,936 bytes (EIE), LSN-#####

### OSM#1:

Located in the OSM root:  
000 Table of Contents.pdf

Located in the "documents" folder:  
001 NRC Transmittal Letter.pdf 1024 bytes (EIE)  
002 NRC Motion in Support of DOE Analysis.pdf, 15,679,411 bytes (EIE)  
003 Notice of Appearance for J. Jones, Esq.pdf, 1,056,911 bytes (EIE)

004 Description Analytical Code DOE Site Plan.pdf, 142,846 bytes (EIE), LSN-#####  
005 Description Core Sample 3.pdf, 1,032,116 bytes ( EIE), LSN-#####  
006 Description Video - Jan. 21, 2003.pdf, 156,936 bytes (EIE), LSN-#####

## **OSM#2**

Located in the OSM root:  
000 Table of Contents.pdf

Located in the "Analytical Code" folder:  
001 DOE Site Characterization Plan Analysis.exe 123,311,123 bytes, (Description submitted via EIE), Proprietary

Located in the "Video" folder:  
002 Video Recording of Jan. 21, 2003 Meeting.wmv, 236,561,440 bytes, (Description submitted via EIE), LSN-#####



# High Level Waste Submittal Form

WM-00011

## Hearing Form

ASLBP #

LSN #

Affiliation

Document Date

09-23-2005

Author Name

J. Doe

Document Title

Motion in Support of Site Plan

Document Type

Legal - Motion

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Issues

Party Identifier

Panel Judges



Check box if this is part of a multi-part submission

Unique ID

This is part of

Service List

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Submit Document

# ATTACHMENT D - Sample Files Describing "BLOBS" or Physical Objects

**004 Analytical Code Used for DOE Site Characterization Plan, Chpt 4, Groundwater Level Analysis,  
(Description submitted via EIE) LSN-D4567823**

This enclosure provides the Analytical Code used for the analysis of information presented in Chapter 4 of DOE's Site Characterization. Code is run on a UNIX PC utilizing abcd Operating system, ~~~~~

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**005 Core Sample 3, Area 16 (Description submitted via EIE)  
LSN-C456789**

Core Sample 3 was taken from Area 16 on the southeastern slope of Yucca Mountain and displays strata from

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~~~~~  
~~~~~  
~~~~~  
~~~~~

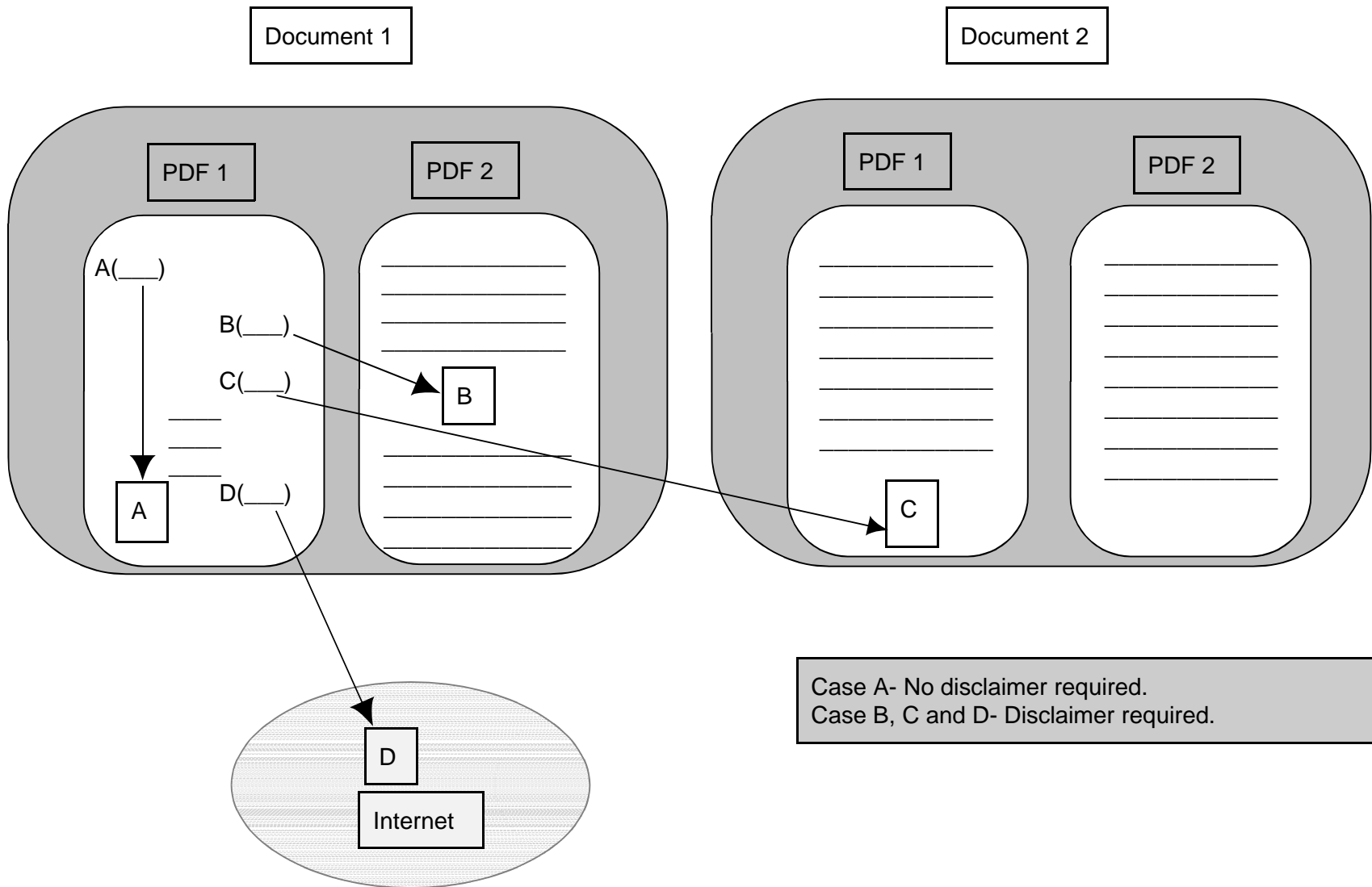
**006 Videotape of Jan. 21, 2003 Meeting to Discuss Core Sample Evaluations  
(Description submitted via EIE, Video file submitted on OSM) LSN-V987654**

This is a video recording of the January 21, 2003 meeting between the US Department of Energy, the Center for Nuclear Waste Regulatory Analyses, and the Nuclear Regulatory Commission to discuss procedures used to perform core sample evaluations of area 22 on the southwestern slope of Yucca Mountain.

**Technical Parameters/Special Instructions:**

This video file was created using XXX software running on a 900 MHz personal computer utilizing Windows XP Video Viewer 123, which is widely available for free on the Internet. File Size is 236 MB. Total run time is approximately 1 hours and 20 minutes.

# ATTACHMENT E - TYPES OF HYPERLINKS AND NEED FOR DISCLAIMERS



information technology security awareness training.

### E.O. 12866, Regulatory Review

This rule has been reviewed by the Office of Management and Budget in accordance with E.O. 12866.

### Regulatory Flexibility Act

I certify that these regulations would not have a significant economic impact on a substantial number of small entities because they would apply only to Federal personnel including contractors and other users of information systems that support the operations and assets of the agency.

### List of Subjects in 5 CFR part 930

Administrative practice and procedure; Computer technology; Government employees; Motor vehicles. Office of Personnel Management.

**Kay Coles James,**  
Director.

■ Accordingly, OPM revises 5 CFR part 930, subpart C, as follows:

### PART 930—PROGRAMS FOR SPECIFIC POSITIONS AND EXAMINATIONS (MISCELLANEOUS)

■ 1. Subpart C is revised to read as follows:

#### Subpart C—Information Security Responsibilities for Employees who Manage or Use Federal Information Systems

**Authority:** 5 U.S.C. 4118; Pub. L. 107-347, 116 Stat. 2899

#### §930.301 Information systems security awareness training program.

Each Executive Agency must develop a plan for Federal information systems security awareness and training and

(a) Identify employees with significant information security responsibilities and provide role-specific training in accordance with National Institute of Standards and Technology (NIST) standards and guidance available on the NIST Web site, <http://csrc.nist.gov/publications/nistpubs/>, as follows:

(1) All users of Federal information systems must be exposed to security awareness materials at least annually. Users of Federal information systems include employees, contractors, students, guest researchers, visitors, and others who may need access to Federal information systems and applications.

(2) Executives must receive training in information security basics and policy level training in security planning and management.

(3) Program and functional managers must receive training in information security basics; management and implementation level training in security planning and system/application security management; and management and implementation level training in system/application life cycle management, risk management, and contingency planning.

(4) Chief Information Officers (CIOs), IT security program managers, auditors, and other security-oriented personnel (e.g., system and network administrators, and system/application security officers) must receive training in information security basics and broad training in security planning, system and application security management, system/application life cycle management, risk management, and contingency planning.

(5) IT function management and operations personnel must receive training in information security basics; management and implementation level training in security planning and system/application security management; and management and implementation level training in system/application life cycle management, risk management, and contingency planning.

(b) Provide the Federal information systems security awareness material/exposure outlined in NIST guidance on IT security awareness and training to all new employees before allowing them access to the systems.

(c) Provide information systems security refresher training for agency employees as frequently as determined necessary by the agency, based on the sensitivity of the information that the employees use or process.

(d) Provide training whenever there is a significant change in the agency information system environment or procedures or when an employee enters a new position that requires additional role-specific training.

[FR Doc. 04-13319 Filed 6-10-04; 8:45 am]

**BILLING CODE 6325-38-P**

## NUCLEAR REGULATORY COMMISSION

### 10 CFR Part 2

RIN 3150-AH31

#### Licensing Proceeding for a High-Level Radioactive Waste Geologic Repository; Licensing Support Network, Submissions to the Electronic Docket

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Final rule.

**SUMMARY:** The Nuclear Regulatory Commission is amending its Rules of Practice applicable to the use of the Licensing Support Network (LSN) and the electronic hearing docket in the licensing proceeding on the disposal of high-level radioactive waste at a geologic repository. The amendments establish the basic requirements and standards for the submission of adjudicatory materials to the electronic hearing docket by parties to the high-level radioactive waste licensing proceeding. The amendments also address the issue of reducing the unnecessary loading of duplicate documents on individual participant LSN document collection servers (Web sites); the continuing obligation of LSN participants to update their documentary material after the initial certification; the Secretary of the Commission's determination that the DOE license application is electronically accessible; and the provisions on material that may be excluded from the LSN.

**DATES:** *Effective Date:* July 14, 2004.

**FOR FURTHER INFORMATION CONTACT:** Francis X. Cameron, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001, telephone (301) 415-1642, e-mail [FXC@nrc.gov](mailto:FXC@nrc.gov).

#### SUPPLEMENTARY INFORMATION:

##### I. Background

The Commission's regulations in 10 CFR Part 2, Subpart J, provide for, among other things, the use of an electronic information management system to provide documents related to the high-level radioactive waste (HLW) repository licensing proceeding. Originally promulgated on April 14, 1989 (54 FR 14944), the information management system required by Subpart J is to have the following functions:

(1) The Licensing Support Network (LSN) provides full text search and retrieval access to the relevant documents of all parties and potential parties to the HLW repository licensing proceeding beginning in the time period before the U.S. Department of Energy (DOE) license application for the repository is submitted;

(2) The NRC Electronic Information Exchange (EIE) provides for electronic submission of filings by the parties, as well as the orders and decisions of the Atomic Safety and Licensing Board Panel (ASLBP), during the proceeding; and

(3) The Electronic Hearing Docket (EHD) provides for the development and

access to an electronic version of the HLW licensing proceeding docket.

The creation of the LSN (originally called the "Licensing Support System") was stimulated by the requirements of section 114(d) of the Nuclear Waste Policy Act of 1982 (NWPA). This provision sets as a goal Commission issuance of a final decision approving or disapproving issuance of the construction authorization for a geologic repository for HLW within three years of the docketing of the DOE license application. The Commission anticipated that the HLW proceeding would involve substantial numbers and volumes of documents created by well-informed parties on numerous and complex issues. The Commission believed that the LSN could facilitate the timely review of DOE's application by providing for electronic access to relevant documents via the LSN before the application is submitted, rather than the traditional, and potentially time-consuming, discovery process associated with the physical production of documents after an application is submitted. In addition, the Commission believed that early access to these documents in an electronically searchable form would allow for a thorough and comprehensive technical review of the license application by all parties and potential parties to the HLW licensing proceeding, resulting in better focused contentions in the proceeding.

The current requirements in 10 CFR 2.1003(a) require the DOE to make its documentary material available in electronic form no later than six months in advance of DOE's submission of its application to the NRC. The NRC must make its documentary material available in electronic form no later than thirty days after the DOE certification of compliance. All other participants must make their documents available in electronic form no later than ninety days after the DOE certification of compliance. Originally, the LSN was conceived as a large, centralized information management system administered by what was then called the Licensing Support System Administrator (now the LSN Administrator). To take advantage of the advances in technology that occurred since the promulgation of the original rule, the Commission revised the rule to use the Internet to link geographically dispersed sites rather than rely on a complex and expensive centralized system (63 FR 71729; December 30, 1998).

As noted, one of the objectives of the regulations in 10 CFR Part 2, Subpart J is to provide for electronic submission of filings by the parties, as well as the

orders and decisions of the ASLBP, during the proceeding. The purpose of this function is to reduce the time that it takes to serve filings by substituting electronic transmission for the physical mailing of filings that is typically used in NRC licensing proceedings. Shortening the amount of time for certain activities during the hearing process will support the NRC's efforts to meet the schedule in the NWPA. 10 CFR 2.1013(c)(1) requires that all filings in the HLW adjudicatory proceeding be "transmitted electronically" (emphasis added) by the submitter to the Presiding Officer, the parties, and the Secretary of the Commission. The Commission believes that the majority of these filings will consist of simple documents that can be readily transmitted by EIE. However, after further considering the nature of some of the documents that may be submitted by the parties during the proceeding, the Commission believes that it is necessary to specify requirements for submitting large and/or complex documents. This need was the reason the Commission initiated the proposed rulemaking that is the subject of this final rule. The proposed rule was published in the **Federal Register** on November 26, 2003 (68 FR 66372).

The proposed amendments addressed a number of aspects of the current rules:

- The requirements and standards for a party's submissions to the electronic docket for the HLW repository licensing proceeding;
- Those provisions that could result in the loading of duplicate documents on individual participant LSN document collection servers;
- The provisions related to the Secretary of the Commission's determination that the DOE license application is electronically accessible;
- Those provisions related to the continuing obligation of LSN participants to update their documentary material; and
- Those provisions on material that may be excluded from the LSN.

## II. Public Comments

The Commission received nine comments on the proposed rule from the following entities:

- (1) U.S. Department of Energy (DOE).
- (2) State of Nevada.
- (3) Nuclear Energy Institute (NEI).
- (4) Nevada Nuclear Waste Task Force, Incorporated.
- (5) Nye County, Nevada.
- (6) Lincoln County and the City of Caliente, Nevada.
- (7) White Pine County, Nevada.
- (8) Eureka County, Nevada.
- (9) Progress Energy.

These comments addressed the following categories of issues:

### 1. Rule or Guidance

Two commenters (DOE, NEI) recommended that the technical standards in proposed section 2.1013(c)(1) be incorporated into a guidance document rather than in the NRC regulations. These commenters noted that the proposed standards in section 2.1013(c)(1) were useful clarifications, but it was not necessary to formalize them in a rulemaking. The rationale for this recommendation was that technical capabilities can change significantly over the period of time that the HLW licensing proceeding will take place and that any needed changes to reflect new technical capabilities could more efficiently be implemented by revising guidance rather than by initiating a new rulemaking. In addition, NEI was concerned about the need for stability in the LSN regulatory framework as the date for submission of the DOE license application draws closer. NEI also recommended that, if the NRC decides to proceed with the rulemaking, it be done as expeditiously as possible. NEI also requested that the NRC provide some assurance to LSN participants on the stability of the LSN regulatory framework in the interim period while a rule was being finalized. Finally, NEI urged the Commission to issue the final revision to NRC Regulatory Guide 3.69 on the Topical Guidelines that were issued for public comment in June, 2002, *See* "Draft Regulatory Guide DG-3022 (Proposed Revision 1 of Regulatory Guide 3.69)." Another commenter, Progress Energy, expressed the same concerns as NEI.

### Response

The Commission has tried to balance the need for flexibility, informality, and responsiveness, *i.e.*, using guidance for the technical standards, with the need to ensure that the fundamental compliance requirements for LSN participants are clear, *i.e.*, using a rule. Accordingly, the Commission has expressed what it believes to be the most important technical standards in Section 2.1013(c)(1) of the final rule, while including the majority of the detailed technical specifications in a guidance document, "Guidance for the Submission of Electronic Docket Materials Under 10 CFR Part 2, Subpart J", U.S. Nuclear Regulatory Commission, (Guidance Document). The Guidance Document is available on the NRC Web site, <http://www.nrc.gov>.

The Guidance document can also be found in the Commission's Agencywide Documents Access and Management



System (ADAMS) at Accession Number ML041560341. The Guidance Document contains essential information in regard to the proper implementation of the requirements of this rule.

In terms of providing an assurance of a stable regulatory framework, the Commission is not imposing any new requirements that would significantly alter the current regulatory framework. Furthermore, the Commission does not anticipate adding any additional requirements beyond those in this final rule before the repository license application is submitted. As explained by the NRC staff at the December 2003 meeting of the LSN Advisory Review Panel, the only revision to the scope of documents covered by the Topical Guidelines in Regulatory Guide 3.69, was a proposed new exclusion for "congressional correspondence." Therefore, the Commission does not believe that the existing regulatory framework will in any way be "destabilized." The final revision of the Topical Guidelines will be completed immediately after this rule is finalized.

## 2. Technical standards

DOE had several comments on the technical standards for the submission of electronic filings to the adjudicatory proceeding.

### A. Complex Documents

Section 2.1013(c)(1)(iii) of the proposed rule would have required that those portions of "complex documents" that are amenable to being transmitted electronically as a filing in the HLW adjudicatory proceeding be transmitted electronically, while those parts of complex documents that were not amenable to electronic transmission be submitted on optical media. DOE, in its comment letter, questioned the advantage of electronically transmitting only some portions of a complex document. If a complex document is not amenable to submittal in its entirety via electronic transmission through the EIE, the advantage of submitting only portions of it is unclear because those portions may not be useful by themselves. DOE recommended that the entire document be submitted on optical storage media, with a transmittal letter submitted via the EIE providing notification of the submittal of that document.

### Response

The final rule maintains the approach of the proposed rule to the submission of complex documents. In terms of the usefulness of submitting portions of the document by electronic transmittal, the Commission believes that this would

serve several useful purposes. First, it provides early notification that a complex document is coming in and consequently allows other parties to plan their review and possible response. Second, there often will be substantial benefit in receiving the text portion of a complex document via electronic transmission, notwithstanding the delay in receiving the additional attachments. Various Atomic Safety and Licensing Boards have been issuing orders for several years that use this practice. This has allowed the parties and the Boards to review the text portion, which contains the arguments of the parties, while awaiting the rest of the pleading. However, for purposes of the service requirements in section 2.1013(c) or the computation of time requirements in section 2.1017, the filing of a complex document or a large document is not complete until all portions of the document have been submitted.

### B. Image Resolution

Section 2.1013(c)(1)(iv) of the proposed rule would have required that all electronic submissions to the EHD have 300 dots per inch (dpi) minimum resolution for bi-tonal, color, and grayscale. DOE noted the inconsistency between these EHD requirements and the requirements in section 2.1011(b)(2)(iv) for documents placed on individual LSN participant Web sites. The LSN participant Web site documents are required to have 300 dpi for bi-tonal but 150 dpi minimum resolution for grayscale and color. DOE recommended that the final rule on the EHD be consistent with the LSN participant Web site requirements to avoid having to convert the color and grayscale parts of existing documents from 150 dpi to 300 dpi. According to DOE, this would not be "an efficient use of resources." The Commission interprets this latter phrase to mean that the conversion would be not only costly, but unnecessary because 150 dpi color and gray scale would be fully readable. DOE also noted that the Guidance Document states that there is flexibility with respect to the minimum resolution as long as the integrity and quality of the document result in readable copies. The DOE suggests that this flexibility should be added to the rule if the technical requirements are to be retained in the rule.

### Response

Records submitted to the NRC as part of the Electronic Hearing Docket are Federal "official agency records." The National Archives and Records Administration (NARA) issued a standard that records scanned after

December 23, 2002, must meet the minimum standard of 300 dpi for bi-tonal, color, and grayscale documents. The NRC adopted this standard on January 1, 2004, the effective date for the NRC final rule on the electronic maintenance and submission of information to the NRC (68 FR 58792; October 10, 2003). The NRC has considered the DOE's concern with regard to the "efficient use of resources." In response, the NRC has modified language in the rule to: (1) require submitters to use the 300 dpi standard for documents created after the January 1, 2004 effective date of the electronic maintenance rule, except in limited circumstances in which (a) submitters may need to use an image scanned before January 1, 2004, in a document created after January 1, 2004 or (b) the scanning process for a large, one-page image may not successfully complete at the 300 dpi standard resolution; and (2) require that documents created or scanned before January 1, 2004, (or for those documents in 1(a) or (b) above), meet the standards for documents placed on LSN participant Web sites in section 2.1011(b)(2)(iv) which is 150 dpi for color and grayscale documents and 300 dpi for bi-tonal documents. The Commission is also assuming that this document image resolution requirement for LSN participant Web sites would meet the criterion of "readability."

### C. Image Format

Section 2.1013(c)(1)(v) of the proposed rule would have required electronic submissions to be generated in Adobe Acrobat Portable Document Format (PDF). DOE noted that this PDF requirement was inconsistent with the requirement for LSN participant Web sites in section 2.1011(b)(2)(iv) that allows Tagged Image File Format (TIFF). DOE suggests that files on LSN participant Web sites that are submitted to the adjudicatory proceeding be allowed to be submitted in the TIFF format. Converting images in the LSN that are usable in TIFF format to PDF format for the EHD would again, according to DOE, "not be an efficient use of resources."

### Response

The electronic documentary material submitted to the EHD will be entered as official agency records in ADAMS. The PDF became the NRC standard for official agency records on January 1, 2004, the effective date for the NRC final rule on the electronic maintenance and submission of information to the NRC (68 FR 58792; October 10, 2003). The NRC has adopted PDF as the NRC

standard for this official agency records system based on the following:

- PDF represents a “generic” format that behaves consistently across multiple hardware and operating systems;
- When files are distributed in PDF, the information is “locked down” for the general user, who can access the content through the use of PDF viewer software;
- The PDF standard, though it is proprietary to Adobe, has been published, is freely available, and the capability to create PDF documents has been integrated into many other software applications;
- PDF documents can be generated from any application that can generate Postscript printer files; thus anything that can be printed can be represented in PDF;
- PDF supports file generation options for text-oriented files produced on a word processing or publishing system;
- PDF supports file generation options for scanned image-oriented files; and
- PDF supports file generation options for scanned text-oriented files capable of full text search.

In contrast, adherence to the PDF standards for NRC official agency records is not required for purposes of individual LSN participant Web sites and therefore, TIFF is acceptable under section 2.1011(b)(2)(iv). The Commission also believes that TIFFs can readily be converted to PDF using features inherent in PDF-authoring software. In those rare circumstances where technical reasons would prevent the successful conversion to PDF, DOE or any other LSN participant, can submit the image in TIFF and include a detailed statement of the technical reasons that prevent conversion to PDF, in a transmittal letter to accompany the filing.

#### D. Hyperlinks

Section 2.1013(c)(1)(vi) of the proposed rule requires that documents be free of hyperlinks to other documents or Web sites other than within a single PDF file. DOE notes that some documents may have embedded hyperlinks that are difficult to remove. The DOE suggests that the requirement be revised to state that use of the document in the EHD should not depend on hyperlinks to other documents or Web sites. The Commission understands this comment to suggest that there should be no restriction in the rule on documents containing hyperlinks, but that the use

of the document in the hearing may not depend on those hyperlinks.

#### Response

The Commission has considered the DOE comments and has revised the final rule to allow hyperlinks to be contained in documents submitted to the EHD. The Commission believes that it will be difficult and costly to remove these hyperlinks. Instead of prohibiting a document from being submitted with hyperlinks, section 2.1013(c)(1)(vi) of the final rule would prohibit reliance on the hyperlinks for purposes of providing additional evidentiary material or completing a submittal. This would require the submitter to review all documents submitted to the EHD for hyperlinks to the Internet or other documents. Any necessary material would need to be included in the filing or as an attachment to the filing.

However, the Commission is also concerned that hyperlinks in a filing that do not function, or that link a user to an external website that has changed or perhaps contains some type of offensive material, could create a negative perception of the integrity of the EHD database. Therefore, the final rule requires each electronic submission to contain a disclaimer that notifies the reader that the hyperlinks in the filing may not operate or may link the reader to material that is not intended to be necessary, or in some cases, even related, to the use of the filing in the proceeding. This disclaimer must either be in the transmittal memorandum required for filings over 50 MB or in the body of the pleading for filings under 50 MB. The single exception to the use of hyperlinks in a filing is when the hyperlink connects to another part of the same PDF file. The use of hyperlinks in this context is permissible. This also has implications for the minimum size of a file that is submitted to the EHD. The Commission encourages submitters to combine small files that are components of a larger document into one file to facilitate efficient distribution and use of the documentary material. For example, if a document consists of 15 separate 2 MB files, those 15 files should be combined to result in one 30 MB file. This will allow submitters to use hyperlinks in a larger file, *i.e.*, a single electronic file up to 50 MB.

#### E. Definitions

DOE noted that the definition of complex documents in section 2.1001 of the proposed rule could be viewed as inconsistent with the definition in the Supplementary Information for the proposed rule. Proposed section 2.1001 states that a complex document has

substantial portions that are neither textual nor image. However, the Supplementary Information (68 FR 66374) states that complex documents can also include a textual or graphic file that cannot be segmented into 50 megabyte (MB) files. The DOE suggests that the description in the Supplementary Information be used as the definition in section 2.1001 of the rule.

#### Response

The Commission agrees and has revised the definition accordingly.

#### 3. Docketing

Section 2.1012(a) provides that the DOE license application cannot be docketed unless the Secretary of the Commission determines that the license application can be effectively accessed through ADAMS. DOE is concerned that this establishes a requirement on DOE that is beyond its control. Entering documents into ADAMS is strictly a NRC function and ADAMS is under the sole control of the NRC. Any accessibility problems resulting from entering the license application into ADAMS would be the responsibility of the NRC. DOE notes that, in preparing its electronic license application, the DOE is responsible for meeting the NRC requirements, as well as addressing any guidance that has been issued by the NRC, and transmitting the license application to the proper address and in the proper format(s) specified by the NRC for these actions. If the DOE meets clearly defined specifications for such transmittals, the NRC should be able to make the document available through ADAMS.

The DOE recommends that section 2.1012(a) be revised to read: “The Director may determine that the tendered application is not acceptable for docketing under this subpart if the application is not accompanied by an updated certification pursuant to section 2.1009(b) or if the application is not submitted on optical storage media in a format consistent with NRC regulations and guidance.”

#### Response

The Commission agrees with this suggestion and has revised the final rule accordingly. However, in addition to the above two criteria, the Commission has also added a third criterion on non-compliance with any other requirements in Subpart J.

#### 4. The Continuing Need to Supplement Individual LSN Participant Web Sites

Proposed section 2.1003(e) would have required an LSN participant to

supplement its LSN Web site with any documentary material created after the time of initial certification. NEI was concerned that this requirement could continue indefinitely. It is NEI's opinion that the requirement to supplement ends when discovery, in the form of document production, is completed.

#### Response

The Commission agrees and has revised section 2.1003(e) to specify that the requirement to supplement ends when discovery is complete. The Commission anticipates that discovery will be complete by the time set for the second Pre-Hearing Conference at which issues for hearing will be finalized and schedules for prefiled testimony and hearing will be set. See Appendix D to 10 CFR Part 2. However, it should be emphasized that the Board could extend discovery beyond this time period. Moreover, although there is no obligation on an LSN participant to add new documents to its site after discovery closes, an LSN participant does have an obligation to maintain its existing LSN collection intact and available for the balance of the construction authorization proceeding. Parties will have a continuing need to search LSN participant databases during the evidentiary hearing and throughout the NRC appellate process.

#### 5. The Scope of the Congressional Exclusion

Nye County, Nevada expressed the view that the exclusion for congressional correspondence in proposed section 2.1005(i) seems overly broad. The commenter believes that it is entirely conceivable that somewhere in correspondence with a member of Congress or with congressional staff, DOE, or any other party, may have made relevant and admissible statements about some technical issues affecting the licensibility of Yucca Mountain. To exclude all such correspondence categorically is unwarranted. According to Nye County, a better approach would be to limit the exclusion to correspondence involving such matters as budget, and program management.

#### Response

The Commission appreciates the thoughtful comments of Nye County on this matter. However, the Commission continues to believe that this type of material will not have a significant bearing on repository licensing issues. Much of this material either relates to budgetary issues and schedules or is merely a summary of information in an agency primary document. It would normally not be the source of material

that a party would rely on for its case in the hearing or a source of material that would be contrary to such reliance information. However, most, if not all, of the material directed to Federal entities of concern to Nye County, would still be available as part of the normal Federal recordkeeping requirements. If a particular item of Congressional correspondence does become relevant to a contention admitted in the HLW proceeding, it can be made available at that time. The Commission does not anticipate that any disputes over this clearly and narrowly defined exclusion will be brought before the Pre-license Application Presiding Officer (PAPO).

#### 6. The Trigger for Participant Certification

Three commenters, the Agency for Nuclear Projects in the State of Nevada's Governor's Office, the Nevada Nuclear Waste Task Force, and Eureka County's Yucca Mountain Information Office, all raised concerns on the timing of LSN participant certification in relation to DOE's certification. The current requirements in 10 CFR 2.1003(a) require the DOE to make its documentary material available in electronic form no later than six months in advance of DOE's submission of its license application to the NRC. The NRC must make its documentary material available in electronic form no later than thirty days after the DOE certification of compliance. All other participants must make their documents available in electronic form no later than ninety days after the DOE certification of compliance. However, these commenters noted that although DOE may have all of its documentary material available on its LSN document server by the time required for certification, it is possible that the DOE collection would not yet have been indexed and audited by the LSN Administrator. Therefore, the entire DOE collection would not yet be "available" to the public. The commenters recommended that the Commission add an additional certification by the LSN Administrator that the DOE collection had been indexed and audited. This LSN Administrator certification would then become the tolling event for the certification by all other LSN participants, rather than the DOE certification.

#### Response

At the outset, the Commission notes that an amendment such as that recommended by the commenters is outside the scope of this rulemaking.

This issue was not raised in the proposed rule and was not intended to be part of this rulemaking effort. However, the Commission also recognizes the importance of this concern. The NRC is pursuing an approach with DOE to ensure that the DOE collection has been indexed and audited by the LSN Administrator in approximately the same time frame as the DOE certification. This should ensure that an indexed and baselined DOE collection will be available to other LSN participants well in advance of the point at which the NRC docket an acceptable DOE license application.

#### 7. Transportation Issues

Lincoln County and the City of Caliente, in their comments on the proposed rule, urged the Commission to clarify the extent to which Yucca Mountain repository system transportation related information will be considered during licensing and, therefore, be required for inclusion within the LSN. The County and the City believe that the Yucca Mountain licensing proceeding should encompass all aspects of the Yucca Mountain repository transportation system.

#### Response

The Commission recognizes that issues related to the transportation of High Level Waste (HLW) and Spent Nuclear Fuel (SNF) to the Yucca Mountain site in Nevada are of concern to members of the public. These issues are complicated by the multi-agency coordination that is required between DOE, the Department of Transportation (DOT), and the NRC. As a preliminary matter, it is important to distinguish the role of the NRC in matters related to transportation. The only role of the NRC in the licensing proceeding for Yucca Mountain with respect to transportation issues is to review the DOE Environmental Impact Statement (EIS), for adoption to the extent practicable.

The Nuclear Waste Policy Act of 1982, 42 U.S.C. 10101, *et seq.*, as amended (NWPA), provides the primary framework for issues related to the proposed Yucca Mountain repository, including transportation issues. Section 114(f) of the NWPA requires DOE to prepare an EIS, part of which may include an evaluation of transportation impacts. Additionally, section 114(f) mandates that the NRC, to the extent practicable, adopt the DOE EIS, including those parts of the EIS related to transportation. Such adoption shall be deemed to satisfy the responsibilities of the NRC under NEPA and "no further consideration shall be required." See NWPA section 114(f)(4). The Topical

Guidelines in Regulatory Guide 3.69 specifically address those aspects of transportation that are included under documentary material for purposes of the LSN.

### III. The Final Rule

#### *Submissions to the Electronic Docket for the Hearing*

As noted, one of the objectives of the regulations in 10 CFR Part 2, Subpart J is to provide for electronic submission of filings by the parties, as well as the orders and decisions of the Atomic Safety and Licensing Board, during the proceeding. The purpose of this function is to reduce the time that it takes to serve filings by substituting electronic transmission for the physical mailing of filings that is typically used in NRC licensing proceedings. Shortening the amount of time for certain activities during the hearing process will support the NRC's efforts to meet the schedule in the NWPA. 10 CFR 2.1013(c)(1) requires that all filings in the HLW licensing proceeding be *transmitted electronically* (emphasis added) by the submitter to the Presiding Officer, the parties, and the Secretary of the Commission. The Commission believes that the majority of these filings will consist of simple documents that can be readily transmitted by EIE. However, after further considering the nature of some of the documents that may be submitted by the parties during the proceeding, the Commission believes that it is necessary to specify requirements for submitting large and/or complex documents.

Large documents consist of electronic files that, because of their size, create challenges for both the NRC staff, potential parties and the public when transmitting, viewing, or downloading the document (e.g., significant delays in transmission, uploading, or downloading times). The Commission anticipates that the potential license application and some filings in the HLW repository adjudicatory proceeding will be of a size that will create transmission, viewing, or downloading challenges. In electronic format, some of these files could be up to several hundreds of megabytes (MB) in size. Examples of potential large documents are:

- DOE Site Characterization Plan
- DOE License Application and supporting materials
- DOE Environmental Impact Statement
- Some adjudicatory documents (e.g., motions, responses, transcripts, exhibits, and orders)

Additionally, any or all of these types of documents could contain embedded

photographs, charts, tables, and other graphics.

Complex documents consist (entirely or in part) of electronic files having substantial portions that are neither textual nor image in nature, and graphic or other Binary Large Objects that exceed 50 MB and cannot be logically divided. For example, these types of specialized documents may include:

- Executable files, which can be opened (run) to execute a programmed series of instructions on a computer or network;
- Runtime executable software, which generally is operational upon demand without being installed on a computer or network;
- Viewer or printer executable software that causes images to be displayed on the computer monitor or pages to print on an attached printer;
- Files from a dynamic link library (.dll), which are a collection of small, bundled executable programs that each provide one or more distinctive functions used by application programs and operating systems and are available when needed by applications or operating systems;
- Large data sets associated with an executable; and
- Actual software code for analytical programs that a party may intend to introduce into the proceeding.

As part of complex document submittals, the NRC anticipates receiving files that—

- (1) Due to their file size, may preclude easy transmission, retrieval, and use; or
- (2) May require specialized software and/or hardware for faithful display and subsequent use; and
- (3) May not be suitable for inclusion in a "generic" file format such as the Adobe® Acrobat Portable Document Format (PDF).

Examples of files that could be part of a complex document are:

- Maps
- Databases
- Simulations
- Audio files
- Video files
- Executable programs

There are several potential problems presented by the electronic transmission of these large or complex documents, including the "time out" problems when submitting very large documents via the Internet, difficulty of use in the hearing room, and Federal records management considerations. These potential problems are evaluated in more detail in the regulatory analysis for this final rule.

In response to these potential problems, the Commission is revising

the framework for the submission of filings during the HLW licensing proceeding. This revised framework is based on segmenting large documents using manageable file size units to reduce the potential for interruption or delay in transmission, uploading, or downloading. For example, large documents could be segmented into pieces, which correspond to the organization (chapters or sections) of the document, in order to address the transfer and retrieval performance problems discussed above. The author of the document would be in the best position to break up document files into usable segments without adversely impacting the organization or content of the document.

The electronic submission of filings in the HLW repository proceeding must be made via the Internet using the NRC EIE, when practicable. The EIE is an electronic transfer mechanism being established by the NRC for electronic transmission of documents to the agency via the Internet. EIE provides for the transmission of documents in a verifiable and certifiable mode that includes digital signatures.

The final amendments revise section 2.1001 to establish three categories of electronic filings for purposes of the HLW repository proceeding and would revise section 2.1013(c)(1) to specify the submission requirements for these three categories of electronic filings.

"Simple documents" are textual or graphic oriented material that are less than 50 megabytes (MB) in size. These documents are transmitted electronically via EIE as contemplated by the current 10 CFR 2.1011. Test results have demonstrated that 50 MB is a reasonable size for downloading files across wide area networks or from the Internet via phone lines.

"Large documents" are those that have textual or graphic oriented material larger than 50 MB in size. Under revised section 2.1013(c)(1)(ii), these documents must be submitted via the EIE in multiple transmissions of 50 MB or less each. The large document submission may also be supplemented with a courtesy copy on optical storage media to provide NRC staff, parties, and interested governmental participants in the HLW repository proceeding with a useful reference copy of the document. For purposes of the NRC staff review of the DOE license application, as opposed to an electronic submission to the adjudicatory docket, the requirements for DOE's submission of the license application are already specified in 10 CFR 63.22 of the Commission's regulations. 10 CFR 63.22(a) specifies that the application, any amendments to

the application, and an accompanying environmental impact statement and any supplements, must be signed by the Secretary of Energy or the Secretary's representative and must be filed with the Director in triplicate on paper and optical storage media. In addition, 10 CFR 63.22(b) requires that 30 additional copies of the license application be submitted on paper and optical storage media.

"Complex documents" are any combination of the following:

- Textual or graphic-oriented electronic files
- Electronic files that cannot be segmented into 50 MB files
- Other electronic objects, such as computer programs, simulations, video, audio, data files, and files with special printing requirements.

Under final section 2.1013(c)(1)(iii), those portions of complex documents that can be electronically submitted through the EIE, again in 50 MB or less segments, will be transmitted electronically. Those portions that are not amenable to electronic transmission will be delivered on optical storage media. The optical storage media must include the complete document, *i.e.*, include the portions of the document that have been delivered via the EIE.

In addition to these revisions, section 2.1013 (c)(1) is amended to require the following:

- Electronic submissions of files created after January 1, 2004 must have 300 dots per inch (dpi) as the minimum resolution for bi-tonal, color, and grayscale, except in limited circumstances in which (a) submitters may need to use an image scanned before January 1, 2004, in a document created after January 1, 2004, or (b) the scanning process for a large, one-page image may not successfully complete at the 300 dpi standard resolution.
- Electronic submissions of files created before January 1, 2004, or electronic submissions created after January 1, 2004, which cannot meet the 300 dpi standard for color and grayscale, must meet the standard for documents placed on LSN participant Web sites (10 CFR Part 2.1011(b)(2)(iv)) which is 150 dpi for color and grayscale documents and 300 dpi for bi-tonal documents.
- Electronic submissions must be in the appropriate PDF output format. These formats and their use are:
  - PDF—Formatted Text and Graphics—use for textual documents converted from native applications
  - PDF—Searchable Image (Exact)—use for textual documents converted from scanned documents

- PDF—Image Only—use for graphic-, image-, and forms-oriented documents

Tagged Image File Format (TIFF) images and the results of spreadsheet applications will need to be converted to PDF, except in those rare instances, examples of which are described in the Guidance Document, where PDF conversion is not practicable. Spreadsheets may be submitted using Microsoft® Excel, Corel® Quattro Pro, or Lotus® 123.

- Electronic submissions to the hearing docket cannot rely on the use of any hyperlinks to other electronic files or websites to generate additional documentary material. Any such documentary material must be submitted either as an attachment to the filing or as a separate filing. If a submittal contains hyperlinks, then it must include a disclaimer to the effect that the hyperlinks may be inoperable or are not essential to the use of the filing.
- Electronic submissions to the EHD may rely on the use of hyperlinks within the same PDF file.
- Electronic submissions must be free of any security restrictions imposed by the author (proposed section 2.1013(c)(1)(vii)).

Additional information on the submission of these filings will be provided in the Guidance Document, discussed earlier. The Guidance Document is available on the NRC Web site (<http://www.nrc.gov>). The NRC expects parties, interested governmental participants, and potential parties to use the detailed instructions in the Guidance Document to ensure that their electronic filings are effectively submitted. Areas covered by the Guidance Document address the need for and format of the transmittal letter for electronic filings, file naming conventions, copyrighted information, and instructions on sensitive or classified information.

#### Docketing

The final revisions clarify the responsibility of the Secretary of the Commission, under section 2.1012(a), to determine whether the DOE license application for a HLW repository is in an electronic media form and format that is acceptable for docketing. Under section 2.1012(a), the DOE license application cannot be docketed unless the Secretary of the Commission determines that the DOE license application has been submitted on optical storage media in a format consistent with NRC regulations and guidance.

#### Documentary Material

Section 2.1003 of the current LSN rule requires a party, a potential party, or an interested governmental participant (hereinafter "participant") to make its documentary material available in electronic form. The definition of "documentary material" includes material prepared by an individual participant, for example, all reports or studies prepared by, or on behalf of, a participant. It also includes other material in the possession of the participant on which the participant intends to rely and/or cite in support of its position in the HLW repository proceeding or that doesn't support its position. This provision can be read to obligate a party who possesses a document prepared by another participant to make that document available on its LSN document collection server even though it is already available on the LSN document collection server of the party who had prepared the document. For example, under this interpretation a document prepared by DOE would not only need to be available through the centralized LSN Web site from the DOE LSN document collection server, but also from the LSN document collection server of other participants. Without compromising the objective of ensuring that all documentary material is available on the LSN, the Commission believes that it would be beneficial to eliminate or at least significantly reduce the loading of duplicate documents. Reducing duplication will not only alleviate burdens on the participants, but will also make search and retrieval of the LSN collection more efficient. Therefore, the final amendment to section 2.1003(a)(1) allows an LSN participant to avoid loading a document created by another LSN participant if that document has already been made available by the LSN participant who created the document or on whose behalf the document was created.

If, in the process of eliminating duplicate documents, an LSN participant identifies a document which the creator of that document has not included on its LSN document collection server, as a practical matter, the participant who identified the document should include it on its LSN document collection server, as well as notifying the creator of the document that it is taking that action. Moreover, in such circumstances, it is not apparent what purpose would be served by raising the issue before the PAPO unless the documentary material has some readily apparent significance as a Class 2 document (as delineated in the

discussion below) or a significant number of “missing” documents were identified with regard to a particular LSN participant, so as to raise the issue of a concerted, deliberate effort not to comply with the regulations.

The Commission is also amending section 2.1003 by adding a new paragraph (e) to this section. Section 2.1003(e) requires LSN participants to supplement the documentary material provided under section 2.1003(a) in its initial certification with documentary material produced after that event. While much of an LSN participant’s documentary material will be made available early, it is reasonable to expect that additional material will be created after the initial compliance period specified in section 2.1003(a). In addition, the ongoing performance confirmation program required of DOE by section 63.131 of the Commission’s regulations will generate additional documentary material after the license application is docketed. The Commission has revised section 2.1003(e) to specify that the requirement to supplement ends when discovery is completed. The schedule in Appendix D to 10 CFR Part 2 anticipates the close of discovery to occur near the time of the second pre-hearing conference held to finalize issues for hearing and schedules for prefiled testimony and hearing. However, during the proceeding, the Atomic Safety and Licensing Board can always direct that additional discovery or discovery supplementation must take place. Moreover, it should be added that while there is no obligation on an LSN participant to add new documents to its site after discovery closes, an LSN participant does have an obligation to maintain its existing LSN collection intact and available for the rest of the proceeding. Parties will have a continuing need to search LSN participant databases during the evidentiary hearing and throughout the NRC appellate process.

Finally, the Commission is providing further information and a clarification on the responsibilities of LSN participants in regard to the three classes of documentary material in section 2.1001. These three classes are:

1. Any information on which a party, potential party, or interested governmental participant intends to rely and/or cite in support of its position in the HLW repository proceeding;
2. Any information that is known to, and in the possession of, or developed by the party that is relevant to, but does not support, that information noted in item 1 or that party’s position; and
3. All reports and studies prepared by or on behalf of a potential party,

interested governmental participant, or party, including all related “circulated drafts” relevant to the application and the issues set forth in the Topical Guidelines, regardless of whether they will be relied upon or cited by a party.

The first two classes of documentary material are tied to a “reliance” criterion. Reliance is fundamentally related to a position that a party in the HLW repository proceeding will take in regard to compliance with the Commission regulations on the issuance of a construction authorization for the repository. These compliance issues take the form of “contentions” of law or fact that a party has successfully had admitted for litigation in the HLW repository proceeding under the rules of practice in 10 CFR Part 2. The third class of material, “reports and studies prepared for or on behalf of the potential party” has meaning independent of any contentions that might be offered. The material in this class must be available on the LSN regardless of whether it has any relation to a contention offered at the hearing. It is also a likely source of the material that a party would use to develop its contentions. “Reports” and “studies” will also include the basic documents relevant to licensing such as the DOE EIS, the NRC Yucca Mountain Review Plan, as well as other reports or studies prepared by a LSN participant or its contractor.

To fall within the definition of “documentary material”, reports or studies must have a nexus to both the *license application* (emphasis added) and the Topical Guidelines contained in NRC Regulatory Guide 3.69. This dual requirement is designed to ensure that LSN participants do not have to identify, and include as documentary material, reports or studies that have no bearing on the DOE license application for a geologic repository at the Yucca Mountain site, such as reports or studies on other potential repository sites or on issues outside of the NRC licensing criteria. In addition, § 63.21 of the Commission’s regulations requires that the DOE Environmental Impact Statement (EIS) must accompany the license application. Therefore, reports and studies relevant to issues addressed by the DOE EIS must also be made available as Class 3 documentary material. This is also consistent with the coverage of the Topical Guidelines.

To assist participants in identifying documentary material that may be relevant to the license application in the time period before it is submitted, the Commission is recommending that LSN participants use the NRC Yucca Mountain Review Plan (NUREG-1804,

Rev. 2, July, 2003) as a guide. The Yucca Mountain Review Plan provides guidance to the NRC staff on evaluating the DOE license application. As such, it anticipates the form and substance of the DOE license application and can be used as a reliable guide for identifying documentary material.

The Commission also notes that the history of the LSN and its predecessor, the Licensing Support System, makes it apparent it was the Commission’s expectation that the LSN, among other things, would provide potential participants with the opportunity to frame focused and meaningful contentions and to avoid the delay potentially associated with document discovery, by requiring parties and potential parties to the proceeding to make all their Subpart J-defined documentary material available through the LSN prior to the submission of the DOE application. These objectives are still operational. Nonetheless, the Commission is clarifying that, because the full scope of coverage of the reliance concept will only become apparent after proffered contentions are admitted by the Presiding Officer in the proceeding, an LSN participant would not be expected to identify specifically documents that fall within either Class 1 or Class 2 documentary material in the pre-license application phase.

In this regard, the Commission still expects all participants to make a good faith effort to have made available all of the documentary material that may eventually be designated as Class 1 and Class 2 documentary material by the date specified for initial compliance in section 2.1003(a) of the Commission’s regulations. Thereafter, in conjunction with its license application submission, DOE would be required to supplement its Class 1 and Class 2 documents to the degree the application makes it apparent the scope of the DOE documentary material in those classes had changed, a process that might well be repeated by all parties following the admission of contentions. Finally, as part of the regular post-contention admission discovery process under section 2.1018, a party could be required to identify the specific documents that comprise its Class 1 and Class 2 documentary material. As a consequence, while it is not possible to say there are no special circumstances that would necessitate a ruling by the PAPO on the availability of a particular document in the pre-license application stage based on its Class 1 or Class 2 status, disputes over Class 1 and Class 2 documentary material generally would be of a type that would be more appropriately raised before the Presiding Officer designated

during the time following the admission of contentions when the NRC staffs working to complete the Safety Evaluation Report in its entirety.

#### Exclusions

The Commission has reviewed its procedural rules for the HLW repository licensing proceeding, including the LSN requirements, to assess whether they appropriately reflect the evolution of the relevant technology, law, and policy since the rules were originally promulgated in 1987, being mindful of a recent report by the House Committee on Appropriations (Committee), issued July 2003, expressing concern on the extent of documentation that DOE may be required to provide as part of the LSN. The Committee encouraged the Commission to review its regulatory requirements regarding the LSN to ensure that they do not require the duplication of information otherwise easily obtainable, focus on information that is truly relevant to the substantive decisions that will have to be made, and establish a time frame in accord with the traditional conduct of an adjudicatory proceeding.<sup>1</sup> Based on our review, the Commission has determined that the LSN rule could be further revised to address the Committee's concerns, while still maintaining the overall purpose and functionality of the LSN.

The Commission is revising section 2.1005 of the rule to specify an additional category of documents, "congressional correspondence," that may be excluded from the LSN. Section 2.1005 of the Commission's regulations establishes several categories of documents that do not have to be entered into the LSN, either under the documentary material requirements of section 2.1003, or under the derivative discovery provisions of section 2.1019. These include materials that are either widely available or do not have any significant relevance to the issues that might be litigated in the HLW licensing proceeding. The Commission is adding "correspondence between a party, potential party, or interested governmental participant and the Congress of the United States" to these exclusions. This reflects the Commission's current judgment that this type of material will not have a significant bearing on repository licensing issues. Much of this material either relates to budgetary issues and schedules or is merely a summary of an entity's primary document. It would normally not be the source of material that a party would rely on for its case

in the hearing or as a source of material that would be contrary to such reliance information. However, the correspondence generated by Federal entities will still be available as part of the normal Federal recordkeeping requirements. If a particular item of Congressional correspondence does become relevant to a contention admitted in the HLW proceeding, it can be made available at that time. The Commission does not anticipate that any disputes over this clearly and narrowly defined exclusion would be brought before the PAPO.

#### Plain Language

The Presidential memorandum dated June 1, 1998, entitled, "Plain Language in Government Writing," directed that the Government's writing be in plain language. This memorandum was published June 10, 1998 (63 FR 31883). In light of this directive, editorial changes have been made in these proposed revisions to improve the organization and readability of the existing language of the paragraphs being revised. These types of changes are not discussed further in this document. The NRC requested comment on the proposed rule specifically with respect to the clarity of the language used. The Commission did not receive any comments on this aspect of the proposed rule.

#### Voluntary Consensus Standards

The National Technology Transfer and Advancement Act of 1995, Pub. L. 104-113, requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless using such a standard is inconsistent with applicable law or otherwise impractical. This final rule would establish requirements and standards for the submission of filings to the electronic docket for the HLW licensing proceeding. Although the specific standards in the final rule are unique to the Commission's HLW repository proceeding, they are based on industry-wide standards such as Portable Document Format (PDF).

#### Environmental Impact: Categorical Exclusion

The NRC has determined that this final regulation is the type of action described in categorical exclusion 10 CFR 51.22(c)(1). Therefore, neither an environmental impact statement nor an environmental assessment has been prepared.

#### Paperwork Reduction Act Statement

This final rule does not contain information collection requirements and, therefore, is not subject to the requirements of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*).

#### Regulatory Analysis

The Commission did not receive any specific comments on the regulatory analysis for the proposed rule. The regulatory analysis for the final rule has not been changed.

The following regulatory analysis identifies several alternatives to the rule set forth in the final rule. Subpart J of 10 CFR Part 2 establishes an electronic environment for the adjudicatory proceeding for consideration of a potential license application by the U.S. Department of Energy (DOE) for a proposed HLW repository at Yucca Mountain, Nevada. The NRC expects to begin receiving and processing a significant volume of electronic documents associated with the adjudicatory proceeding in the near future. Some of these filings will consist of large or complex documents. Examples of material in these large electronic files include maps, charts, video presentations, computer modeling or simulation programs with their associated databases, and narrative reports with extensive embedded graphic objects. Consistent with 10 CFR Part 2, Subpart J:

- The NRC has established the Licensing Support Network (LSN) so that all parties, potential parties, and participants in the proceeding will be able to make their documentary material electronically available to meet document discovery requirements.

- The NRC will direct all participants in the adjudicatory proceeding to use the agency's EIE capabilities to submit their filings electronically to the NRC when practicable.

- After processing, documents submitted in the HLW repository proceeding would be available in the Electronic Hearing Docket (EHD), which is accessible via the Internet; electronic objects that cannot be made directly accessible via the EHD Web site, such as computer simulation models, will be described in the EHD and made available on optical storage media.

The assessment of existing and anticipated technology capabilities identified a number of potential issues that may make it difficult to meet the challenges of electronic submission of large documents as specified in 10 CFR Part 2, Subpart J. Those challenges are driven by the following fundamental issues:

<sup>1</sup> H.R. Rep. No. 108, 108th Cong. 1st Sess. (2003).

- Technology limitations of current electronic document and records transmission and management systems.
- Maintaining document and object fidelity, integrity, and authenticity.
- Receiving source document formats in an acceptable resolution.
- Management of and access to non-textual information.
- Federal recordkeeping requirements.
- General usability of the electronic submittals.
- Potential limitations of information technology (hardware, software, or Internet service provider) used by the general public.

#### The Nature of the Documents

Documents may be large, complex, or a combination of both, as follows:

- Large documents consist of electronic files that, because of their size, create challenges for both the NRC and the public when transmitting, viewing, or downloading the document (e.g., significant delays in transmission, uploading, or downloading times). The NRC anticipates that the potential license application and some filings in the HLW repository adjudicatory proceeding will be of a size that will create transmission, viewing, or downloading challenges. In electronic format, some of these files could contain several hundred megabytes.
- Complex documents consist (entirely or in part) of electronic files having substantial portions that are neither textual nor image in nature, and graphic or other Binary Large Objects that exceed 50 MB and cannot be logically divided. For example, specialized exhibits may include computer software programs and their operating components, large data files, and actual software code for analytical programs that a party may intend to introduce into the proceeding.

#### Articulation of the Issues

Large and/or complex documents may pose challenges in any or all of the following general areas:

##### • *Electronic Submission Process*

When submitted via the Internet, very large documents or files can cause “time-out” problems for computers at either end of the transfer, resulting in a failed or canceled transfer. Transmission times are dependent on the speed of the sender’s communication device and the technology used by the Internet service provider. Very large documents or files require lengthy transmission times during which the potential for error conditions or other service interruptions

increases in direct proportion to the time the communication link must be maintained. The time-out problems could affect each party who receives the documents as part of the service of a filing. The actual transfer times for very large documents or files may approach 24 hours using standard Internet File Transfer Protocol (FTP) routines. In terms of ensuring timeliness, this may not be a significant improvement over the use of an overnight courier to send the files on optical storage media (e.g., CD-ROM).

##### • *Access to Large, Complex Documents in the Electronic Hearing Docket (EHD)*

Keeping a large document together in one very large file may allow users to easily search for, retrieve, and analyze the document in its entirety, but may result in service interruption problems similar to those described above. This is particularly true if a user wants to download the image file of one of these large documents. Retrieval time will be unacceptably slow, or will result in a time-out problem with the user’s Internet connection.

Users of the EHD may encounter comparable download delays because of the file size of large or complex documents and, depending on the nature of the file, the file may not be executable on a user’s desktop personal computer because of configuration, memory, display, or other technical problems.

##### • *Use of Large, Complex Documents in a Hearing Room*

Large documents may be pre-filed as potential exhibits in the docket; however, in a hearing room, it is possible that only portions of such documents, e.g., specified chapters, pages, or paragraphs will be offered. In a dynamic and fast-paced hearing room environment, it would not be desirable to delay the proceeding to wait for a large file to load; navigate to the desired chapters, pages, or paragraphs; and then extract the appropriate selection for use in the proceeding. Complex documents may also require specialized hardware and/or software to execute software program files and access their associated data.

##### • *Official Record and Federal Records Management Considerations*

For both large and complex documents, the NRC must consider the need to generate an official record of the proceeding for use in potential appellate environments, see 10 CFR 2.1013(a), and for generating an Official Agency Record (OAR) version of the docketed materials for retirement to the National

Archives and Records Administration (NARA). Each of these situations requires the ability to reassemble the record version of the documentary material (excluding software executables), independent of the media or software initially used to create it.

Coupled with the project objectives and technical requirements (discussed in the next section), these issues represent the framework for potential solutions. The NRC analysis distilled and assessed the objectives, technical requirements, and issues and developed four designs.

#### Technical Requirements

Given the anticipated size and complexity of individual documents, and the quantity of submittals, the need to transmit, manage, and retrieve electronic documents and objects challenges both the NRC’s current processes and its information technology/information management (IT/IM) infrastructures, and the information technology (hardware, software, Internet service provider) in use by the general public. Examples of potential large documents are:

- The DOE Site Characterization Plan;
- The DOE License Application and supporting materials;
- The DOE Environmental Impact Statement;
- Adjudicatory documents (e.g., motions, responses, transcripts, exhibits, and orders).

Any or all of these types of documents may contain embedded photographs, charts, tables, and other graphics that contribute to the understanding of the narrative.

The NRC also anticipates receiving files that could be part of complex document submittals that:

- (1) Due to their file size, may preclude easy transmission, retrieval, and use; or
- (2) May require specialized software and/or hardware for faithful display and subsequent use; and
- (3) May not be suitable for inclusion in a “generic” file format such as PDF. The PDF standard, though it is proprietary to Adobe®, has been published and is available for use by software vendors. Users can access the content of a PDF format file through the use of the Adobe Reader® viewer software.

Examples of files that could be part of complex documents include maps, databases, simulations, audio files, video files, and executable programs.

The analysis of the challenges of handling large documents in the NRC and public IT environments considered the following functional areas:



- *Transmit* activities entail sending a submittal from the submitter to the NRC, either via electronic format (through transmission or media) or as a physical object (e.g., video or audio).

- *Capture* relates to the receipt of electronic objects, with notifications provided according to an approved service list, preferably through e-mail. Upon receipt at the NRC, each submittal is staged for additional processing.

- *Index & Cross-Reference* are two distinct processes. Each submittal must be indexed based on prescribed profile templates. In addition, as part of the cataloging process, a submittal may be identified (or cross-referenced) as part of a package or compound document.

- *Store* manages the storage location of a submittal, i.e., within a folder or larger collection for electronic submittals, or the physical media location for submittals provided on optical storage media (e.g., CD-ROM) containing text, data, and objects. This process involves applying security and audit controls, as well as the appropriate retention schedule.

- *Search & Retrieve* operations involve querying the bibliographic header and content, displaying the pertinent object(s), and, if desired, printing all or part of the displayed object(s).

- *Create & Revise* activities facilitate the creation or revision of new documents using content that has been extracted (copied and pasted) from original submittals.

- *Copy & Distribute* activities involve maintaining distribution (service) lists and providing the means to copy or download an individual document or a collection of documents.

These activities may also involve reproduction when the need arises to generate a hard copy of a submittal (e.g., "8.5"x"11" paper", drawings, etc.).

Finally, there was an assessment of the existing NRC document and records management systems environment as well as requirements for enhancements to support the large document business requirements.

#### Assessment and Alternatives

The NRC assessed a number of alternatives to the existing technology infrastructure, current and planned operating procedures for processing documents, and regulatory requirements to determine how the identified objectives, issues, and technical requirements can be addressed while ensuring that—

- Document fidelity and integrity is preserved (e.g. organization, accuracy, completeness);

- Documents are accessible to users via commonly used computer configurations;

- The information is available on reliable and controllable media; and
- Unique submittals with special software/hardware components can be handled.

The assessment also considered that the NRC should provide guidance to participants in the proceeding well in advance of when large, complex filings are reasonably anticipated. The guidance, as well as the underlying technology and procedures, would address matters such as processes, file sizes, file formats, document organization overviews to facilitate reconstruction of the complete filing, labeling formats, and alternative transfer media.

This section presents general concepts and four alternatives for handling large, complex electronic submittals in the HLW repository proceeding.

#### General Concept

The overall information infrastructure for receiving and managing HLW-related documents involves several existing agency information systems.

Participants in the proceeding will primarily send submittals to the NRC in the preferred PDF format via EIE, which provides a Web-form (an entry form similar to that of an overnight express mail carrier shipping form) for the submitter to accurately identify what is being transmitted. Upon receipt, each submittal would be entered into the Agencywide Document and Management System (ADAMS). Once captured within ADAMS, the submittal would be available for internal use by agency staff, and the information would be made publicly available (as appropriate) via the EHD. Variations on this general process and issues associated with large, complex documents are described in the following sections.

#### Alternative 1

*Description:* Documents, images, and other submittal components are submitted through the EIE as a single file, and the EIE Web-form serves as the transmittal letter. The NRC captures large files as single units, without the need for any manual manipulation, such as breaking a submission into workable pieces. Based on the service list, an e-mail is sent to provide notification of receipt and a link from the EIE server to the file for immediate access by parties and participants to the proceeding. In addition, the file is made available (as appropriate) to the EHD. Interested parties can search on the bibliographic

header information, the content, or a combination of the two. Retrieval of a document is directly to the user's desktop.

*Positives:* This alternative would satisfy the electronic transmission requirements of 10 CFR Part 2, Subpart J. This alternative primarily benefits and is less restrictive to the submitter. That is, the submitter dictates the form and format of the content, and the submittal comes in as a single optimized PDF format file.

*Negatives:* Submittal file size could be very large (potentially several hundred MB), particularly if graphics are widely used. The transmission may be problematic because of service interruptions or time-outs attributable to the very long transfer times required for large files. File sizes could also make this alternative unfeasible for subsequent users of a file, primarily because of download delays and time-outs. In addition, although any executables contained in the submittal could be stored in the EHD, they could not be indexed for search and retrieval or accessed online. The executable file would need to be downloaded and run locally.

#### Alternative 2

*Description:* The only object transmitted through the EIE is the transmittal letter for the large, complex document, which notifies the NRC of an impending package submittal. All other electronic files pertaining to the submittal are sent on optical storage media (e.g., CD-ROM), which is delivered to the NRC via an overnight express mail carrier. Based on the service list, the NRC sends an e-mail containing links from the EIE server to the transmittal letter for immediate access by parties and participants to the proceeding. All text-based components (e.g., narrative with embedded graphics) are rendered as optimized PDF format files. The NRC extracts each file from the optical storage media (e.g., CD-ROM) and makes the files available (as appropriate) to the EHD as either individual objects or a compound document, depending on the document organization. The NRC also links a bibliographic header to the appropriate optical storage media (e.g., CD-ROM) for files or objects that are not candidates for extraction (because of some technical constraint). Interested parties can search the EHD on the bibliographic header, the content, or a combination of the two. Retrieval of a document or specified component(s) is directly to the user's desktop. Additionally, the NRC provides copies (upon request and for a fee) of the

optical storage media (e.g., CD-ROM) for public access.

*Positives:* The NRC provides guidance to the submitter to facilitate processing and use within the agency. This alternative also avoids potential problems associated with submitting large files via the EIE.

*Negatives:* This alternative does not meet the electronic service requirements of 10 CFR Part 2, Subpart J. There may also be a delay in parties and participants receiving documents. As compared with Alternative 1, additional processing will be required to extract, profile, and store files in a timely manner. In addition, use of this alternative could adversely affect document fidelity and integrity (e.g. organization, accuracy, or completeness) which could affect the efficient conduct of an adjudication, as well as for agency recordkeeping and eventual turnover to NARA.

#### Alternative 3

*Description:* Documents, images, and other components (including the transmittal letter and enhanced Web-form) are transmitted through the EIE as multiple segmented files ("chunks") of a single submittal. All text-based components (e.g., narrative with embedded graphics) are rendered as optimized PDF format files. Based on the service list, the NRC sends an e-mail containing links from the EIE server to the transmittal letter and the various segmented files for immediate access by parties and participants to the proceeding. Upon receipt and subsequent processing, the NRC makes the segmented files available (as appropriate) to the EHD as a "package" or "compound document." Interested parties can search on the bibliographic headers, or content, or a combination of both. Retrieval of selected components is direct to the user's computer.

*Positives:* This alternative satisfies electronic transmission requirements of 10 CFR Part 2 and allows submission via the EIE. It also allows the NRC to provide guidance to have precisely defined segments and bibliographic header information associated with each segment. The segmentation facilitates later use and access.

*Negatives:* This alternative requires the EIE to facilitate the transfer, segregate component content from bibliographic header information and the transmittal letter, and make that information available to the EHD. A possible fatal flaw is that some file types may not be able to be segmented into manageable sizes (e.g., graphic-oriented materials showing subsurface geology in color or computer modeling information

and/or software), and some materials may not be accessible via the EHD.

#### Alternative 4

*Description:* All text-based components (e.g. narrative with embedded graphics) are rendered as optimized PDF files and transmitted in manageable segments. All non-text components that are not suitable for an optimized PDF file are submitted on optical storage media (e.g., CD-ROM). When necessary, due to the nature of the submittal, a submittal letter identifies all electronic files that comprise the submission, clearly indicating which components are submitted via EIE, and which are submitted on optical storage media (e.g., CD-ROM). The submittal letter, enhanced Web-forms, and all segmented text files are sent through the EIE. The optical storage media (e.g., CD-ROM) containing the complete submission (i.e., text-based segments submitted via EIE and any files submitted only on optical storage media) are delivered to the NRC and other parties via an overnight mail carrier or other overnight delivery service. The NRC links a bibliographic header to the optical storage media (e.g., CD-ROM) component of the submission.

Based on the service list, the NRC sends an e-mail containing links from the EIE server to the transmittal letter and the various components submitted through the EIE for immediate access by parties and participants to the proceeding. The NRC indexes the text-based components sent via EIE and makes them available to the EHD as a "package" or "compound document." Additionally, the NRC provides copies (upon request and for a fee) of the optical storage media (e.g., CD-ROM) for the public. Interested parties can search on the bibliographic header information, content, or a combination of both. Retrieval of text-based components is directly to the user's computer, and non-text components are retrievable from the optical storage media (e.g., CD-ROM).

*Positives:* This alternative combines the best features and advantages of Alternatives 2 and 3, including text-based component submission through the EIE and non-text component submissions via optical storage media (e.g., CD-ROM). This alternative provides several means to optimize a submission and allows the NRC to process the submission appropriately; provide access to end-users (i.e., adjudicatory proceeding participants and the general public); and prepare for the eventual transfer to NARA.

*Negatives:* Processing will need to be closely coordinated to maintain the integrity of the various submittal components (segmented files stored in ADAMS with the bibliographic header records that point to optical storage media, such as a CD-ROM).

Documentary material submitted on optical storage media and sent by overnight mail (or other expedited delivery services) would not meet the electronic transmission requirements of 10 CFR Part 2, Subpart J. There may be a delay in parties and participants receiving document components contained only on the optical storage media (e.g., CD-ROM).

#### Planned Actions

Alternative 4 is the recommended approach for the NRC to meet the identified objectives. The NRC believes that this alternative provides the best means for transferring the wide variety of file types and sizes received from parties and participants in the proceeding, as well as the most practical means for delivering electronic information to parties and participants in the HLW repository adjudicatory proceeding, the presiding officer, and the Office of the Secretary (SECY), under the requirements of 10 CFR Part 2, Subpart J.

Toward that end, the agency will take the following steps:

- Develop guidance for use in generating HLW proceeding submissions that specifies the size, file characteristics, and method (either EIE or optical storage media) for different submittal types (i.e. simple, large, or complex). This guidance will also provide direction concerning the information the agency requires to ensure proper identification of each segment.
- Implement enhancements to the agency's existing IT/IM systems (such as an improved EIE capability) in anticipation of storage, search, and retrieval needs, as they pertain to Alternative 4.
- Implement enhancements to the agency's current document processing work flows in anticipation of the receipt, indexing, and distribution of information, as they pertain to Alternative 4.
- Develop a rule change to implement the recommended alternative. The final rule reflects this approach.

#### Regulatory Flexibility Certification

As required by the Regulatory Flexibility Act (5 U.S.C. 605(b)), the Commission has evaluated the impact of the final rule on small entities. The NRC has established standards for

determining who qualifies as small entities (10 CFR 2.810). The Commission certifies that this final rule, if adopted, would not have a significant economic effect on a substantial number of small entities. The amendments would modify the NRC's rules of practice and procedure in regard to the HLW repository licensing proceeding. Parties to the HLW repository licensing proceeding will be required to submit their filings during the proceeding according to the standards in the proposed rule. Some of the participants affected by the final rule, for example, DOE, NRC, the State of Nevada, would not fall within the definition of "small entity" under the NRC's size standards. Other parties and potential parties may qualify as "small entities" under these size standards. However, the required standards will overall make it easier for those parties who are small entities to participate in the HLW repository licensing proceeding.

*Backfit Analysis*

The NRC has determined that a backfit analysis is not required for this final rule because these amendments would not include any provisions that require backfits as defined in 10 CFR Chapter I.

**List of Subjects in 10 CFR Part 2**

Administrative practice and procedure, Antitrust, Byproduct material, Classified information, Environmental protection, Nuclear materials, Nuclear power plants and reactors, Penalties, Sex discrimination, Source material, Special nuclear material, Waste treatment and disposal.

■ For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 552 and 553; the Nuclear Regulatory Commission is adopting the following amendments to 10 CFR Part 2.

**PART 2—RULES OF PRACTICE FOR DOMESTIC LICENSING PROCEEDINGS AND ISSUANCE OF ORDERS**

■ 1. The authority citation for Part 2 continues to read as follows:

**Authority:** Secs.161, 181, 68 Stat. 948, 953, as amended (42 U.S.C. 2201, 2231); sec. 191, as amended, Pub. L. 87-615, 76 Stat. 409 (42 U.S.C. 2241); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841); 5 U.S.C. 552; sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note).

Section 2.101 also issued under secs. 53, 62, 63, 81, 103, 104, 105, 68 Stat. 930, 932, 933, 935, 936, 937, 938, as amended (42 U.S.C. 2073, 2092, 2093, 2111, 2133, 2134, 2135); sec. 114(f), Pub. L. 97-425, 96 Stat. 2213, as amended (42 U.S.C. 10143(O)); sec.

102, Pub. L. 91-190, 83 Stat. 853, as amended (42 U.S.C. 4332); sec. 301, 88 Stat. 1248 (42 U.S.C. 5871). Sections 2.102, 2.103, 2.104, 2.105, 2.321 also issued under secs. 102, 104, 105, 163, 183i, 189, 68 Stat. 936, 937, 938, 954, 955, as amended (42 U.S.C. 2132, 2133, 2134, 2135, 2233, 2239). Section 2.105 also issued under Pub. L. 97-415, 96 Stat. 2073 (42 U.S.C. 2239). Sections 2.200-2.206 also issued under secs. 161 b, i, o, 182, 186, 234, 68 Stat. 948-951, 955, 83 Stat. 444, as amended (42 U.S.C. 2201 (b), (i), (o), 2236, 2282); sec. 206, 88 Stat 1246 (42 U.S.C. 5846). Section 2.205(j) also issued under Pub. L. 101-410, 104 Stat. 90, as amended by section 3100(s), Pub. L. 104-134, 110 Stat. 1321-373 (28 U.S.C. 2461 note). Subpart C also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239). Sections 2.600-2.606 also issued under sec. 102, Pub. L. 91-190, 83 Stat. 853, as amended (42 U.S.C. 4332). Section 2.700a also issued under 5 U.S.C. 554. Sections 2.343, 2.346, 2.754, 2.712 also issued under 5 U.S.C. 557. Section 2.764 also issued under secs. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161). Section 2.790 also issued under sec. 103, 68 Stat. 936, as amended (42 U.S.C. 2133) and 5 U.S.C. 552. Sections 2.800 and 2.808 also issued under 5 U.S.C. 553. Section 2.809 also issued under 5 U.S.C. 553, and sec. 29, Pub. L. 85-256, 71 Stat. 579, as amended (42 U.S.C. 2039). Subpart K also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239); sec. 134, Pub. L. 97-425, 96 Stat. 2230 (42 U.S.C. 10154). Subpart L also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239). Subpart M also issued under sec. 184 (42 U.S.C. 2234) and sec. 189, 68 Stat. 955 (42 U.S.C. 2239). Subpart N also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239). Appendix A also issued under sec. 6, Pub. L. 91-550, 84 Stat. 1473 (42 U.S.C. 2135).

■ 2. In § 2.1001, definitions of "Complex document," "Large document," and "Simple document" are added in alphabetical order to read as follows:

**§ 2.1001 Definitions.**

\* \* \* \* \*

"Complex document" means a document that consists (entirely or in part) of electronic files having substantial portions that are neither textual nor image in nature, and graphic or other Binary Large Objects that exceed 50 megabytes and cannot logically be divided. For example, specialized submissions may include runtime executable software, viewer or printer executables, dynamic link library (.dll) files, large data sets associated with an executable, and actual software code for analytical programs that a party may intend to introduce into the proceeding.

\* \* \* \* \*

"Large document" means a document that consists of electronic files that are larger than 50 megabytes.

\* \* \* \* \*

"Simple document" means a document that consists of electronic files that are 50 megabytes or less.

\* \* \* \* \*

■ 3. In § 2.1003, the introductory text of paragraph (a) and paragraph (a)(1) are revised, and paragraph (e) is added, to read as follows:

**§ 2.1003 Availability of material.**

(a) Subject to the exclusions in § 2.1005 and paragraphs (b), (c), and (e) of this section, DOE shall make available, no later than six months in advance of submitting its license application for a geologic repository, the NRC shall make available no later than thirty days after the DOE certification of compliance under § 2.1009(b), and each other potential party, interested governmental participant or party shall make available no later than ninety days after the DOE certification of compliance under § 2.1009(b)—

(1) An electronic file including bibliographic header for all documentary material (including circulated drafts but excluding preliminary drafts) generated by, or at the direction of, or acquired by, a potential party, interested governmental participant or party; provided, however, that an electronic file need not be provided for acquired documentary material that has already been made available by the potential party, interested governmental participant or party that originally created the documentary material. Concurrent with the production of the electronic files will be an authentication statement for posting on the LSN Web site that indicates where an authenticated image copy of the documents can be obtained.

\* \* \* \* \*

(e) Each potential party, interested governmental participant or party shall continue to supplement its documentary material made available to other participants via the LSN with any additional material created after the time of its initial certification in accordance with paragraph (a)(1) through (a)(4) of this section until the discovery period in the proceeding has concluded.

■ 4. In § 2.1005, paragraph (i) is added to read as follows:

**§ 2.1005 Exclusions.**

\* \* \* \* \*

(i) Correspondence between a potential party, interested governmental participant, or party and the Congress of the United States.

■ 5. In § 2.1012, paragraph (a) is revised to read as follows:

**§ 2.1012 Compliance.**

(a) If the Department of Energy fails to make its initial certification at least six months prior to tendering the application, upon receipt of the tendered application, notwithstanding the provisions of § 2.101(f)(3), the Director of the NRC's Office of Nuclear Material Safety and Safeguards will not docket the application until at least six months have elapsed from the time of the certification. The Director may determine that the tendered application is not acceptable for docketing under this subpart if the application is not accompanied by an updated certification pursuant to § 2.1009(b), or if the Secretary of the Commission determines that the application is not submitted on optical storage media in a format consistent with NRC regulations and guidance, or for non-compliance with any other requirements identified in this subpart.

\* \* \* \* \*

■ 6. In § 2.1013, paragraphs (a)(2) and (c)(1) are revised to read as follows:

**§ 2.1013 Use of the electronic docket during the proceeding.**

(a) \* \* \*

(2) The Secretary of the Commission will establish an electronic docket to contain the official record materials of the high-level radioactive waste repository licensing proceeding in searchable full text, or, for material that is not suitable for entry in searchable full text, by header and image, as appropriate.

\* \* \* \* \*

(c)(1) All filings in the adjudicatory proceeding on the application for a high-level radioactive waste geologic repository under part 60 or 63 of this chapter shall be transmitted by the submitter to the Presiding Officer, parties, and Secretary of the Commission, according to the following requirements—

(i) "Simple documents" must be transmitted electronically via EIE;

(ii) "Large documents" must be transmitted electronically in multiple transmissions of 50 megabytes or less each via EIE;

(iii) "Complex documents":

(A) Those portions that can be electronically submitted through the EIE, in 50 MB or less segments, must be transmitted electronically, along with a transmittal letter; and

(B) Those portions that are not capable of being transmitted electronically must be submitted on optical storage media which must also include those portions of the document that had been or will be transmitted electronically.

(iv) Electronic submissions must have the following resolution—

(A) Electronic submissions of files created after January 1, 2004 must have 300 dots per inch (dpi) as the minimum resolution for bi-tonal, color, and grayscale, except in limited circumstances where submitters may need to use an image scanned before January 1, 2004, in a document created after January 1, 2004, or the scanning process for a large, one-page image may not successfully complete at the 300 dpi standard resolution.

(B) Electronic submissions of files created before January 1, 2004, or electronic submissions created after January 1, 2004, which cannot meet the 300 dpi standard for color and grayscale, must meet the standard for documents placed on LSN participant Web sites in § 2.1011(b)(2)(iv) of this subpart, which is 150 dpi for color and grayscale documents and 300 dpi for bi-tonal documents.

(v) Electronic submissions must be generated in the appropriate PDF output format by using:

(A) PDF—Formatted Text and Graphics for textual documents converted from native applications;

(B) PDF—Searchable Image (Exact) for textual documents converted from scanned documents; and

(C) PDF—Image Only for graphic-, image-, and forms-oriented documents. In addition, Tagged Image File Format (TIFF) images and the results of spreadsheet applications must be converted to PDF, except in those rare instances where PDF conversion is not practicable.

(vi) Electronic submissions must not rely on hyperlinks to other documents or Web sites for completeness or access except for hyperlinks that link to material within the same PDF file. If the submittal contains hyperlinks to other documents or Web sites, then it must include a disclaimer to the effect that the hyperlinks may be inoperable or are not essential to the use of the filing. Information contained in hyperlinks to a Web site on the Internet or to another PDF file, that is necessary for the completeness of a filing, must be submitted in its entirety in the filing or as an attachment to the filing.

(vii) All electronic submissions must be free of author-imposed security restrictions.

\* \* \* \* \*

Dated at Rockville, Maryland, this 4th day of June, 2004.

For the Nuclear Regulatory Commission.

**Annette Vietti-Cook,**

*Secretary of the Commission.*

[FR Doc. 04–13113 Filed 6–10–04; 8:45 am]

BILLING CODE 7590-01-P

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 25**

[Docket No. NM280; Special Conditions No. 25–264–SC]

**Special Conditions: Raytheon Aircraft MU–300 Airplanes; High Intensity Radiated Fields (HIRF)**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final special conditions; request for comments.

**SUMMARY:** These special conditions are issued for Raytheon Aircraft Company Model MU–300 airplanes modified by Elliott Aviation Technical Products Development, Inc. These airplanes will have novel and unusual design features when compared to the state of technology envisioned in the airworthiness standards for transport category airplanes. The modification incorporates the installation of a Honeywell AZ–252 Advanced Air Data Computer and optional BA–250 and AM–250 Altimeters. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for the protection of these systems from the effects of high-intensity-radiated fields (HIRF). These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

**DATES:** The effective date of these special conditions is June 3, 2004. Comments must be received on or before July 14, 2004.

**ADDRESSES:** Comments on these special conditions may be mailed in duplicate to: Federal Aviation Administration, Transport Airplane Directorate, Attn: Rules Docket (ANM–113), Docket No. NM280, 1601 Lind Avenue SW., Renton, Washington, 98055–4056; or delivered in duplicate to the Transport Airplane Directorate at the above address. Comments must be marked: Docket No. NM280. Comments may be inspected in the Rules Docket weekdays, except Federal holidays, between 7:30 a.m. and 4 p.m.

**FOR FURTHER INFORMATION CONTACT:** Greg Dunn, FAA, Airplane and Flight Crew

# Subpart J--Procedures Applicable to Proceedings for the Issuance of Licenses for the Receipt of High-Level Radioactive Waste at a Geologic Repository

Source: 54 FR 14944, Apr. 14, 1989, unless otherwise noted.

## § 2.1000 Scope of subpart J.

The rules in this subpart, together with the rules in subparts C and G of this part, govern the procedure for an application for authorization to construct a high-level radioactive waste repository at a geologic repository operations area noticed under §§ 2.101(f)(8) or 2.105(a)(5), and for an application for a license to receive and possess high level radioactive waste at a geologic repository operations area. The procedures in this subpart take precedence over those in 10 CFR part 2, subpart C, except for the following provisions: §§ 2.301; 2.303; 2.307; 2.309; 2.312; 2.313; 2.314; 2.315; 2.316; 2.317(a); 2.318; 2.319; 2.320; 2.321; 2.322; 2.323; 2.324; 2.325; 2.326; 2.327; 2.328; 2.330; 2.331; 2.333; 2.335; 2.338; 2.339; 2.342; 2.343; 2.344; 2.345; 2.346; 2.348; and 2.390. The procedures in this subpart take precedence over those in 10 CFR part 2, subpart G, except for the following provisions: §§ 2.701, 2.702; 2.703; 2.708; 2.709; 2.710; 2.711; 2.712.

[63 FR 71736, Dec. 30, 1998; 69 FR 2264, Jan. 14, 2004]

## § 2.1001 Definitions.

*Bibliographic header* means the minimum series of descriptive fields that a potential party, interested governmental participant, or party must submit with a document or other material.

*Circulated draft* means a nonfinal document circulated for supervisory concurrence or signature in which the original author or others in the concurrence process have non-concurred. A "circulated draft" meeting the above criterion includes a draft of a document that eventually becomes a final document, and a draft of a document that does not become a final document due to either a decision not to finalize the document or the passage of a substantial period of time in which no action has been taken on the document.

*Complex document* means a document that consists (entirely or in part) of electronic files having substantial portions that are neither textual nor image in nature, and graphic or other Binary Large Objects that exceed 50 megabytes and cannot logically be divided. For example, specialized submissions may include runtime executable software, viewer or printer executables, dynamic link library (.dll) files, large data sets associated with an executable, and actual software code for analytical programs that a party may intend to introduce into the proceeding.

*Document* means any written, printed, recorded, magnetic, graphic matter, or other documentary material, regardless of form or characteristic.

*Documentary material* means:

(1) Any information upon which a party, potential party, or interested governmental participant intends to rely and/or to cite in support of its position in the proceeding for a construction authorization for a high-level radioactive waste repository at a geologic repository operations area pursuant to parts 60 or 63 of this chapter, a license to receive and possess high-level radioactive waste at a geologic repository operations area pursuant to parts 60 or 63 of this chapter;

(2) Any information that is known to, and in the possession of, or developed by the party that is relevant to, but does not support, that information or that party's position; and

(3) All reports and studies, prepared by or on behalf of the potential party, interested governmental participant, or party, including all related "circulated drafts," relevant to both the license application and the issues set forth in the Topical Guidelines in Regulatory Guide 3.69, regardless of whether they will be relied upon and/or cited by a party. The scope of documentary material shall be guided by the topical guidelines in the applicable NRC Regulatory Guide.

*DOE* means the U.S. Department of Energy or its duly authorized representatives.

*Electronic docket* means the NRC information system that receives, distributes, stores, and retrieves the Commission's adjudicatory docket materials.

*Image* means a visual likeness of a document, presented on a paper copy, microform, or a bit-map on optical or magnetic media.

*Interested governmental participant* means any person admitted under § 2.315(c) of this part to the proceeding on an application for a construction authorization for a high-level radioactive waste repository at a geologic repository operations area under parts 60 or 63 of this chapter, and an application for a license to receive and possess high level radioactive waste at a geologic repository operations area under parts 60 and 63 of this chapter.

*Large document* means a document that consists of electronic files that are larger than 50 megabytes.

*Licensing Support Network* means the combined system that makes documentary material available electronically to parties, potential parties, and interested governmental participants to a proceeding for a construction authorization for a high-level radioactive waste repository at a geologic repository operations area, and an application for a license to receive and possess high level radioactive waste at a geologic repository operations area under parts 60 and 63 of this chapter.

*LSN Administrator* means the person within the U.S. Nuclear Regulatory Commission responsible for coordinating access to and the integrity of data available on the Licensing Support Network. The LSN Administrator shall not be in any organizational

unit that either represents the U.S. Nuclear Regulatory Commission staff as a party to the high-level waste repository licensing proceeding or is a part of the management chain reporting to the Director, Office of Nuclear Material Safety and Safeguards. For the purposes of this subpart, the organizational unit within the NRC selected to be the LSN Administrator shall not be considered to be a party to the proceeding.

*Marginalia* means handwritten, printed, or other types of notations added to a document excluding underlining and highlighting.

*NRC* means the U.S. Nuclear Regulatory Commission or its duly authorized representatives.

*Party* for the purpose of this subpart means the DOE, the NRC staff, the host State, any affected unit of local government as defined in Section 2 of the Nuclear Waste Policy Act of 1982, as amended (42 U.S.C. 10101), any affected Indian Tribe as defined in section 2 of the Nuclear Waste Policy Act of 1982, as amended (42 U.S.C. 10101), and a person admitted under § 2.309 to the proceeding on an application for construction authorization for a high-level radioactive waste repository at a geologic repository operations area under parts 60 or 63 of this chapter, and an application for a license to receive and possess high level radioactive waste at a geologic repository operations area under parts 60 and 63 of this chapter; provided that a host State, affected unit of local government, or affected Indian Tribe files a list of contentions in accordance with the provisions of § 2.309.

*Personal record* means a document in the possession of an individual associated with a party, interested governmental participant, or potential party that was not required to be created or retained by the party, interested governmental participant, or potential party, and can be retained or discarded at the possessor's sole discretion, or documents of a personal nature that are not associated with any business of the party, interested governmental participant, or potential party.

*Potential party* means any person who, during the period before the issuance of the first pre-hearing conference order under § 2.1021(d), is given access to the Licensing Support Network and who consents to comply with the regulations set forth in subpart J of this part, including the authority of the Pre-License Application Presiding Officer designated pursuant to § 2.1010.

*Pre-license application electronic docket* means the NRC's electronic information system that receives, distributes, stores, and maintains NRC pre-license application docket materials during the pre-license application phase.

*Pre-license application phase* means the time period before a construction authorization for a high-level radioactive waste repository at a geologic repository operations area under parts 60 or 63 of this chapter is docketed under § 2.101(f)(3), and the time period before a license application to receive and possess high-level radioactive waste at a geologic repository operations area under parts 60 or 63 is docketed under § 2.101(f)(3).

*Preliminary draft* means any nonfinal document that is not a circulated draft.

*Presiding Officer* means one or more members of the Commission, or an atomic safety and licensing board, or a named officer who has been delegated final authority in the matter, designated in the notice of hearing to preside.

*Searchable full text* means the electronic indexed entry of a document that allows the identification of specific words or groups of words within a text file.

*Simple document* means a document that consists of electronic files that are 50 megabytes or less.

*Topical Guidelines* means the set of topics set forth in Regulatory Guide 3.69, Topical Guidelines for the Licensing Support System, which are intended to serve as guidance on the scope of "documentary material".

[54 FR 14944, Apr. 14, 1989, as amended at 56 FR 7795, Feb. 26, 1991; 63 FR 17136, Dec. 30, 1998; 66 FR 29465, May 31, 2001; 66 FR 55788, Nov. 2, 2001; 69 FR 2264, Jan. 14, 2004; 69 FR 32848, June 14, 2004]

## **§ 2.1002 [Reserved]**

## **§ 2.1003 Availability of material.**

(a) Subject to the exclusions in § 2.1005 and paragraphs (b), (c), and (e) of this section, DOE shall make available, no later than six months in advance of submitting its license application for a geologic repository, the NRC shall make available no later than thirty days after the DOE certification of compliance under § 2.1009(b), and each other potential party, interested governmental participant or party shall make available no later than ninety days after the DOE certification of compliance under § 2.1009(b)--

(1) An electronic file including bibliographic header for all documentary material (including circulated drafts but excluding preliminary drafts) generated by, or at the direction of, or acquired by, a potential party, interested governmental participant or party; provided, however, that an electronic file need not be provided for acquired documentary material that has already been made available by the potential party, interested governmental participant or party that originally created the documentary material. Concurrent with the production of the electronic files will be an authentication statement for posting on the LSN Web site that indicates where an authenticated image copy of the documents can be obtained.

(2) In electronic image format, subject to the claims of privilege in § 2.1006, graphic-oriented documentary material that includes raw data, computer runs, computer programs and codes, field notes, laboratory notes, maps, diagrams and photographs, which have been printed, scripted, or hand written. Text embedded within these documents need not be separately entered in searchable full text. A bibliographic header must be provided for all graphic-oriented documentary material. Graphic-oriented documents may include--

(i) Calibration procedures, logs, guidelines, data and discrepancies;



- (ii) Gauge, meter and computer settings;
- (iii) Probe locations;
- (iv) Logging intervals and rates;
- (v) Data logs in whatever form captured;
- (vi) Text data sheets;
- (vii) Equations and sampling rates;
- (viii) Sensor data and procedures;
- (ix) Data Descriptions;
- (x) Field and laboratory notebooks;
- (xi) Analog computer, meter or other device print-outs;
- (xii) Digital computer print-outs;
- (xiii) Photographs;
- (xiv) Graphs, plots, strip charts, sketches;
- (xv) Descriptive material related to the information identified in this paragraph.

(3) In an electronic file, subject to the claims of privilege in § 2.1006, only a bibliographic header for each item of documentary material that is not suitable for image or searchable full text.

(4) An electronic bibliographic header for each documentary material--

- (i) For which a claim of privilege is asserted;
- (ii) Which constitutes confidential financial or commercial information; or
- (iii) Which constitutes safeguards information under § 73.21 of this chapter.

(b) Basic licensing documents generated by DOE, such as the Site Characterization Plan, the Environmental Impact Statement, and the license application, or by NRC, such as the Site Characterization Analysis, and the Safety Evaluation Report, shall be made available in electronic form by the respective agency that generated the document.

(c) The participation of the host State in the pre-license application phase shall not affect the State's ability to exercise its disapproval rights under section 116(b)(2) of the Nuclear Waste Policy Act, as amended, 42 U.S.C. 10136(b)(2).

(d) This subpart shall not affect any independent right of a potential party, interested governmental participant or party to receive information.

(e) Each potential party, interested governmental participant or party shall continue to supplement its documentary material made available to other participants via the LSN with any additional material created after the time of its initial certification in accordance with paragraph (a)(1) through (a)(4) of this section until the discovery period in the proceeding has concluded.

[63 FR 71737, Dec. 30, 1998, as amended at 66 FR 2946, May 31, 2001; 69 FR 2264, Jan. 14, 2004; 69 FR 32848, June 14, 2004]

## **§ 2.1004 Amendments and additions.**

Any document that has not been provided to other parties in electronic form must be identified in an electronic notice and made available for inspection and copying by the potential party, interested governmental participant, or party responsible for the submission of the document within five days after it has been requested unless some other time is approved by the Pre-License Application Presiding Officer or the Presiding Officer designated for the high-level waste proceeding. The time allowed under this paragraph will be stayed pending Officer action on a motion to extend the time.

[63 FR 71737, Dec. 30, 1998]

## **§ 2.1005 Exclusions.**

The following material is excluded from the requirement to provide electronic access, either pursuant to § 2.1003, or through derivative discovery pursuant to § 2.1019(i)--

- (a) Official notice materials;
- (b) Reference books and text books;
- (c) Material pertaining exclusively to administration, such as material related to budgets, financial management, personnel, office space, general distribution memoranda, or procurement, except for the scope of work on a procurement related to repository siting, construction, or operation, or to the transportation of spent nuclear fuel or high-level waste;
- (d) Press clippings and press releases;
- (e) Junk mail;
- (f) References cited in contractor reports that are readily available;
- (g) Classified material subject to subpart I of this part;

(h) Readily available references, such as journal articles and proceedings, which may be subject to copyright.

(i) Correspondence between a potential party, interested governmental participant, or party and the Congress of the United States.

[63 FR 71738, Dec. 30, 1998; 69 FR 32848, June 14, 2004]

## **§ 2.1006 Privilege.**

(a) Subject to the requirements in § 2.1003(a)(4), the traditional discovery privileges recognized in NRC adjudicatory proceedings and the exceptions from disclosure in § 2.390 may be asserted by potential parties, interested States, local governmental bodies, Federally-recognized Indian Tribes, and parties. In addition to Federal agencies, the deliberative process privilege may also be asserted by States, local governmental bodies, and Federally-recognized Indian Tribes.

(b) Any document for which a claim of privilege is asserted, but is denied in whole or in part by the Pre-License Application Presiding Officer or the Presiding Officer, must be provided in electronic form by the party, interested governmental participant, or potential party that asserted the claim to--

(1) The other participants; or

(2) To the Pre-License Application Presiding Officer or to the Presiding Officer, for entry into a Protective Order file, if the Pre-License Application Presiding Officer or the Presiding Officer so directs under §§ 2.1010(b) or 2.1018(c).

(c) Notwithstanding any availability of the deliberative process privilege under paragraph (a) of this section, circulated drafts not otherwise privileged shall be provided for electronic access pursuant to § 2.1003(a).

[63 FR 71738, Dec. 30, 1998; 64 FR 15920, Apr 2, 1999; 69 FR 2265, Jan. 14, 2004]

## **§ 2.1007 Access.**

(a)(1) A system to provide electronic access to the Licensing Support Network shall be provided at the headquarters of DOE, and at all DOE Local Public Document Rooms established in the vicinity of the likely candidate site for a geologic repository, beginning in the pre-license application phase.

(2) A system to provide electronic access to the Licensing Support Network shall be provided at the NRC Web site, <http://www.nrc.gov>, and/or at the NRC Public Document Room beginning in the pre-license application phase.

(3)[Reserved]

(b) Public availability of paper and electronic copies of the records of NRC and DOE, as well as duplication fees, and fee waiver for those records, is governed by the regulations of the respective agencies.

[63 FR 71738, Dec. 30, 1998, as amended at 64 FR 48948, Sept. 9, 1999]

## **§ 2.1008 [Reserved]**

## **§ 2.1009 Procedures.**

(a) Each potential party, interested governmental participant, or party shall--

(1) Designate an official who will be responsible for administration of its responsibility to provide electronic files of documentary material ;

(2) Establish procedures to implement the requirements in § 2.1003;

(3) Provide training to its staff on the procedures for implementation of the responsibility to provide electronic files of documentary material;

(4) Ensure that all documents carry the submitter's unique identification number;

(5) Cooperate with the advisory review process established by the NRC under § 2.1011(d).

(b) The responsible official designated under paragraph (a)(1) of this section shall certify to the Pre-License Application Presiding Officer that the procedures specified in paragraph (a)(2) of this section have been implemented, and that to the best of his or her knowledge, the documentary material specified in § 2.1003 has been identified and made electronically available. The initial certification must be made at the time the participant is required to comply with § 2.1003. The responsible official for the DOE shall also update this certification at the time DOE submits the license application.

[63 FR 71738, Dec. 30, 1998 as amended at 66 FR 29466, May 31, 2001]

## **§ 2.1010 Pre-license application presiding officer.**

(a)(1) The Commission may designate one or more members of the Commission, or an atomic safety and licensing board, or a named officer who has been delegated final authority on the matter to serve as the Pre-License Application Presiding Officer to rule on disputes over the electronic availability of documents during the pre-license application phase, including disputes relating to privilege, and disputes relating to the implementation of the recommendations of the Advisory Review Panel established under § 2.1011(d).

(2) The Pre-License Application Presiding Officer shall be designated at such time during the pre-license application phase as the Commission finds it appropriate, but in

any event no later than fifteen days after the DOE certification of initial compliance under § 2.1009(b).

(b) The Pre-License Application Presiding Officer shall rule on any claim of document withholding to determine--

(1) Whether it is documentary material within the scope of this subpart;

(2) Whether the material is excluded under § 2.1005;

(3) Whether the material is privileged or otherwise excepted from disclosure under § 2.1006;

(4) If privileged, whether it is an absolute or qualified privilege;

(5) If qualified, whether the document should be disclosed because it is necessary to a proper decision in the proceeding;

(6) Whether the material should be disclosed under a protective order containing such protective terms and conditions (including affidavits of nondisclosure) as may be necessary and appropriate to limit the disclosure to potential participants, interested governmental participants and parties in the proceeding, or to their qualified witnesses and counsel. When Safeguards Information protected from disclosure under section 147 of the Atomic Energy Act of 1954, as amended, is received and possessed by a potential party, interested governmental participant, or party, other than the Commission staff, it shall also be protected according to the requirements of § 73.21 of this chapter. The Pre-License Application Presiding Officer may also prescribe such additional procedures as will effectively safeguard and prevent disclosure of Safeguards Information to unauthorized persons with minimum impairment of the procedural rights which would be available if Safeguards Information were not involved. In addition to any other sanction that may be imposed by the Pre-License Application Presiding Officer for violation of an order pertaining to the disclosure of Safeguards Information protected from disclosure under section 147 of the Atomic Energy Act of 1954, as amended, the entity in violation may be subject to a civil penalty imposed pursuant to § 2.205. For the purpose of imposing the criminal penalties contained in section 223 of the Atomic Energy Act of 1954, as amended, any order issued pursuant to this paragraph with respect to Safeguards Information shall be deemed to be an order issued under section 161b of the Atomic Energy Act of 1954, as amended.

(c) Upon a final determination that the material is relevant, and not privileged, exempt from disclosure, or otherwise exempt from production under § 2.1005, the potential party, interested governmental participant, or party who asserted the claim of withholding must make the document available in accordance with the provisions of this subpart within five days.

(d) The service of all pleadings and answers, orders, and decisions during the pre-license application phase shall be made according to the procedures specified in § 2.1013(c) and entered into the pre-license application electronic docket.

(e) The Pre-License Application presiding officer possesses all the general powers specified in §§ 2.319 and 2.321(c).

(f) The Commission, in designating the Pre-License Application Presiding Officer in accordance with paragraphs (a) (1) and (2) of this section, shall specify the jurisdiction of the Officer.

[63 FR 71738, Dec. 30, 1998 as amended at 66 FR 29466, May 31, 2001; 69 FR 2265, Jan. 14, 2004]

## **§ 2.1011 Management of electronic information.**

(a) Electronic document production and the electronic docket are subject to the provisions of this subpart.

(b)(1) The NRC, DOE, parties, and potential parties participating in accordance with the provision of this subpart shall be responsible for obtaining the computer system necessary to comply with the requirements for electronic document production and service.

(2) The NRC, DOE, parties, and potential parties participating in accordance with the provision of this subpart shall comply with the following standards in the design of the computer systems necessary to comply with the requirements for electronic document production and service:

(i) The participants shall make textual (or, where non-text, image) versions of their documents available on a web accessible server which is able to be canvassed by web indexing software (i.e., a "robot", "spider", "crawler") and the participant system must make both data files and log files accessible to this software.

(ii) The participants shall make bibliographic header data available in an HTTP (Hypertext Transfer Protocol) accessible, ODBC (Open Database Connectivity) and SQL (Structured Query Language)-compliant (ANSI IX3.135091992/ISO 9075091992) database management system (DBMS). Alternatively, the structured data containing the bibliographic header may be made available in a standard database readable (e.g., XML (Extensible Markup Language <http://www.w3.org/xml/>), comma delimited, or comma separated value (.csv)) file.

(iii) Textual material must be formatted to comply with the ISO/IEC 8859091 character set and be in one of the following acceptable formats: ASCII, native word processing (Word, WordPerfect), PDF Normal, or HTML.

(iv) Image files must be formatted as TIFF CCITT G4 for bi-tonal images or PNG (Portable Network Graphics) per [<http://www.w3.org/TR/REC-png-multi.html>] format for grey-scale or color images, or PDF (Portable Document Format--Image). TIFF, PDF, or PNG images will be stored at 300 dpi (dots per inch) or greater, grey scale images at 150 dpi or greater with eight bits of tonal depth, and color images at 150 dpi or greater with 24 bits of color depth. Images found on participant machines will be stored as single image-per-page to facilitate retrieval of no more than a single page, or alternatively,

images may be stored in an image-per-document format if software is incorporated in the web server that allows image-per-page representation and delivery.

(v) The participants shall programmatically link, preferably via hyperlink or some other automated process, the bibliographic header record with the text or image file it represents. Each participant's system must afford the LSN software enough information to allow a text or image file to be identified to the bibliographic data that describes it.

(vi) To facilitate data exchange, participants shall adhere to hardware and software standards, including, but not limited to:

(A) Network access must be HTTP/1.1 [<http://www.faqs.org/rfcs/rfc2068.html>] over TCP (Transmission Control Protocol, [<http://www.faqs.org/rfcs/rfc793.html>]) over IP (Internet Protocol, [<http://www.faqs.org/rfcs/rfc791.html>]).

(B) Associating server names with IP addresses must follow the DNS (Domain Name System), [<http://www.faqs.org/rfcs/rfc1034.html>] and [<http://www.faqs.org/rfcs/rfc1035.html>].

(C) Web page construction must be HTML [<http://www.w3.org/TR/REC-html40/>].

(D) Electronic mail (e-mail) exchange between e-mail servers must be SMTP (Simple Mail Transport Protocol, [<http://www.faqs.org/rfcs/rfc821.html>]).

(E) Format of an electronic mail message must be per [<http://www.faqs.org/rfcs/rfc822.html>] optionally extended by MIME (Multipurpose Internet Mail Extensions) per [<http://www.faqs.org/rfcs/rfc2045.html>] to accommodate multipurpose e-mail.

(c) The Licensing Support Network shall be coordinated by the LSN Administrator, who shall be designated before the start of the pre-license application phase. The LSN Administrator shall have the responsibility to--

(1) Identify technical and policy issues related to implementation of the LSN for LSN Advisory Review Panel and Commission consideration;

(2) Address the consensus advice of the LSN Advisory Review Panel under paragraph (e)(1) of this section that is consistent with the requirements of this subpart;

(3) Identify any problems experienced by participants regarding LSN availability, including the availability of individual participant's data, and provide a recommendation to resolve any such problems to the participant(s) and the Pre-License Application Presiding Officer relative to the resolution of any disputes regarding LSN availability, including disputes on the availability of an individual participant's data;

(4) Identify any problems regarding the integrity of documentary material certified in accordance with § 2.1009(b) by the participants to be in the LSN, and provide a recommendation to resolve any such problems to the participant(s) and the Pre-License

Application Presiding Officer relative to the resolution of any disputes regarding the integrity of documentary material;

(5) Provide periodic reports to the Commission on the status of LSN functionality and operability.

(6) Evaluate LSN participant compliance with the basic design standards in paragraph (b)(2) of this section, and provide for individual variances from the design standards to accommodate changes in technology or problems identified during initial operability testing of the individual documentary collection websites or the "central LSN site".

(7) Issue guidance for LSN participants on how best to comply with the design standards in paragraph (b)(2) of this section.

(d) The Secretary of the Commission shall reconstitute the LSS Advisory Review Panel as the LSN Advisory Review Panel, composed of the interests currently represented on the LSS Advisory Review Panel. The Secretary of the Commission shall have the authority to appoint additional representatives to the LSN Advisory Review Panel consistent with the requirements of the Federal Advisory Committee Act, 5 U.S.C. app. I, giving particular consideration to potential parties, parties, and interested governmental participants who were not members of the NRC HLW Licensing Support System Advisory Review Panel.

(e)(1) The LSN Advisory Review Panel shall provide advice to--

(i) NRC on the fundamental issues of the type of computer system necessary to access the Licensing Support Network effectively under paragraph (b) of this section; and

(ii) The Secretary of the Commission on the operation and maintenance of the electronic docket established for the HLW geologic repository licensing proceeding under the Commission's Rules of Practice (10 CFR part 2).

(iii) The LSN Administrator on solutions to improve the functioning of the LSN;

(2) The responsibilities of the LSN Advisory Review Panel shall include advice on--

(i) Format standards for providing electronic access to the documentary material certified by each participant to be made available in the LSN to the other parties, interested governmental participants, or potential parties;

(ii) The procedures and standards for the electronic transmission of filings, orders, and decisions during both the pre-license application phase and the high-level waste licensing proceeding;

(iii) Other duties as specified in this subpart or as directed by the Secretary of the Commission.

[63 FR 71738, Dec. 30, 1998 as amended at 66 FR 29466, May 31, 2001]



## **§ 2.1012 Compliance.**

(a) If the Department of Energy fails to make its initial certification at least six months prior to tendering the application, upon receipt of the tendered application, notwithstanding the provisions of § 2.101(f)(3), the Director of the NRC's Office of Nuclear Material Safety and Safeguards will not docket the application until at least six months have elapsed from the time of the certification. The Director may determine that the tendered application is not acceptable for docketing under this subpart if the application is not accompanied by an updated certification pursuant to § 2.1009(b), or if the Secretary of the Commission determines that the application is not submitted on optical storage media in a format consistent with NRC regulations and guidance, or for non-compliance with any other requirements identified in this subpart.

(b)(1) A person, including a potential party given access to the Licensing Support Network under this subpart, may not be granted party status under § 2.309, or status as an interested governmental participant under § 2.315, if it cannot demonstrate substantial and timely compliance with the requirements of § 2.1003 at the time it requests participation in the HLW licensing proceeding under § 2.309 or § 2.315.

(2) A person denied party status or interested governmental participant status under paragraph (b)(1) of this section may request party status or interested governmental participant status upon a showing of subsequent compliance with the requirements of § 2.1003. Admission of such a party or interested governmental participant under §§ 2.309 or 2.315, respectively, is conditioned on accepting the status of the proceeding at the time of admission.

(c) The Presiding Officer shall not make a finding of substantial and timely compliance pursuant to paragraph (b) of this section for any person who is not in compliance with all applicable orders of the Pre-License Application Presiding Officer designated pursuant to § 2.1010.

[54 FR 14944, Apr. 14, 1991, as amended at 56 FR 7796, Feb. 26, 1991; 63 FR 71739, Dec. 30, 1998; 66 FR 29466, May 31, 2001; 69 FR 2265, Jan. 14, 2004; 69 FR 32849, June 14, 2004]

## **§ 2.1013 Use of the electronic docket during the proceeding.**

(a)(1) As specified in § 2.303, the Secretary of the Commission will maintain the official docket of the proceeding on the application for construction authorization for a high-level radioactive waste repository at a geologic repository operations area under parts 60 or 63 of this chapter, and for applications for a license to receive and possess high level radioactive waste at a geologic repository operations area under parts 60 or 63 of this Chapter.

(2) The Secretary of the Commission will establish an electronic docket to contain the official record materials of the high-level radioactive waste repository licensing

proceeding in searchable full text, or, for material that is not suitable for entry in searchable full text, by header and image, as appropriate.

(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. The electronic docket will contain a list of all exhibits, showing where in the transcript each was marked for identification and where it was received into evidence or rejected. For any hearing sessions recorded stenographically or by other means, transcripts will be entered into the electronic docket on a daily basis in order to afford next-day availability at the hearing. However, for any hearing sessions recorded on videotape or other video medium, if a copy of the video recording is made available to all parties on a daily basis that affords next-day availability at the hearing, a transcript of the session prepared from the video recording will be entered into the electronic docket within twenty-four (24) hours of the time the transcript is tendered to the electronic docket by the transcription service.

(c)(1) All filings in the adjudicatory proceeding on the application for a high-level radioactive waste geologic repository under part 60 or 63 of this chapter shall be transmitted by the submitter to the Presiding Officer, parties, and Secretary of the Commission, according to the following requirements--

(i) "Simple documents" must be transmitted electronically via EIE;

(ii) "Large documents" must be transmitted electronically in multiple transmissions of 50 megabytes or less each via EIE;

(iii) "Complex documents":

(A) Those portions that can be electronically submitted through the EIE, in 50 MB or less segments, must be transmitted electronically, along with a transmittal letter; and

(B) Those portions that are not capable of being transmitted electronically must be submitted on optical storage media which must also include those portions of the document that had been or will be transmitted electronically.

(iv) Electronic submissions must have the following resolution--

(A) Electronic submissions of files created after January 1, 2004 must have 300 dots per inch (dpi) as the minimum resolution for bi-tonal, color, and grayscale, except in limited circumstances where submitters may need to use an image scanned before January 1, 2004, in a document created after January 1, 2004, or the scanning process for a large, one-page image may not successfully complete at the 300 dpi standard resolution.

(B) Electronic submissions of files created before January 1, 2004, or electronic submissions created after January 1, 2004, which cannot meet the 300 dpi standard for color and grayscale, must meet the standard for documents placed on LSN participant Web sites in § 2.1011(b)(2)(iv) of this subpart, which is 150 dpi for color and grayscale documents and 300 dpi for bi-tonal documents.

(v) Electronic submissions must be generated in the appropriate PDF output format by using:

(A) PDF--Formatted Text and Graphics for textual documents converted from native applications;

(B) PDF--Searchable Image (Exact) for textual documents converted from scanned documents; and

(C) PDF--Image Only for graphic-, image-, and forms-oriented documents. In addition, Tagged Image File Format (TIFF) images and the results of spreadsheet applications must be converted to PDF, except in those rare instances where PDF conversion is not practicable.

(vi) Electronic submissions must not rely on hyperlinks to other documents or Web sites for completeness or access except for hyperlinks that link to material within the same PDF file. If the submittal contains hyperlinks to other documents or Web sites, then it must include a disclaimer to the effect that the hyperlinks may be inoperable or are not essential to the use of the filing. Information contained in hyperlinks to a Web site on the Internet or to another PDF file, that is necessary for the completeness of a filing, must be submitted in its entirety in the filing or as an attachment to the filing.

(vii) All electronic submissions must be free of author-imposed security restrictions.

(2) The Secretary of the Commission will establish an electronic docket to contain the official record materials of the high-level radioactive waste repository licensing proceeding in searchable full text, or, for material that is not suitable for entry in searchable full text, by header and image, as appropriate.

(3) Service upon a party or interested governmental participant is completed when the sender receives electronic acknowledgment ("delivery receipt") that the electronic submission has been placed in the recipient's electronic mailbox.

(4) Proof of service, stating the name and address of the person on whom served and the manner and date of service, shall be shown for each document filed, by--

(i) Electronic acknowledgment ("delivery receipt");

(ii) The affidavit of the person making the service; or

(iii) The certificate of counsel.

(5) All Presiding Officer and Commission issuances and orders will be transmitted electronically to the parties and interested governmental participants.

(d) Online access to the electronic docket, including a Protective Order File if authorized by a Presiding Officer, shall be provided to the Presiding Officer, the representatives of the parties and interested governmental participants, and the witnesses while testifying,

for use during the hearing. Use of paper copy and other images will also be permitted at the hearing.

[63 FR 71739, Dec. 30, 1998, as amended at 66 FR 55788, Nov. 2, 2001; 69 FR 2265, Jan. 14, 2004; 69 FR 32849, June 14, 2004]

## **§ 2.1015 Appeals.**

(a) No appeals from any Pre-License Application Presiding Officer or Presiding Officer order or decision issued under this subpart are permitted, except as prescribed in paragraphs (b), (c), and (d) of this section.

(b) A notice of appeal from a Pre-License Application presiding officer order issued under § 2.1010, a presiding officer prehearing conference order issued under § 2.1021, a presiding officer order granting or denying a motion for summary disposition issued in accordance with § 2.1025, or a presiding officer order granting or denying a petition to amend one or more contentions under § 2.309, must be filed with the Commission no later than ten (10) days after service of the order. A supporting brief must accompany the notice of appeal. Any other party, interested governmental participant, or potential party may file a brief in opposition to the appeal no later than ten (10) days after service of the appeal.

(c) Appeals from a Presiding Officer initial decision or partial initial decision must be filed and briefed before the Commission in accordance with the following requirements.

(1) *Notice of appeal.* Within ten (10) days after service of an initial decision, any party may take an appeal to the Commission by filing a notice of appeal. The notice shall specify:

(i) The party taking the appeal; and

(ii) The decision being appealed.

(2) *Filing appellant's brief.* Each appellant shall file a brief supporting its position on appeal within thirty (30) days (40 days if Commission staff is the appellant) after the filing of notice required by paragraph (a) of this section.

(3) *Filing responsive brief.* Any party who is not an appellant may file a brief in support of or in opposition to the appeal within thirty (30) days after the period has expired for the filing and service of the brief of all appellants. Commission staff may file a responsive brief within forty (40) days after the period has expired for the filing and service of the briefs of all appellants. A responding party shall file a single responsive brief regardless of the number of appellants' briefs filed.

(4) *Brief content.* A brief in excess of ten (10) pages must contain a table of contents, with page references, and a table of cases (alphabetically arranged), statutes, regulations, and other authorities cited, with references to the pages of the brief where they are cited.

(i) An appellant's brief must clearly identify the errors of fact or law that are the subject of the appeal. An intervenor-appellant's brief must be confined to issues which the intervenor-appellant placed in controversy or sought to place in controversy in the proceeding. For each issue appealed, the precise portion of the record relied upon in support of the assertion of error must also be provided.

(ii) Each responsive brief must contain a reference to the precise portion of the record which supports each factual assertion made.

(5) *Brief length.* A party shall not file a brief in excess of seventy (70) pages in length, exclusive of pages containing the table of contents, table of citations and any addendum containing statutes, rules, regulations, etc. A party may request an increase of this page limit for good cause. Such a request shall be made by motion submitted at least seven (7) days before the date upon which the brief is due for filing and shall specify the enlargement requested.

(6) *Certificate of service.* All documents filed under this section must be accompanied by a certificate reflecting service upon all other parties to the proceeding.

(7) *Failure to comply.* A brief which in form or content is not in substantial compliance with the provisions of this section may be stricken, either on motion of a party or by the Commission on its own initiative.

(d) When, in the judgment of a Pre-License Application presiding officer or presiding officer, prompt appellate review of an order not immediately appealable under paragraph (b) of this section is necessary to prevent detriment to the public interest or unusual delay or expense, the Pre-License Application presiding officer or presiding officer may refer the ruling promptly to the Commission, and shall provide notice of this referral to the parties, interested governmental participants, or potential parties. The parties, interested governmental participants, or potential parties may also request that the Pre-License Application presiding officer or presiding officer certify under § 2.319 rulings not immediately appealable under paragraph (b) of this section.

(e) Unless otherwise ordered, the filing of an appeal, petition for review, referral, or request for certification of a ruling shall not stay the proceeding or extend the time for the performance of any act.

[56 FR 7797, Feb. 26, 1991, as amended at 56 FR 29410, June 27, 1991; 69 FR 2265, Jan. 14, 2004]

## **§ 2.1017 Computation of time.**

In computing any period of time, the day of the act, event, or default after which the designated period of time begins to run is not included. The last day of the period so computed is included unless it is a Saturday, Sunday, or legal holiday at the place where the action or event is to occur, in which event the period runs until the end of the next day which is neither a Saturday, Sunday, nor holiday. Whenever a party, potential party, or interested governmental participant, has the right or is required to do some act within a prescribed period after the service of a notice or other document upon it, one day shall

be added to the prescribed period. If the electronic docket is unavailable for more than four access hours of any day that would be counted in the computation of time, that day will not be counted in the computation of time.

[63 FR 71740, Dec. 30, 1998]

## **§ 2.1018 Discovery.**

(a)(1) Parties, potential parties, and interested governmental participants in the high-level waste licensing proceeding may obtain discovery by one or more of the following methods:

(i) Access to the documentary material made available pursuant to § 2.1003;

(ii) Entry upon land for inspection, access to raw data, or other purposes pursuant to § 2.1020;

(iii) Access to, or the production of, copies of documentary material for which bibliographic headers only have been submitted pursuant to § 2.1003(a);

(iv) Depositions upon oral examination pursuant to § 2.1019;

(v) Requests for admissions pursuant to § 2.708;

(vi) Informal requests for information not made electronically available, such as the names of witnesses and the subjects they plan to address; and

(vii) Interrogatories and depositions upon written questions, as provided in paragraph (a)(2) of this section.

(2) Interrogatories and depositions upon written questions may be authorized by order of the discovery master appointed under paragraph (g) of this section, or if no discovery master has been appointed, by order of the Presiding Officer, in the event that the parties are unable, after informal good faith efforts, to resolve a dispute in a timely fashion concerning the production of information.

(b)(1) Parties, potential parties, and interested governmental participants, pursuant to the methods set forth in paragraph (a) of this section, may obtain discovery regarding any matter, not privileged, which is relevant to the licensing of the likely candidate site for a geologic repository, whether it relates to the claim or defense of the person seeking discovery or to the claim or defense of any other person. Except for discovery pursuant to §§ 2.1018(a)(2) and 2.1019 of this subpart, all other discovery shall begin during the pre-license application phase. Discovery pursuant to §§ 2.1018(a)(2) and 2.1019 of this subpart shall begin after the issuance of the first pre-hearing conference order under § 2.1021 of this subpart, and shall be limited to the issues defined in that order or subsequent amendments to the order. It is not ground for objection that the information sought will be inadmissible at the hearing if the information sought appears reasonably calculated to lead to the discovery of admissible evidence.

(2) A party, potential party, or interested governmental participant may obtain discovery of documentary material otherwise discoverable under paragraph (b)(1) of this section and prepared in anticipation of, or for the hearing by, or for another party's, potential party's, or interested governmental participant's representative (including its attorney, surety, indemnitor, insurer, or similar agent) only upon a showing that the party, potential party, or interested governmental participant seeking discovery has substantial need of the materials in the preparation of its case and that it is unable without undue hardship to obtain the substantial equivalent of the materials by other means. In ordering discovery of these materials when the required showing has been made, the Presiding Officer shall protect against disclosure of the mental impressions, conclusions, opinions, or legal theories of an attorney or other representative of a party, potential party, or interested governmental participant concerning the proceeding.

(c)(1) Upon motion by a party, potential party, interested governmental participant, or the person from whom discovery is sought, and for good cause shown, the presiding officer may make any order that justice requires to protect a party, potential party, interested governmental participant, or other person from annoyance, embarrassment, oppression, or undue burden, delay, or expense, including one or more of the following:

(i) That the discovery not be had;

(ii) That the discovery may be had only on specified terms and conditions, including a designation of the time or place;

(iii) That the discovery may be had only by a method of discovery other than that selected by the party, potential party, or interested governmental participant seeking discovery;

(iv) That certain matters not be inquired into, or that the scope of discovery be limited to certain matters;

(v) That discovery be conducted with no one present except persons designated by the presiding officer;

(vi) That, subject to the provisions of § 2.390 of this part, a trade secret or other confidential research, development, or commercial information not be disclosed or be disclosed only in a designated way; or

(vii) That studies and evaluations not be prepared.

(2) If the motion for a protective order is denied in whole or in part, the presiding officer may, on such terms and conditions as are just, order that any party, potential party, interested governmental participant or other person provide or permit discovery.

(d) Except as provided in paragraph (b) of this section, and unless the Presiding Officer upon motion, for the convenience of parties, potential parties, interested governmental participants, and witnesses and in the interest of justice, orders otherwise, methods of discovery may be used in any sequence, and the fact that a party, potential party, or interested governmental participant is conducting discovery, whether by deposition or

otherwise, shall not operate to delay any other party's, potential party's, or interested governmental participant's discovery.

(e) A party, potential party, or interested governmental participant who has made available in electronic form all material relevant to any discovery request or who has responded to a request for discovery with a response that was complete when made is under no duty to supplement its response to include information thereafter acquired, except as follows:

(1) To the extent that written interrogatories are authorized pursuant to paragraph (a)(2) of this section, a party or interested governmental participant is under a duty to seasonably supplement its response to any question directly addressed to (i) the identity and location of persons having knowledge of discoverable matters, and (ii) the identity of each person expected to be called as an expert witness at the hearing, the subject matter on which the witness is expected to testify, and the substance of the witness' testimony.

(2) A party, potential party, or interested governmental participant is under a duty seasonably to amend a prior response if it obtains information upon the basis of which (i) it knows that the response was incorrect when made, or (ii) it knows that the response though correct when made is no longer true and the circumstances are such that a failure to amend the response is in substance a knowing concealment.

(3) A duty to supplement responses may be imposed by order of the Presiding Officer or agreement of the parties, potential parties, and interested governmental participants.

(f)(1) If a deponent of a party, potential party, or interested governmental participant upon whom a request for discovery is served fails to respond or objects to the request, or any part thereof, the party, potential party, or interested governmental participant submitting the request or taking the deposition may move the Presiding Officer, within five days after the date of the response or after failure to respond to the request, for an order compelling a response in accordance with the request. The motion shall set forth the nature of the questions or the request, the response or objection of the party, potential party, interested governmental participant, or other person upon whom the request was served, and arguments in support of the motion. For purposes of this paragraph, an evasive or incomplete answer or response shall be treated as a failure to answer or respond. Failure to answer or respond shall not be excused on the ground that the discovery sought is objectionable unless the person, party, potential party, or interested governmental participant failing to answer or respond has applied for a protective order pursuant to paragraph (c) of this section.

(2) In ruling on a motion made pursuant to this section, the Presiding Officer may make such a protective order as it is authorized to make on a motion made pursuant to paragraph (c) of this section.

(3) An independent request for issuance of a subpoena may be directed to a nonparty for production of documents. This section does not apply to requests for the testimony of the NRC regulatory staff under § 2.709.



(g) The presiding officer, under § 2.322, may appoint a discovery master to resolve disputes between parties concerning informal requests for information as provided in paragraphs (a)(1) and (a)(2) of this section.

[54 FR 14944, Apr. 14, 1989, as amended at 56 FR 7797, Feb. 26, 1991; 63 FR 71740, Dec. 30, 1998; 69 FR 2266, Jan. 14, 2004]

## **§ 2.1019 Depositions.**

(a) Any party or interested governmental participant desiring to take the testimony of any person by deposition on oral examination shall, without leave of the Commission or the Presiding Officer, give reasonable notice in writing to every other party and interested governmental participant, to the person to be examined, and to the Presiding Officer of the proposed time and place of taking the deposition; the name and address of each person to be examined, if known, or if the name is not known, a general description sufficient to identify him or her or the class or group to which he or she belongs, the matters upon which each person will be examined and the name or descriptive title and address of the officer before whom the deposition is to be taken.

(b) Within the United States, a deposition may be taken before any officer authorized to administer oaths by the laws of the United States or of the place where the examination is held. Outside of the United States, a deposition may be taken before a secretary of an embassy or legation, a consul general, vice consul or consular agent of the United States, or a person authorized to administer oaths designated by the Commission. Depositions may be conducted by telephone or by video teleconference at the option of the party or interested governmental participant taking the deposition.

(c) The deponent shall be sworn or shall affirm before any questions are put to him or her. Examination and cross-examination shall proceed as at a hearing. Each question propounded shall be recorded and the answer taken down in the words of the witness. Objections on questions of evidence shall be noted in short form without the arguments. The officer shall not decide on the competency, materiality, or relevancy of evidence but shall record the evidence subject to objection. Objections on questions of evidence not made before the officer shall not be deemed waived unless the ground of the objection is one which might have been obviated or removed if presented at that time.

(d) When the testimony is fully transcribed, the deposition shall be submitted to the deponent for examination and signature unless the deponent is ill or cannot be found or refuses to sign. The officer shall certify the deposition or, if the deposition is not signed by the deponent, shall certify the reasons for the failure to sign, and shall promptly transmit an electronic copy of the deposition to the Secretary of the Commission for entry into the electronic docket.

(e) Where the deposition is to be taken on written questions as authorized under § 2.1018(a)(2), the party or interested governmental participant taking the deposition shall electronically serve a copy of the questions, showing each question separately and consecutively numbered, on every other party and interested governmental participant with a notice stating the name and address of the person who is to answer them, and the name, description, title, and address of the officer before whom they are to be asked.

Within ten days after service, any other party or interested governmental participant may serve cross-questions. The questions, cross-questions, and answers shall be recorded and signed, and the deposition certified, returned, and transmitted in electronic form to the Secretary of the Commission for entry into the electronic docket as in the case of a deposition on oral examination.

(f) A deposition will not become a part of the evidentiary record in the hearing unless received in evidence. If only part of a deposition is offered in evidence by a party or interested governmental participant, any other party or interested governmental participant may introduce any other parts. A party or interested governmental participant shall not be deemed to make a person its own witness for any purpose by taking his or her deposition.

(g) A deponent whose deposition is taken and the officer taking a deposition shall be entitled to the same fees as are paid for like services in the district courts of the United States, to be paid by the party or interested governmental participant at whose instance the deposition is taken.

(h) The deponent may be accompanied, represented, and advised by legal counsel.

(i)(1) After receiving written notice of the deposition under paragraph (a) or paragraph (e) of this section, and ten days before the scheduled date of the deposition, the deponent shall submit an electronic index of all documents in his or her possession, relevant to the subject matter of the deposition, including the categories of documents set forth in paragraph (i)(2) of this section, to all parties and interested governmental participants. The index shall identify those records which have already been made available electronically. All documents that are not identical to documents already made available electronically, whether by reason of subsequent modification or by the addition of notations, shall be treated as separate documents.

(2) The following material is excluded from the initial requirements of § 2.1003 to be made available electronically, but is subject to derivative discovery under paragraph (i)(1) of this section--

(i) Personal records;

(ii) Travel vouchers;

(iii) Speeches;

(iv) Preliminary drafts;

(v) Marginalia.

(3) Subject to paragraph (i)(6) of this section, any party or interested governmental participant may request from the deponent a paper copy of any or all of the documents on the index that have not already been provided electronically.

(4) Subject to paragraph (i)(6) of this section, the deponent shall bring a paper copy of all documents on the index that the deposing party or interested governmental participant requests that have not already been provided electronically to an oral deposition conducted pursuant to paragraph (a) of this section, or in the case of a deposition taken on written questions pursuant to paragraph (e) of this section, shall submit such documents with the certified deposition.

(5) Subject to paragraph (i)(6) of this section, a party or interested governmental participant may request that any or all documents on the index that have not already been provided electronically, and on which it intends to rely at hearing, be made electronically available by the deponent.

(6) The deposing party or interested governmental participant shall assume the responsibility for the obligations set forth in paragraphs (i)(1), (i)(3), (i)(4), and (i)(5) of this section when deposing someone other than a party or interested governmental participant.

[54 FR 14944, Apr. 14, 1989, as amended at 56 FR 7797, Feb. 26, 1991; 63 FR 71740, Dec. 30, 1998 as amended at 69 FR 2265, Jan. 14, 2004]

## **§ 2.1020 Entry upon land for inspection.**

(a) Any party, potential party, or interested governmental participant may serve on any other party, potential party, or interested governmental participant a request to permit entry upon designated land or other property in the possession or control of the party, potential party, or interested governmental participant upon whom the request is served for the purpose of access to raw data, inspection and measuring, surveying, photographing, testing, or sampling the property or any designated object or operation thereon, within the scope of § 2.1018 of this subpart.

(b) The request may be served on any party, potential party, or interested governmental participant without leave of the Commission or the Presiding Officer.

(c) The request shall describe with reasonable particularity the land or other property to be inspected either by individual item or by category. The request shall specify a reasonable time, place, and manner of making the inspection and performing the related acts.

(d) The party, potential party, or interested governmental participant upon whom the request is served shall serve on the party, potential party, or interested governmental participant submitting the request a written response within ten days after the service of the request. The response shall state, with respect to each item or category, that inspection and related activities will be permitted as requested, unless the request is objected to, in which case the reasons for objection shall be stated. If objection is made to part of an item or category, the part shall be specified.

[54 FR 14944, Apr. 14, 1991, as amended at 56 FR 7797, Feb. 26, 1991]

## **§ 2.1021 First prehearing conference.**

(a) In any proceeding involving an application for a construction authorization for a HLW repository at a geologic repository operations area under parts 60 or 63 of this chapter, or an application for a license to receive and possess high-level radioactive waste at a geologic repository operations area pursuant to parts 60 or 63 of this chapter, the Commission or the presiding officer will direct the parties, interested governmental participants and any petitioners for intervention, or their counsel, to appear at a specified time and place, within seventy days after the notice of hearing is published, or such other time as the Commission or the presiding officer may deem appropriate, for a conference to:

- (1) Permit identification of the key issues in the proceeding;
  - (2) Take any steps necessary for further identification of the issues;
  - (3) Consider all intervention petitions to allow the Presiding Officer to make such preliminary or final determination as to the parties and interested governmental participants, as may be appropriate;
  - (4) Establish a schedule for further actions in the proceeding; and
  - (5) Establish a discovery schedule for the proceeding taking into account the objective of meeting the three year time schedule specified in section 114(d) of the Nuclear Waste Policy Act of 1982, as amended, 42 U.S.C. 10134(d).
- (b) The Presiding Officer may order any further formal and informal conferences among the parties and interested governmental participants including teleconferences, to the extent that it considers that such a conference would expedite the proceeding.
- (c) A prehearing conference held pursuant to this section shall be stenographically reported.
- (d) The Presiding Officer shall enter an order which recites the action taken at the conference, the schedule for further actions in the proceeding, and any agreements by the parties, and which identifies the key issues in the proceeding, makes a preliminary or final determination as to the parties and interested governmental participants in the proceeding, and provides for the submission of status reports on discovery.

[54 FR 14944, Apr. 14, 1991, as amended at 56 FR 7797, Feb. 26, 1991; 66 FR 55788, Nov. 2, 2001; 69 FR 2266, Jan. 14, 2004]

## **§ 2.1022 Second prehearing conference.**

(a) The Commission or the presiding officer in a proceeding on either an application for construction authorization for a high-level radioactive waste repository at a geologic repository operations area under parts 60 or 63 of this chapter, or an application for a license to receive and possess high-level radioactive waste at a geologic repository

operations area under parts 60 or 63 of this chapter, shall direct the parties, interested governmental participants, or their counsel to appear at a specified time and place not later than thirty days after the Safety Evaluation Report is issued by the NRC staff for a conference to consider:

(1) Any amended contentions submitted, which must be reviewed under the criteria in § 2.309(c) of this part;

(2) Simplification, clarification, and specification of the issues;

(3) The obtaining of stipulations and admissions of fact and of the contents and authenticity of documents to avoid unnecessary proof;

(4) Identification of witnesses and the limitation of the number of expert witnesses, and other steps to expedite the presentation of evidence;

(5) The setting of a hearing schedule;

(6) Establishing a discovery schedule for the proceeding taking into account the objective of meeting the three year time schedule specified in section 114(d) of the Nuclear Waste Policy Act of 1982, as amended, 42 U.S.C. 10134(d); and

(7) Such other matters as may aid in the orderly disposition of the proceeding.

(b) A prehearing conference held pursuant to this section shall be stenographically reported.

(c) The Presiding Officer shall enter an order which recites the action taken at the conference and the agreements by the parties, limits the issues or defines the matters in controversy to be determined in the proceeding, sets a discovery schedule, and sets the hearing schedule.

[54 FR 14944, Apr. 14, 1991, as amended at 56 FR 7797, Feb. 26, 1991; 69 FR 2266, Jan. 14, 2004]

## **§ 2.1023 Immediate effectiveness.**

(a) Pending review and final decision by the Commission, and initial decision resolving all issues before the presiding officer in favor of issuance or amendment of either an authorization to construct a high-level radioactive waste repository at a geologic repository operations area under parts 60 or 63 of this chapter, or a license to receive and possess high-level radioactive waste at a geologic repository operations area under parts 60 or 63 of this chapter will be immediately effective upon issuance except:

(1) As provided in any order issued in accordance with § 2.342 that stays the effectiveness of an initial decision; or

(2) As otherwise provided by the Commission in special circumstances.

(b) The Director of Nuclear Material Safety and Safeguards, notwithstanding the filing or pendency of an appeal or a petition for review pursuant to § 2.1015 of this subpart, promptly shall issue a construction authorization or a license to receive and possess high-level radioactive waste at a geologic repository operations area, or amendments thereto, following an initial decision resolving all issues before the Presiding Officer in favor of the licensing action, upon making the appropriate licensing findings, except --

(1) As provided in paragraph (c) of this section; or

(2) As provided in any order issued in accordance with § 2.342 of this part that stays the effectiveness of an initial decision; or

(3) As otherwise provided by the Commission in special circumstances.

(c)(1) Before the Director of Nuclear Material Safety and Safeguards may issue a construction authorization or a license to receive and possess waste at a geologic repository operations area in accordance with paragraph (b) of this section, the Commission, in the exercise of its supervisory authority over agency proceedings, shall undertake and complete a supervisory examination of those issues contested in the proceeding before the Presiding Officer to consider whether there is any significant basis for doubting that the facility will be constructed or operated with adequate protection of the public health and safety, and whether the Commission should take action to suspend or to otherwise condition the effectiveness of a Presiding Officer decision that resolves contested issues in a proceeding in favor of issuing a construction authorization or a license to receive and possess high-level radioactive waste at a geologic repository operations area. This supervisory examination is not part of the adjudicatory proceeding. The Commission shall notify the Director in writing when its supervisory examination conducted in accordance with this paragraph has been completed.

(2) Before the Director of Nuclear Material Safety and Safeguards issues a construction authorization or a license to receive and possess high-level radioactive waste at a geologic repository operations area, the Commission shall review those issues that have not been contested in the proceeding before the Presiding Officer but about which the Director must make appropriate findings prior to the issuance of such a license. The Director shall issue a construction authorization or a license to receive and possess high-level radioactive waste at a geologic repository operations area only after written notification from the Commission of its completion of its review under this paragraph and of its determination that it is appropriate for the Director to issue such a construction authorization or license. This Commission review of uncontested issues is not part of the adjudicatory proceeding.

(3) No suspension of the effectiveness of a Presiding Officer's initial decision or postponement of the Director's issuance of a construction authorization or license that results from a Commission supervisory examination of contested issues under paragraph (c)(1) of this section or a review of uncontested issues under paragraph (c)(2) of this section will be entered except in writing with a statement of the reasons. Such suspension or postponement will be limited to such period as is necessary for the Commission to resolve the matters at issue. If the supervisory examination results in a suspension of the effectiveness of the Presiding Officer's initial decision under paragraph (c)(1) of this section, the Commission will take review of the decision sua sponte and

further proceedings relative to the contested matters at issue will be in accordance with procedures for participation by the DOE, the NRC staff, or other parties and interested governmental participants to the Presiding Officer proceeding established by the Commission in its written statement of reasons. If a postponement results from a review under paragraph (c)(2) of this section, comments on the uncontested matters at issue may be filed by the DOE within ten days of service of the Commission's written statement.

[54 FR 14944, Apr. 14, 1991, as amended at 56 FR 7797, Feb. 26, 1991; 66 FR 55789, Nov. 2, 2001; 69 FR 2266, Jan. 14, 2004]

## **§ 2.1025 Authority of the Presiding Officer to dispose of certain issues on the pleadings.**

(a) Any party may move, with or without supporting affidavits, for a decision by the Presiding Officer in that party's favor as to all or any part of the matters involved in the proceeding. The moving party shall annex to the motion a separate, short, and concise statement of the material facts as to which the moving party contends that there is no genuine issue to be heard. Motions may be filed at any time. Any other party may file an answer supporting or opposing the motion, with or without affidavits, within twenty (20) days after service of the motion. The party shall annex to any answer opposing the motion a separate, short, and concise, statement of the material facts as to which it is contended there exists a genuine issue to be heard. All material facts set forth in the statement to be filed by the moving party will be deemed to be admitted unless controverted by the statement required to be filed by the opposing party. The opposing party may, within ten (10) days after service, respond in writing to new facts and arguments presented in any statement filed in support of the motion. No further supporting statements or responses thereto may be entertained. The Presiding Officer may dismiss summarily or hold in abeyance motions filed shortly before the hearing commences or during the hearing if the other parties or the Presiding Officer would be required to divert substantial resources from the hearing in order to respond adequately to the motion.

(b) Affidavits must set forth those facts that would be admissible in evidence and show affirmatively that the affiant is competent to testify to the matters stated therein. The Presiding Officer may permit affidavits to be supplemented or opposed by further affidavits. When a motion for summary disposition is made and supported as provided in this section, a party opposing the motion may not rest upon the mere allegations or denials of its answer; its answer by affidavits or as otherwise provided in this section must set forth specific facts showing that there is a genuine issue of fact. If no such answer is filed, the decision sought, if appropriate, must be rendered.

(c) The Presiding Officer shall render the decision sought if the filings in the proceeding show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law. However, in any proceeding involving a construction authorization for a geologic repository operations area, the procedure described in this section may be used only for the determination of specific subordinate issues and may not be used to determine the ultimate issue as to whether the authorization must be issued.

[56 FR 7798, Feb. 26, 1991]

## **§ 2.1026 Schedule.**

(a) Subject to paragraphs (b) and (c) of this section, the Presiding Officer shall adhere to the schedule set forth in appendix D of this part.

(b)(1) Pursuant to § 2.307, the presiding officer may approve extensions of no more than fifteen (15) days beyond any required time set forth in this subpart for a filing by a party to the proceeding. Except in the case of exceptional and unforeseen circumstances, requests for extensions of more than fifteen (15) days must be filed no later than five (5) days in advance of the required time set forth in this subpart for a filing by a party to the proceeding.

(2) Extensions beyond 15 days must be referred to the Commission. If the Commission does not disapprove the extension within 10 days of receiving the request, the extension will be effective. If the Commission disapproves the extension, the date which was the subject of the extension request will be set for 5 days after the Commission's disapproval action.

(c)(1) The Presiding Officer may delay the issuance of an order up to thirty days beyond the time set forth for the issuance in appendix D.

(2) If the Presiding Officer anticipates that the issuance of an order will not occur until after the thirty day extension specified in paragraph (c)(1) of this section, the Presiding Officer shall notify the Commission at least ten days in advance of the scheduled date for the milestone and provide a justification for the delay.

[56 FR 7798, Feb. 26, 1991; 69 FR 2266, Jan. 14, 2004]

## **§ 2.1027 Sua sponte.**

In any initial decision in a proceeding on an application for a construction authorization for a high-level radioactive waste repository at a geologic repository operations area under parts 60 or 63 of this chapter, or an application for a license to receive and possess high-level radioactive waste at a geologic repository operations area under parts 60 or 63 of this chapter, the Presiding Officer, other than the Commission, shall make findings of fact and conclusions of law on, and otherwise give consideration to, only those matters put into controversy by the parties and determined to be litigable issues in the proceeding.

[56 FR 7798, Feb. 26, 1991; 69 FR 2266, Jan. 14, 2004]