PART I: CAPITAL ASSET PLAN AND BUSINESS CASE (All Assets)

Agency	**Nuclear Regulatory Commission**
Bureau	**Atomic Safety and Licensing Board Panel (ASLBP)**
Account Title	**Salaries and Expenses**
Account Identification Code	**31-0200-0-1-276**
Program Activity	**Nuclear Waste Program**
Name of Project	**Digital Data Management System (DDMS) – Revised 2/10/03**
Unique Project Identifier: (IT only)(See section 53)	**429—00-01-05-01-1005-00**
Project Initiation Date	**March 2001**
Project Planned Completion Date	

This Project is: Initial Concept ____ Planning __X__ Full Acquisition __X__ Steady State ____
Mixed Life Cycle __X__

Project/useful segment is funded:	Incrementally	X	Fully	
Was this project approved by OMB for previous Year Budget Cycle?	Yes		No	X
Did the Executive/Investment Review Committee approve funding for this project this year?	Yes	X	No	
Did the CFO review the cost goal?	Yes	X	No	
Did the Procurement Executive review the acquisition strategy?	Yes	X	No	
Is this investment included in your agency's annual performance plan or multiple agency annual performance plans?	Yes		No	X
Does the project support homeland security goals and objectives, i.e., 1) improve border and transportation security, 2) combat bio-terrorism, 3) enhance first responder programs; 4) improve information sharing to decrease response times for actions and improve the quality of decision making?	Yes		No	X
Is this project information technology? (See section 300.4 for definition)	Yes	X	No	
For information technology projects only:				
a. Is this Project a Financial Management System? (see section 53.3 for a definition)	Yes		No	X
If so, does this project address a FFMIA compliance area?	Yes		No	X
If yes, which compliance area?				
b. Does this project implement electronic transactions or record keeping that is covered by the Government Paperwork Elimination Act (GPEA)?	Yes		No	X
If so, is it included in your GPEA plan (and does not yet provide an electronic option)?	Yes		No	X
Does the project already provide an electronic option?	Yes		No	X
c. Was a privacy impact assessment performed for this project?	Yes	X	No	
d. Was this project reviewed as part of the FY 2002 Government Information Security Reform Act review process?	Yes	X	No	

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d.1 If yes, were any weaknesses found?	Yes	No	X
d.2. Have the weaknesses been incorporated into the agency's corrective action plans?	Yes	No	N/A
e. Has this project been identified as a national critical operation or asset by a Project Matrix review or other agency determination?	Yes	No	X

Preparations for NRC's Project Matrix Review are just underway. The Review will not be completed until the first Quarter FY 2003, at the earliest.

e.1 If no, is this an agency mission critical or essential service, system, operation, or asset (such as those documented in the agency's COOP Plan), other than those identified above as national critical infrastructures?	Yes	No	X

SUMMARY OF SPENDING FOR PROJECT STAGES
(In Millions)
(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)

	PY-1 and Earlier	PY 2002	CY 2003	BY 2004
Planning:				
Budgetary	$ .048			
Outlays	$ .048			
Acquisition:*				
Budgetary		$1.66600	$ .711600	$1.818000**
Outlays		$ .09512	$2.28248***	$1.818000
Total, sum of stages:				
Budgetary	$ .048	$1.66600	$ .711600	$1.818000**
Outlays	$ .048	$ .09512	$2.28248***	$1.818000
Maintenance:*				
Budgetary				
Outlays				
Total, All Stages:				
Budgetary	$ .048	$1.66600	$.711600	$1.818000**
Outlays	$ .048	$ .09512	$2.28248***	$1.818000

I. A. Project Description

1. Provide a brief description of this project and its status through your capital planning and investment control (CPIC) or capital programming "control" review for the current cycle.

The Digital Data Management System (DDMS) will help NRC meet its obligation of conducting the adjudicatory proceeding regarding the Department of Energy's (DOE) application for construction authorization for a High Level Waste (HLW) repository at Yucca Mountain, Nevada by providing necessary information technology (IT) and audio/visual (A/V) resources in a fully integrated courtroom environment. The current estimated date for beginning adjudicatory hearings is May 2005. The DDMS project is in the "Planning Stage" of capital planning and investment control (CPIC).

The scope and nature of this proceeding dictate the essential need for efficient capture and management of the enormous volume of multimedia data that must be processed and displayed in a very short, congressionally-mandated, three-year time frame for this hearing. The enormity of the HLW repository licensing hearing is evidenced by the number of documents that the Office of the Secretary (SECY) estimates will be part of the hearing docket at the completion of the proceeding. The SECY estimate of 50,000 documents is 300 times the volume associated with a typical Atomic Safety & Licensing Board Panel (ASLBP) hearing and 24 times the volume of the largest hearing currently being conducted. In the

current environment, ASLBP hearings are conducted using paper-based information and limited A/V capabilities. This current approach clearly cannot support a hearing of the magnitude of the HLW repository licensing proceeding and cannot meet the Commission rules established for the proceeding, including the provision for online access to the electronic docket during the hearing for "the representatives of the parties and interested governmental participants, and the witnesses while testifying" [Reference: 10 C.F.R. Part 2.1013(d)] and next day availability of all transcripts which must be "entered into the electronic docket on a daily basis in order to provide next-day availability at the hearing." [Reference 10 C.F.R. Part 2.1013(b)].

The Presiding Officer is solely responsible for implementing the courtroom-based, electronic access provisions of 10 C.F.R. 2 Subpart J; and implementing DDMS will create an automated environment that allows the Presiding Officer/Judge in ASLBP to comply with these unique regulatory requirements of the HLW waste repository licensing hearing. Upon full implementation, DDMS will provide information technology (IT) and audio/visual (A/V) capabilities in at least two hearings rooms; enable the creation and use of an integrated, comprehensive digital record for the HLW repository licensing proceeding; record, store, and display the text and image of exhibits presented in the hearing or pre-filed in the docket; and provide an up-to-date record of the court proceedings for the agency's official docket that is maintained by SECY. The technology can be used for future hearings, as well.

Specifically, the DDMS System will:

- *Provide IT and A/V capabilities in at least two hearing rooms:*
  - *One in the Las Vegas area so as to be in the vicinity of the Yucca Mountain site,*
  - *a second at NRC Headquarters in Rockville, Maryland*
- *Enable the creation and use of an integrated, comprehensive digital record for the HLW repository licensing proceeding*

Record, store, and display the text and image of documents presented in the hearing using pre-filed electronic documents from the EHD

Permit access and retrieval of the entire record:
  - *Documentary: daily transcripts and exhibits*
  - *Audio*
  - *Video presentations: taped testimony and simulation models*
  - *Recording of proceedings in an electronic format*

Allow counsel for the parties to bring prepared materials to the evidentiary hearing electronically and have it integrated and accessible in the hearing room

Provide continual real-time access to the hearing record by the presiding officer and distribution to the parties in the litigation

Support information management for the proceedings during the pre-hearing, hearing, and post-hearing phases

The benefits identified during the preparation of the business case analysis include the following:

Ability to satisfy Commission Rules and Policies: DDMS will meet the full intent of all Commission rules and policies

- *Ability to conduct an efficient and effective hearing: DDMS will provide electronic handling of documents introduced or changed in the courtroom.*

Ability to support non-HLW hearings

- *Ability to support the agency and judicial appellate processes*
- *Ability to implement an operational capability in the scheduled time*
- *Ability to minimize interruptions to courtroom access to information*
- *Ability to provide comprehensive public access to the hearing*
- *Improved Perception of the NRC*

Ability to capitalize on current/planned NRC investments

The status of the DDMS project is that the DDMS Comprehensive Planning and Investment Control (CPIC) Business Case Analysis (BCA) was presented to the NRC's Information Technology Business Council (ITBC) and its Program Review Committee (PRC) for project and budgetary approval of the recommended alternative. Subsequently, NRC's Chief Information Officer (CIO) approved developing DDMS in a Modular approach with discrete checkpoints, and ASLBP incorporated these checkpoints into the March 15, 2002 request for quotations (RFQ) seeking a contractor to design and develop the system. The contract was awarded on August 28, 2002, and work commenced immediately. The contractors are developing the system in accordance with the NRC's System Development Life Cycle Management (SDLCM) Methodology and the applicable NRC Management Directives (MD), such as MD 12.5 which governs IT Security. In addition, the CIO has identified specific performance goals for the project and DDMS is carefully monitored to ensure the project successfully achieve these goals during each phase or task of the contract.

The objectives of this first phase are (1) to demonstrate the viability of the DDMS concept, and (2) fully flesh out business process, cost-benefit, implementation, and operational issues. This will entail developing the detailed design for the entire DDMS, and installing the Rockville IT component. Upon completion of these activities, ASLBP will ensure that the DDMS includes all functionality and integration necessary to clearly identify and validate all of the automated courtroom requirements which the ASLBP staff identified in the Business Case development process and included in the contractor's Statement of Work. In addition, the DDMS is expected to be scalable so as to support multiple locations by demonstrating the ability to support multiple formal hearing room environments simultaneously, communicate between sites, integrating with external systems and remote locations, and providing remote access from off-site locations into DDMS. There will be an assessment of the capabilities versus the expected outcomes using a pre-defined Checklist with "Pass" or "Fail" scoring for each of the 23 specific capabilities. The results of this assessment will determine whether the project achieved the results expected, and the agency will make a decision about whether to proceed with further development.

Recent national events are the driving force for the development of DDMS. On February 14, 2002, the Secretary of Energy recommended the Yucca Mountain, Nevada, site to the President. The President submitted his recommendation of the site to Congress the next day. On April 8, 2002, the State of Nevada notified Congress of its disapproval of this siting recommendation. On July 9, 2002, however, the Congress passed a joint resolution of approval (essentially overriding Nevada's disapproval action), which

was signed by the President on July 23. As a consequence, DOE is now authorized to proceed with a license application to NRC. Therefore, legally, filings can be submitted to the NRC at any moment, and without any warning. However, for planning purposes, NRC expects to receive the license application from DOE in December 2004 and hold the first prehearing conference in May 2005, at which time there will be a requirement for the Presiding Officer from ASLBP to fully utilize the DDMS system with its fully-integrated IT and audio/visual components.

2. What assumptions are made about this project and why?

The following assumptions form the basis for the DDMS concept:

Status Quo: *The current approach used in other agency adjudicatory hearings involves creating the hearing record using a paper processing regime. This approach does not meet Commission rules for the use of electronic documents in the HLW repository licensing hearing. Furthermore, this approach is impracticable for conducting a hearing of the scope of the HLW repository licensing proceeding. Moreover, significant IT investment costs will be incurred even for an alternative that provides the minimum capabilities needed to meet the rules for this critical hearing (i.e., the HLW Status Quo).*

Hearing Locations: *In accordance with Commission policy, the vast majority of the hearing sessions on the DOE application will be held in the Las Vegas, Nevada area in the vicinity of the Yucca Mountain site. Where practicable, prehearing conferences and other appropriate parts of the hearing process may be conducted in, or utilizing videoconferencing from, the ASLBP hearing room in Rockville, Maryland, or other sites in the Washington, D.C. area.*

User Community: *The hearing could have up to 15 parties with up to 40 trial attorneys, plus additional paralegals and experts supporting attorneys present in the hearing room, depending on the number and type of issues being heard.*

Hearing Workload: *The hearing likely will have 75 to 100 admitted contentions for disposition on the merits, but the actual number may be as large as 150 to 200 admitted contentions. (Past experience suggests that 20 to 25 percent of the proffered contentions are admitted, so even more contentions will be submitted.)*

Simultaneous Hearings: *The hearings likely will be conducted by two or more Licensing Boards that may sit simultaneously. This may mandate legal, technical, and administrative staffing increases that, in the technical area, will require expertise in certain scientific/engineering disciplines. The requirement for simultaneous hearings necessitates dual configurations as well as data base synchronization capabilities.*

Hearing Length: *Pursuant to the schedule for the Yucca Mountain proceeding contained in 10 C.F.R. Part 2, App. D, the evidentiary hearing is to be conducted in 90 calendar days toward the very end of the adjudicatory process. Past experience suggests that conducting*

evidentiary sessions on 75 to 100 admitted contentions may actually total 120 to 150 hearing days (or more). If staff safety/environmental findings can be made in a serial fashion, these hearings would be spread out over 12 to 18 months beginning with some issues (likely environmental) 6 to 9 months after docketing of the DOE application.

Hearing Schedule: *Now that President Bush has recommended and Congress approved DOE going forward with the Yucca Mountain site, it is currently anticipated that DOE will file a construction authorization application in December 2004, precipitating the first prehearing conference in May 2005.*

Commission Rules: *The rules regarding electronic filings of exhibits and pleadings, electronic access to discovery materials, online access to an electronic docket (including previous-day transcripts) during the hearing, and update of an electronic docket during the hearing to list exhibits/evidence will remain unchanged.*

Interfaces: *Other NRC systems will be used to meet the requirements for receiving electronic submissions of exhibits and pleadings (EIE), maintaining the Electronic Hearing Docket for the HLW repository licensing proceeding (Agency-Wide Document Access and Management System (ADAMS) and Electronic Hearing Docket (EHD)), and providing electronic search access to discovery materials (Licensing Support Network (LSN)).*

Agency-wide Document Access and Management System (ADAMS) Processing Schedule: *The DDMS assumes that OCIO can perform timely processing of documents into ADAMS so that transcripts can be added to the EHD to meet the rule for availability of prior day transcripts at the beginning of the hearing on the next day.*

ADAMS Expansion - EHD: *A separate HLW repository licensing proceeding EHD library must be available for use during the hearings in a separate server/LAN environment to provide suitable system performance and to allow for simultaneous review of a retrieved document by all parties at the hearing.*

Restricted Access Materials: *A Protective Order File, which has restricted access and will include less than one percent of the total documents in the EHD, will be established.*

Operational Environment Assumptions: *The DDMS bidders were encouraged to propose "best of breed" commercial off-the-shelf (COTS) software for hearing management, document/object management, and multimedia functionality. Information technology components as well as audiovisual components will be required for the solution, all of which will be installed initially in the ASLBP Hearing Room on the 3rd floor of NRC Headquarters at the Two White Flint North Building in Rockville, Maryland. Once the contractor has demonstrated the information technology, then the agency will authorize procurement and installation of the audio visual components, and upon successful completion of these individual tasks, there will be a task to fully integrate the IT and A/V components in Rockville. Thereafter, a separate implementation task will be bid and awarded for in a*

hearing room in a the general area around Las Vegas, Nevada. The goal is to achieve two operational yet integrated DDMS environments to facilitate simultaneous hearings in Rockville, Maryland, and Las Vegas, Nevada, to meet the short, congressionally-mandated three-year time frame for completing the HLW licensing proceeding.

3. Provide any other supporting information derived from research, interviews, and other documentation.

The following chart depicts the characteristics of the HLW Repository Hearing, compared to a typical ASLBP hearing, and the largest current hearing , the ongoing Private Fuel Storage, L.L.C. proceeding.

Characteristic	Typical Hearing	Large Hearing (PFS, L.L.C.)	HLW Repository Hearing
Estimated number of documents in the hearing docket (at completion)	150	2,000	50,000 estimated by SECY
Minimum number of court rooms needed	1	1	2
Number of simultaneous hearings expected	1	1	3+
Electronic filing for exhibits and pleadings	No	Optional (EIE Pilot)	10 C.F.R. Part 2, Subpart J
Electronic access to discovery materials	No	No	10 C.F.R. Part 2, Subpart J
Online access to electronic docket during hearing	No	No	10 C.F.R. Part 2, Subpart J
Update of an electronic docket to list exhibits and evidence introduced	No	No	10 C.F.R. Part 2, Subpart J
Next day electronic access to transcripts	No	No	10 C.F.R. Part 2, Subpart J
Number of parties	3	7	Up to 15
Number of trial attorneys	6	12	Up to 40
Congressionally-mandated schedule	No	No	3 Years
Hearing visibility	Low	Moderate	Extremely high
Expected public audience	5-20	10-75	100+

There are specific policies and rules that establish the parameters for the DDMS operation, its underlying functional requirements, and the anticipated design solutions that could be used to implement the system. The identified policies and rules are outlined in the following chart.

Law, Policy or 10 C.F. R. Part 2 Rule	Impact on DDMS Requirements/Costs
Hearing Location. Consistent with the NRC policy of conducting hearings near the site of the facility being licensed (10 C.F.R. Part 2, App. A, § I(a)), the vast majority of the HLW hearing sessions will be conducted in the Las Vegas, Nevada area.	Requires the establishment of a new, Las Vegas-area hearing room facility with associated conference and office space, support staff; and information systems capabilities and audio/visual capabilities integrated in DDMS, and the associated telecommunication lines to interface with systems at NRC headquarters.
Electronic Filing. Per rule (10 C.F.R. § 2.1013(a), (c) (1)), all filings on the HLW license application shall be transmitted electronically by the submitter to the Presiding Officer, parties, and SECY, which	Requires that all new exhibits that are introduced in the courtroom during the proceeding, be rendered into an electronic format and submitted to the electronic docket with the DDMS-generated daily proceedings.

is to maintain the docket electronically.	*Also requires that users have access to the EIE.*
Online Access. Per rule (10 C.F.R. § 2.1013(d)), the EHD shall be provided to the Presiding Officer, the representatives of the parties, interested governmental participants, and witnesses while testifying for use during the hearing.	*Requires access from workstations at both the Las Vegas-area and Rockville hearing rooms to the HLW EHD (either an ADAMS-published public version or a copy replicated for storage in the local DDMS environment).*
Docket Update. Per rule (10 C.F.R. § 2.1013(b)), the electronic docket is to 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.	*Requires capabilities to create updated electronic versions of documents contained in the EHD to mark them with information obtained directly in the DDMS System during a hearing.*
Electronic Transcripts. Per rule (10 C.F.R. § 2.1013(b)), transcripts are to be entered into the electronic docket on a daily basis in order to provide next-day availability at the hearing.	*Requires timely update of the ADAMS EHD and/or local DDMS capabilities to store an electronic version of the transcript and provide next day access to this document.*
Information Access by the Disabled. In accordance with the Americans with Disabilities Act (ADA), real-time information from the proceeding must be provided in a manner that is suitable for participants with hearing disabilities.	*Requires the capability to generate transcripts of the proceeding in real-time and in a manner that produces closed-captioning that can be viewed by participants with hearing disabilities.*

I.B. Justification (All Assets)

1. How does this investment support your agency's mission and strategic goals and objectives?

NRC's Strategic Goals	*NRC Strategies*	*Support*	*How Does Your Initiative Support this NRC Goal or Corporate Management Strategy?*
1. Nuclear Reactor Safety: Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of civilian nuclear reactors.			▪
2. Nuclear Materials Safety: Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of source, byproduct, and special nuclear material for medical, academic, and industrial purposes			▪

NRC's Strategic Goals	NRC Strategies	Support	How Does Your Initiative Support this NRC Goal or Corporate Management Strategy?
3. Nuclear Waste Safety: Prevent adverse impacts from radioactive waste to the current and future public health and safety and the environment, and promote common defense and security	In the Nuclear Waste Policy Act of 1982, Congress mandated that the Nuclear Regulatory Commission (NRC) reach a determination on the DOE's application for construction authorization for a high-level waste (HLW) repository at Yucca Mountain, Nevada, in a three-year time frame. DDMS will keep pace with the national high-level waste management program. ASLBP will apply the regulatory framework to prelicensing reviews and consultations with DOE to resolve the issues most important to repository safety and prepare for addressing a licensing decision within the statutory time period.	X	The DDMS supports the high-level waste repository licensing hearing for the proposed Yucca Mountain, Nevada facility. The major objective of the DDMS is to help the NRC meet the congressionally-mandate time requirements for the HLW repository licensing proceeding and the associated regulatory requirement that there be online access to the HLW repository hearing docket during the hearing. The DDMS is intended to achieve time and resource savings by improving the efficiency of conducting this high profile HLW repository licensing hearing with the anticipated large volume of electronic discovery and evidentiary information and is essential to the Licensing Board in preparing timely decisions throughout the proceeding. It also will support Office of General Counsel (OGC) and Office of Nuclear Materials Safety and Safeguards (NMSS) staff in preparing for evidentiary proceedings and may be useful to Commission staff in performing oversight/appellate review activities.
4. International Nuclear Safety Support: Support U.S. interests in the safe and secure use of nuclear materials and in nuclear non-proliferation			▪
NRC Corporate Management Strategy 1: Employ innovative and sound business practices			▪
NRC Corporate Management Strategy 2: Sustain a high-performing, diverse workforce.			▪
NRC Corporate Management Strategy 3: Provide proactive information management and information technology services.			▪
NRC Corporate Management Strategy 4: Communicate strategic change.			▪

2. How does it support the strategic goals from the President's Management Agenda?

Presidents Management Agenda (PMA)	Supports	How Does Your Initiative Support This PMA Item?
Human Capital		
Competitive Sourcing		
Financial Performance		
E-Government	X	The DDMS supports E-Government by: • Providing access to the HLW EHD within the hearing room • Leveraging the investment made by

		the parties all having made electronic documents available during document discovery and for submission to the EHD ▪ *Storing an electronic version of the transcript and providing next day access to this document.* ▪ *Allowing participants to search the electronic docket from remote locations* ▪ *Capturing the record of the hearing in an electronic format for later agency and judicial appellate review*
Budget and Performance Integration		

3. Are there any alternative sources in the public or private sectors that could perform this function?

No existing system accomplishes what the DDMS is intended to do. The requirements for DDMS (and subsequently the investment costs) are driven by:

- *Statutory requirements and NRC policies/rules that dictate the proceeding be accomplished in an electronic manner such that all courtroom functions are geared toward rendering each and every document into an electronically-accessible format; and*
- *The unique nature of the High Level Waste (HLW) hearing which is the first of its kind*

In the current environment, ASLBP hearings are conducted using paper-based information submission and handling processes and limited audio/visual capabilities. This current approach does not comply with the Commission's regulations for the HLW repository licensing hearing and clearly cannot support a hearing of the magnitude of the HLW repository licensing proceeding.

4. If so, explain why your agency did not select one of these alternatives.

No existing system satisfies the need for a hearing room-based litigation system that integrates information technology with audio/visual technology.

5. Who are the customers for this project?

Customers include internal constituencies within the NRC, such as:

- *The Atomic Safety and Licensing Board Panel (ASLBP)*
- *The Office of the General Counsel (OGC)*
- *The Office of the Secretary of the Commission (SECY)*
- *The Office of Nuclear Materials Safety and Safeguards (NMSS)*
- *The Office of the Chief Information Officer (OCIO)*
- *The Office of Administration (ADM)*
- *Chairman and Commissioners*
- *Office of Commission Appellate Adjudication (OCAA)*

In addition, the electronic hearing room capabilities will support the parties to the proceedings. The parties and potential parties include:

- *U.S. Department of Energy*
- *Nye County, Nevada*
- *Affected Units of Local Government (AULG)*

- *Clark County, Nevada*
- *Churchill County, Nevada*
- *Esmerelda County, Nevada*
- *Eureka County, Nevada*
- *Inyo County, California*
- *Lander County, Nevada*
- *Lincoln County, Nevada*
- *Mineral County, Nevada*
- *White Pine County, Nevada*

- *Tribal Interests, such as the National Congress of American Indians (NCAI)*
- *Public Interest Organizations and Individuals, such as the Nevada Nuclear Waste Task Force (NNWTF)*
- *Nuclear Utilities and their representatives, such as the Nuclear Energy Institute (NEI)*

6. Who are the stakeholders of this project?

The stakeholders in DDMS are the many parties and potential parties that will be involved in the HLW proceeding, such as:

- *The Atomic Safety and Licensing Board Panel (ASLBP)*
- *The Office of the General Counsel (OGC)*
- *The Office of the Secretary of the Commission (SECY)*
- *The Office of Nuclear Materials Safety and Safeguards (NMSS)*
- *The Office of the Chief Information Officer (OCIO)*
- *The Office of Administration (ADM)*
- *Chairman and Commissioners*
- *Office of Commission Appellate Adjudication (OCAA)*
- *U.S. Department of Energy*
- *State of Nevada*
- *Nye County, Nevada*
- *Affected Units of Local Government (AULG)*
  - *Clark County, Nevada*
  - *Churchill County, Nevada*
  - *Esmerelda County, Nevada*
  - *Eureka County, Nevada*
  - *Inyo County, California*
  - *Lander County, Nevada*
  - *Lincoln County, Nevada*
  - *Mineral County, Nevada*
  - *White Pine County, Nevada*
- *Tribal Interests, such as the National Congress of American Indians (NCAI)*
- *Public Interest Organizations and Individuals, such as the Nevada Nuclear Waste Task Force (NNWTF)*
- *Nuclear Utilties and their representatives, such as the Nuclear Energy Institute (NEI)*

7. If this is a multi-agency initiative, identify the agencies and organizations affected by this initiative.

DDMS is not (and cannot become) a multi-agency initiative given the need for ASLBP, as the project's Business Sponsor, to maintain judicial impartiality For example, if ASLBP were to direct the DOE, the agency that will submit the license application for Yucca Mountain facility, to provide such a system, questions about the "neutrality" of DOE activities in developing such a system posed by other parties and potential parties to the proceeding could delay system design and implementation. Therefore, ASLBP development of a system that is available to all parties to the proceeding minimizes any concerns that

parties and potential parties to the proceeding are being precluded from participating because of government-imposed financial or IT resource requirements.

8. How will this investment reduce costs or improve efficiencies?

Trying to conduct the proceedings in a paper-based environment would be extremely cumbersome and costly in terms of time, storage, replication and shipping of paper documents, larger hearing room facilities, federal FTE and party/intervenor personnel needed to manage paper documents, and greatly increased document processing capabilities, among other factors. The DDMS reduces the time required to process the enormous volume of information expected in the HLW repository proceeding by utilizing already electronic versions of documents, and increases the efficiency of the judges and participants who have to search the large and complex transcripts and exhibits that will be generated during the hearing.

Without the DDMS, ASLBP faces the prospect of administering these important HLW repository licensing hearings while relying on manual processes and Agencywide Documents Access and Management System (ADAMS) and Licensing Support Network (LSN) automation for hearing room information management. However, these existing systems are not designed to provide interactive trial support and are not capable of controlling or integrating the various media and devices that will be in the hearing room to support exhibit and evidentiary presentations. Using classic, paper-oriented processes and procedures would basically undo the potential efficiencies available from the other IT initiatives currently in-place or underway by requiring the "blow back" of electronic information into paper format in order to incorporate it into the adjudicatory record.

9. List all other assets that interface with this asset *ADAMS/EHD* **. Have these assets been reenigineered as part of this project? Yes____, No X .**

The DDMS will reside on servers resident at the NRC campus. The acquisition specification for the DDMS requires server hardware and software configurations compatible with the NRC infrastructure and no re-engineering of the agency's current infrastructure is anticipated.

The DDMS will utilize data that will be housed in the Electronic Hearing Docket (EHD), a subset collection that is extracted from the NRC's ADAMS electronic record repository. The DDMS will capture hearing room generated information, newly submitted materials, and modifications to prefiled materials as accepted, presented, and manipulated during the proceedings. Some of the structured data values added and captured during the proceedings will be propagated back into the ADAMS system and the subset collection used for the EHD. An assessment is underway to examine and plan the data exchanges between the systems.

Additionally, an assessment is underway by the OCIO to examine the resources necessary to process overnight transactions of the hearing room-generated materials into the ADAMS/EHD so as to ensure next day availability. No business process re-engineering is anticipated as the impacts are volume-based and not process-oriented.

I.C. Performance Goals and Measures (All Assets)

Strategic Goal(s) Supported	Existing Baseline	Planned Performance Improvement Goal	Actual Performance Improvement Results	Planned Performance Metric	Actual Performance Metric Results
Prevent significant adverse impacts	License application hearings for	Demonstrate that an automated hearing can		• High degree of accuracy of multi-media	

from radioactive waste to the current and future public health and safety and the environment, and promote the common defense and security.	*approval to proceed with constructing a HLW facility requires handling and tracking a significant amount of paper records; and is not integrated with other information resources*	*reduce time and increase efficiency for the parties and the judges while also improving the access to information*		*information captured electronically and stored in DDMS* • *Successful DDMS remote connection/ transmission* • *Successful bi-directional integration with ADAMS/EHD*	

I.D. Program Management [All Assets]

1. Is there a program manager assigned to the project? If so, what is his/her name? Yes X No

Ms. Pat Smith, Senior Computer System Analyst, is the full-time DDMS Project Manager. Ms. Smith works in ASLBP and can be reached at (301) 415-7352. The Project Manager represents the business area interests, and the Deputy Project Manager represents the information technology area. The Deputy Project Manager is Ms. ElizaBeth DeWoody, a Senior Computer Systems Analyst from the Office of the Chief Information Officer (CIO). Ms. DeWoody is available at (301) 415-5785.

2. Is there a contracting officer assigned to the project? If so, what is his/her name? Yes X No

The DDMS Contracting Officer is Ms. Sharon Stewart, who works in the NRC Office of Administration/Division of Contracts, and is available at (301) 415-7314.

3. Is there an Integrated Project Team? Yes X No

3.A. If so, list the skill set represented.

The Integrated Project Team skills include the following: capital planning, procurement, legal and adjudicatory users, information technology, information management, and program management.

4. Is there a sponsor/owner? Yes X No

ASLBP is the DDMS sponsor/owner, and all DDMS activities are reported to the Chief Administrative Judge, G. Paul Bollwerk, III.

Part II: Additional Business Case Criteria for Information Technology

II. A. Enterprise Architecture

II.A.1 Business

A. Is this project identified in your agency's enterprise architecture? If not, why?

No, the DDMS is a new initiative and has not been specifically named in NRC's in-progress EA, although it is in compliance with the evolving NRC EA. Even though this project is still in the planning stage, the NRC business need has been identified, a search for duplicative systems and alternatives has been conducted, and the project conforms to the NRC EA in its current state. There is presently no single existing solution that can meet this business need. As they become available, ASLBP will review the applicable FEA components and e-gov initiatives to determine if they are applicable to the technology solutions within DDMS.

B. Explain how this project conforms to your departmental (entire agency) enterprise architecture.

The DDMS falls within the scope of NRC's evolving EA. As such, this system supports the performance of the business functions identified in the agency enterprise business model, documented in the NRC publication, "NRC Enterprise Model," by providing a fully automated hearing room environment for judicial administrative hearings required to carry out the NRC mission. The DDMS will utilize products and components that are aligned with NRC's current application and technology standards and future direction as specified in NRC's existing technology planning documents. Although the NRC's existing technology planning documents are being updated, the current documents identify some core technology needs. These core technology needs are in the process of being updated and expanded through an evolving organizational EA governance process that will ensure that all current and future technology needs are vetted by NRC business managers to validate links to NRC business drivers for the identified technologies. When fully functional, NRC's integrated EA and CPIC processes will enable NRC to apply the same sound risk management strategies to its IT investments that have long characterized NRC's core business operations. NRC has also provided the Federal Enterprise Business Reference Model (FEBRM) with high level business functions and sub-functions derived from the NRC Enterprise Model. While NRC may work to uncover additional internal cross-cutting initiatives and has begun to look at other-agency business processes and State business processes to identify potential areas for collaborative efforts, such efforts are inappropriate and improper with regard to the hearing room environment in which DDMS will operate, as the states and other agencies and businesses may be "parties" to litigation before the ASLBP, and the Panel must maintain its objectivity and impartiality.

C. Identify the Lines of Business and Sub-Functions within the Federal Enterprise Architecture Business Reference Model that will be supported by this initiative.

The Lines of business and sub-functions within the Federal Enterprise Architecture Business Reference Model that the DDMS supports are:

1. *Regulated Activity Approvals (Licensing issuing and control)*
2. *Legal (Judicial Hearings)*

D. Briefly describe how this initiative supports the identified Lines of Business and Sub-Functions of the Federal Business Architecture.

The DDMS will support the business lines and sub-functions Regulated Activity Approvals (Licensing issuing and control) and Legal (Judicial Hearings) by facilitating the NRC's ability to meet a three-year time-frame for making a determination on the HLW repository license application imposed by Congress in the Nuclear Waste Policy Act. Providing a fully electronic high-level waste hearing room will allow all parties access to an efficient and effective hearing process.

E. Was this project approved through the EA Review committee at your agency?

Yes, this project was reviewed and approved by the agency's EA Review committee. The charter for the EA Review committee is available via the agency's record-keeping system, ADAMS. The charter for the "NRC Interim Architecture Review Board" documents the process used by the NRC.

F. What are the major process simplification/reengineering/design projects that are required as part of this initiative?

The DDMS represents a new paradigm in handling administrative court proceedings. The current approach clearly cannot support a hearing of the magnitude of the HLW repository licensing proceeding and cannot meet the Commission rules established for the proceeding, including the provision for online access to the electronic docket during the hearing for "the representatives of the parties and interested governmental participants, and the witnesses while testifying" [Reference" 10 C.F.R. part 2.1013(d)] and next day availability of all transcripts which must be "entered into the electronic docket on a daily basis in order to provide next-day availability at the hearing" [Reference: 10 C.F.R. Part 2.1013(b)].

The process of electronically filing all materials is more efficient and effective because it permits all parties to view evidence and other documentary materials simultaneously. The completed system will leverage information technology to better serve all stakeholders who will save time and resources with a more efficient and effective pre-hearing through licensing automated courtroom system, and permit the agency to comply with the Commission rules. When this system is applied to other hearings, it will simplify the hearing process for all applicants and licensees.

G. What are the major organization restructuring, training, and change management projects that are required?

At the present time, no organizational restructuring, training, or change management will be required. The system represents a new paradigm in how an administrative hearing is conducted in an electronic courtroom. Training for the judges and parties' lawyers is factored into the project schedule, but does not occur until FY 2004.

H. What are the Agency lines of business involved in this project?

The agency lines of business involved in this project are licensing and legal. In determining whether to grant a license, the licensing and legal organizations are responsible for reviewing the technical and legal aspects of the license application and deciding on whether or not to grant a license. Additionally, the legal organization is involved in any adjudicatory proceeding that may be conducted on contested technical or legal issues.

I. What are the implications for the agency business architecture?

DDMS represents a major improvement in handling the pre-filed and docketed materials for a hearing. The implications for the agency business architecture are that as automated legal information systems are increasingly introduced into ASLBP case handling procedures, the corresponding business procedures must be aligned to facilitate these improvements, and the Presiding Officer must issue a pre-hearing order for the case.

II.A.2 Data

A. What types of data will be used in this project?

The data used in this project are documents that can or will be used by parties to build their case either for or against the storage of high-level radioactive waste at Yucca Mountain. The data, or documents, used can include:

Technical Reports and analyses by all participants (including those developed by contractors)
Quality Assurance records
External Correspondence
Internal Memoranda
Meeting minutes/transcripts
Draft documents on which a non-concurrence has been registered
Congressional questions and answers
Other documents
Draft and final environmental assessment for the site characterized
Site characterization plan
Site characterization study plans
Site characterization progress reports
Issue-resolution reports
License application
Topical reports, data, and data analyses
DOE's Environmental Impact Statement
Recommendation report to the President of the United States
Any publicly available information on rulemakings
Public and agency comments on documents
Response to comments
NRC technical positions
NRC regulatory guides
DOE project-decision schedules
DOE program-management documents

In addition to documentary materials, electronic files will be key to capturing the courtroom presentations of extremely complex and sophisticated simulation models, videotape recordings, digital photos, digital video recordings, x-rays, maps, physical objects such as rock samples, live testimony received via videoconferencing, and other materials that may be presented as evidence and must be preserved to generate an accurate case record.

Management of documentary, case, and trial information includes image versions of evidentiary material, large binary object files, and metadata representations of those materials.

B. Does the data needed for this project already exist at the Federal, State, or Local level? If so, what are your plans to gain access to that data?

Prefiled evidentiary materials will be extracted from NRC's EHD, which is a subset collection of NRC's ADAMS system. Contents of the EHD are electronic images of records that have already been made available by the parties via the NRC's Licensing Support Network (LSN) and/or submitted to the docket via the NRC's Electronic Information Exchange (EIE).

B. Are there legal reasons why this data cannot be transferred? If so, what are they and did you address them in the barriers and risk sections above?

There are no reasons why data cannot be transferred internally between NRC agency systems following established handling procedures for privileged, business proprietary, Privacy Act-covered, or safeguards information.

C. If this initiative processes spatial data, identify planned investments for spatial data and demonstrate how the agency ensures compliance with the Federal Geographic Data Committee standards required by OMB Circular A–16.

There are no plans to acquire or process spatial data on DDMS resources. Recorded representations of simulation model software runs will be made as stored as part of the record of the hearing room proceedings.

II.A.3 Application and Technology

A. Discuss this initiative/project in relationship to the application and technology layers of the EA. Include a discussion of hardware, applications, infrastructure, etc.

The impact on NRC's enterprise architecture from implementing DDMS is expected to be limited to the ADAMS and EHD systems. ASLBP is working with the EA Staff to ensure compliance with the application and technology layers of the EA.

B. Are all of the hardware, applications, and infrastructure requirements for this project included in the EA Technical Reference Model? If not, please explain.

Yes, DDMS conforms to NRC's infrastructure requirements and no deviation has been identified at this time. As the project evolves, and additional Federal Enterprise Architecture components are added to NRC's enterprise architecture, ASLBP will assess these components and technologies to determine if they might be leveraged by DDMS.

II. B. Security and Privacy

NOTE: Each category below must be addressed at the project (system/application) level, not at a program or agency level. Referring to security plans or other documents is not an acceptable response.

II.B.1. How is security provided and funded for this project (e.g., by program office or by the CIO through the general support system/network)?

The DDMS is in the planning phase, and security costs for DDMS have been identified and funded by the project office.

Security plans for the DDMS System are identified in the detailed Security Risk Assessment that the DDMS contractor conducted in November, 2002, that formed the basis for the DDMS Security Plan (DRAFT Version dated January 28, 2003), and the DDMS Contingency Plan (DRAFT Version dated February 4, 2003). These documents will be finalized in May, 2003, to provide the full IT security framework for the DDMS Production System that prepares management for maintaining operations and mitigating damage or downtime in the event of a system failure.

The DDMS project team has incorporated system security planning services being provided to NRC by the National Security Agency under an interagency agreement. NSA security specialists participated in the development of the SOW for the DDMS and served as advisors to the Source Evaluation Panel. NRC plans to further utilize NSA teams in performing security assessments of the system, and the team has participated in detailed design activities. In addition, DDMS will be a major application, but it will also receive some security services provided by the underlying NRC LAN general support system.

A. What is the total dollar amount allocated to security for this project in FY 2004?

DDMS is in the planning stage, and costs for security planning activities in FY-2004 are incorporated into the specific tasks of the contract that was awarded for DDMS Design and Pilot Development on August 28, 2002. The DDMS BCA was prepared prior to the events of September 11, 2001 and its security procedures/implementation allocation will be adjusted within the operational budget for the project. It is expected that the total dollar amount allocated to security for DDMS for FY 2004 will be $67,000.

II.B.2 Does the project (system/application) meet the following security requirements of the Government Information Security Reform Act, OMB policy, and NIST guidance?

All security requirements specified by GISRA, OMB policy, and NIST guidance have been included in the statement of work (SOW) for this contract. The contractor is required to design and develop a system that achieves Level V security.

A. Does the project (system/application) have an up-to-date security plan that meets the requirements of OMB policy and NIST guidance? What is the date of the plan?

All security requirements specified by GISRA, OMB policy, and NIST guidance have been included in the statement of work (SOW) for this contract. The DRAFT Security Plan of January 28, 2003, and the DRAFT Contingency Plan of February 4, 2003, will be refined and finalized later in the systems development process, to ensure that all security requirements are in-place for the Pilot System. All security planning deliverables conform to the requirements of OMB Policy and NIST guidance as well as NRC Management Directive 12.5 governing IT Security.

In addition, the NRC will utilize National Security Agency (NSA) security specialists to conduct security and penetration testing on the system to determine vulnerabilities which the contractor must correct.

B. Has the project undergone an approved certification and accreditation process? Specify the C&A methodology used (e.g., NIST guidance) and the date of the last review.

The project is still in the planning phase, therefore no products are currently available for certification and accreditation.

All security requirements specified by GISRA, OMB policy, and NIST guidance have been included in the statement of work (SOW) for this contract. Certification and accreditation will be accomplished using the NIST methodology in accordance with NRC Management Directives and the System Development Life Cycle Management methodology.

C. Have the management, operational, and technical security controls been tested for effectiveness? When were most recent tests performed?

The project is still in the planning phase, therefore no products are currently available for testing.

All security requirements specified by GISRA, OMB policy, and NIST guidance have been included in the statement of work (SOW) for this contract. Security certification testing is included in the contract and again, the security specialists from NSA will ensure compliance.

D. Have all system users been appropriately trained in the past year, including rules of behavior and consequences for violating the rules?

The project is still in the planning phase, therefore no products are currently available for training. All security requirements specified by GISRA, OMB policy, and NIST guidance have been included in the statement of work (SOW) for this contract. Security training requirements will be addressed in the Security Plan for DDMS.

E. How has incident handling capability been incorporated into the system, including intrusion detection monitoring and audit log reviews? Are incidents reported to GSA's FedCIRC?

NRC has recently implemented information systems security incident response procedures. These are part of the underlying security services provided by the NRC LAN general support system. The incident response procedures have been reviewed and approved by GSA's FedCIRC, and the NRC is reporting incidents to the GSA FedCIRC. Incident handling capability for DDMMS is included in the contract.

F. Is the system operated by contractors either on-site or at a contractor facility? If yes, does any such contract include specific security requirements required by law and policy? How are contractor security procedures monitored, verified, and validated by the agency?"

All security requirements specified by GISRA, OMB policy, and NIST guidance have been included in the statement of work (SOW) for this contract. Contractor security procedures will be monitored, verified, and validated by the NRC Security Officer, the NSA Security Specialists, and the IV&V contractor.

II.B.3 How does the agency ensure the effective use of security controls and authentication tools to protect privacy for those systems that promote or permit public access?

All security requirements specified by GISRA, OMB policy, and NIST guidance have been included in the statement of work (SOW) for this contract. Effective security controls and authentication tools to protect privacy are included in the contract, and NRC will test them as part of the certification process.

II.B.4 How does the agency ensure that the handling of personal information is consistent with relevant government-wide and agency policies.

Each business case is reviewed, to include a review of privacy act compliance. At the present time, there appears to be no privacy impact with the DDMS. The NRC's Office of General Counsel reviewed the DDMS on September 24, 2002, and determined that with the DDMS, a Privacy Act system of records need not be created.

II.B.5 If a Privacy Impact Assessment was conducted, please provide a copy to OMB.

The Office of General Counsel at the NRC has determined that DDMS will not have access to any data subject to the Privacy Act protections. A Privacy Impact Assessment is attached.

II. C. Government Paperwork Elimination Act (GPEA)

II.C.1 If this project supports electronic transactions or record-keeping that is covered by GPEA, briefly describe the transaction or record-keeping functions and how this investment relates to your agency's GPEA plan.

The DDMS does not perform electronic transactions or record-keeping that is covered by GPEA.

II.C.2 What is the date of your GPEA plan?

The DDMS does not perform electronic transactions or record-keeping that is covered by GPEA.

II.C.3 Identify any OMB Paperwork Reduction Act (PRA) control numbers from information collections that are tied to this investment.

No PRA control numbers apply to the DDMS.