

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

Agency *Nuclear Regulatory Commission*

Bureau

Account Title *Salaries and Expenses*Account Identification Code *31-0200-0-1-276*Program Activity *Nuclear Waste Program*Name of Project *Licensing Support Network*Unique Project Identifier: *429-00-01-05-01*

(IT only)(See section 53)

Project Initiation Date *12/14/00*Project Planned Completion Date *1/19/07*This Project is: Initial Concept ☐ Planning ☐ Full Acquisition ☒ Steady State ☒Mixed Life Cycle ☐Project/useful segment is funded: Incrementally ☐ Fully ☒Was this project approved by OMB for previous Year Budget Cycle? Yes ☒ No ☐Did the Executive/Investment Review Committee approve funding for this project this year? Yes ☒ No ☐Did the CFO review the cost goal? Yes ☒ No ☐Did the Procurement Executive review the acquisition strategy? Yes ☒ No ☐Is this investment included in your agency's annual performance plan or multiple agency annual performance plans? Yes ☐ No ☐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 ☒Is this project information technology? (See section 300.4 for definition) Yes ☒ No ☐

For information technology projects only:

a. Is this Project a Financial Management System? (see section 53.3 for a definition) Yes ☐ No ☒If so, does this project address a FFMIA compliance area? Yes ☐ No ☐

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 ☒If so, is it included in your GPEA plan (and does not yet provide an electronic option)? Yes ☐ No ☐Does the project already provide an electronic option? Yes ☐ No ☐c. Was a privacy impact assessment performed for this project? Yes ☐ No ☒d. Was this project reviewed as part of the FY 2002 Government Information Security Reform Act review process? Yes ☒ No ☐Information in this record was deleted in accordance with the Freedom of Information Act, exemptions 5FOIA- 2003-241

A/S

d.1 If yes, were any weaknesses found?

Yes   X  No     

d.2. Have the weaknesses been incorporated into the agency's corrective action plans?

Yes   X  No     

e. Has this project been identified as a national critical operation or asset by a Project Matrix review or other agency determination?

No   X  \*

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     

*\*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.*

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### SUMMARY OF SPENDING FOR PROJECT STAGES<sup>1</sup>

(In Millions)

(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)

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	PY-1 and PY < (00-01) 2002	CY 2003	BY 2004
<hr/>			
Planning:			
Budgetary Resources	.415		
Outlays	.415		
Acquisition :			
Budgetary Resources	2.876	.019	
Outlays	2.876	.019	
Total, sum of stages:			
Budgetary Resources			
Outlays			
Maintenance:			
Budgetary Resources	1.310	1.227	1.319
Outlays	1.310		
Total, All Stages:			
Budgetary Resources	3.291	1.329	1.227
Outlays	3.291	1.329	

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## I. A. Project Description

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<sup>1</sup> Reported figures on this table include contractor costs and FTE costs.

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 Licensing Support Network (LSN) provides a web-based portal (LSNNET.GOV), or central index, to the high-level nuclear waste hearing information. The system is currently in the steady state phase of its system lifecycle. However, due to Department of Energy deferral of the submission of its license application until December 2004 (announced after system delivery), the technical solution will require a technology refreshment of the system software to accommodate a two-plus year extension of expected system life. The budget and program implications of this extension are discussed in section 1F, under the heading "Discussion of Additional Risk".*

*The LSN responds to a congressional mandate that the NRC reach a determination on the Department of Energy's (DOE) application for construction authorization for a high-level radioactive waste repository at Yucca Mountain in a three-year time frame. The NRC expects to accomplish this by replacing the classic "discovery" exchanges among parties with electronic access, via the LSN, to discovery materials prior to the docketing of a license application. The LSN is codified in 10 CFR Part 2, Subpart J. Since the original rule establishing a centralized dial-up Licensing Support System (LSS) was promulgated in 1989, there has been extensive interaction with the parties and potential parties to the proceeding under the auspices of the LSS, and later the LSN Advisory Review panel, a federal advisory committee chartered to provide advice and guidance on the design and operation of the system.*

*The LSN is a World Wide Web (www) approach to connecting each party's documentary collections on whatever hardware and software platform they choose within general guidelines reflecting agreed upon standards and formats. The LSN technical foundations are:*

- Microsoft Windows 2000 servers
- IIS Web Servers
- Microsoft SQL Server
- Autonomy COTS text search and retrieval
- Web Trends (for monitoring the LSN web site and participant web sites)
- Microsoft .Net code for the spidering and back-end processes
- ASPX for the web pages

*The LSN fosters the NRC's ability to protect public health and safety with respect to a license decision on the high-level waste repository by:*

- facilitating the NRC's ability to comply with the schedule (three years) for decision on repository construction authorization,
- providing an electronic environment that facilitates a thorough technical review of relevant documentary material and,
- ensuring equitable access to the information for the parties to the hearing.

*The Licensing Support Network (LSN) provides a web-based portal (similar to Yahoo), or central index, to the high-level waste hearing participants' documents. As such, users will follow links to relevant materials from the LSN site or issue searches using field or text queries. However, when a user selects a document for retrieval from the search results list, the request is delivered by the LSN (through a HTTP link) to the participant's machine (e.g., The Department of Energy, Nuclear Regulatory Commission, or local governments) where the participant documents are located. The first document collection required to be indexed by the LSN will be the Department of Energy (DOE). Per 10 CFR Part 2, Subpart J, the DOE documents must be available for LSN indexing six months before the license application for the repository is submitted to the NRC. Subsequent to the DOE documents being available, the NRC and other potential parties (State of Nevada, local counties, Nuclear Energy Institute, etc.) are to make their documents available. Therefore, the LSN "operational date" hinges on the DOE license application date. DOE recently delayed its license application date from March 2002 to December 2004 (estimated). Therefore,*

although the LSN is in the operational/evaluation phase, the envisioned benefits as outlined in the April 2000 business case analysis will not be realized until the discovery process begins in approximately two years (assuming a December 2004 DOE license application date). The LSN portal software was accepted by the government in October 2001 in anticipation of a March 2002 license application. Because of the recent delay in DOE's submission of the license application, the LSN will need to undergo minor enhancements and technology upgrades (e.g., required software upgrades and hardware maintenance) to leverage opportunities not afforded in the initial, compressed, nine-month development schedule and have its operational period extended by two and one-half years commensurate with the delay in the license application.

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

During the project planning phase, NRC assumed that the LSN had to be operational six months prior to March 2002 to meet the availability requirements outlined in 10 C.F.R. Part 2, Subpart J. At that time, it was assumed that if the DOE announced a delay in submitting its license application to NRC, it would not affect the need to implement the LSN because availability of the system was keyed to the date of the DOE site recommendation rather than the submission of the license application (this condition was subsequently revised in a change to 10 C.F.R. Part 2, Subpart J).

It was assumed that the system would be web-based and utilize a browser-based user interface per 10 C.F.R. Part 2, Subpart J.

It was assumed that the number of parties or potential parties likely would increase from those who are members of the original negotiated rulemaking that defined the system attributes. The ultimate design and development of this system was guided and approved by a panel comprised of potential parties to the hearing. Established and chartered as a federal advisory panel in the late 1980's, the Licensing Support Network Advisory Review Panel (LSN ARP) negotiated and determined all facets of the LSN including the Rule (10 C.F.R. Part 2, Subpart J), alternative designs (presented in the CPIC cost-benefit analysis), and even system field values.

It was assumed during planning that the life-cycle covered a six-year fiscal period from mid-FY 2000 through the end of FY 2005 consistent with the announced date for the DOE license application and NRC projections about the duration of the licensing proceedings.

It was recognized during planning that data volumes are drivers of the system's efficiency and effectiveness and that there could be significant variations in the number of documents DOE will make available. Sizing assumptions in the design criteria were, therefore, very conservative.

It was assumed that participants would be responsible for publication of their document collections and, as a consequence, for creation and operation of their web-accessible document collection servers, as required by 10 C.F.R. Part 2, Subpart J.

It was assumed that NRC would utilize its separately developed Electronic Information Exchange (EIE) system to support electronic submissions to the official docket, and that NRC's Agencywide Document Access Management (ADAMS) system would make available to the public and the parties the official docket for the licensing proceeding. This assumption was based on NRC intention to utilize these existing capabilities rather than utilizing the LSN to develop redundant capabilities for the HLW proceedings. Both an electronic docket and electronic submissions are also part of the LSN per 10 C.F.R. Part 2, Subpart J.

It was assumed that NRC, as a participant to the proceedings, would be responsible for adhering to mutually acceptable standards for text and image file formats, bibliographic header structures, database structures, communications protocols, etc., to insulate the operation of the LSN from control by NRC line

organizations. This was based on concerns about avoiding potential conflict of interest issues within the agency as both LSN development manager and LSN participant.

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

As codified at 42 U.S.C. 10134(d), the Nuclear Waste Policy Act (NWP) requires that the NRC conduct the proceedings on an application for the construction of a high level waste repository in 3 years, with an optional fourth year upon showing of good cause. NRC incorporated the requirements of the NWP in 10 C.F.R. Part 2, Subpart J.

The design and operation of this system implements the consensus guidance provided by a Federal Advisory Committee Act (FACA) chartered advisory panel comprised of the parties and potential parties to the Yucca Mountain licensing. This panel, the Licensing Support Network Advisory Review Panel (LSNARP), was originally established to participate in the negotiated rulemaking process that resulted in the promulgation of 10 C.F.R. Part 2, Subpart J. The LSNARP has, since 1989, acted as the forum for stakeholder input into the design and operation of the LSN. Its membership includes the Department of Energy, the Nuclear Regulatory Commission, the Environmental Protection Agency, the State of Nevada, Nevada county governments (Nye, Lander, White Pine, Lincoln, Churchill, Clark, Eureka, Mineral, Esmeralda), Inyo county (CA), tribal interests (e.g., National Congress of American Indians) environmental/public interest groups and individuals (e.g., Nevada Nuclear Waste Task Force), and the nuclear industry (e.g., the Nuclear Energy Institute).

According to the July 24, 2002 issue of Nucleonics Week, the DOE has requested a budget to allow it to load 4 million pages of text on the LSN. This underscores the importance of the LSN, which has implemented sophisticated text search and retrieval technology to allow users to cull through this anticipated enormous database. In addition to providing public access to this material, the LSN will allow the parties to the proceeding access to other participants' documentary discovery material, thereby reducing significantly the time needed for discovery once the adjudicatory proceeding begins, as well as permitting them to develop more focused contentions that will enhance the efficiency of the hearing and foster the agency's ability to meet the three-year time-frame for a licensing determination imposed by Congress.

#### **I.B. Justification (All Assets)**

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

<b>NRC's Strategic Goals</b>	<b>NRC Strategies</b>	<b>Support</b>	<b>How Does Your Initiative Support this NRC Goal or Corporate Management Strategy?</b>
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.			■

NRC's Strategic Goals	NRC Strategies	Support	How Does Your Initiative Support this NRC Goal or Corporate Management Strategy?
<b>2. Nuclear Materials Safety:</b> 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			<ul style="list-style-type: none"> <li>▪</li> </ul>
<b>3. Nuclear Waste Safety:</b> Prevent adverse impacts from radioactive waste to the current and future public health and safety and the environment, and promote common defense and security	<ul style="list-style-type: none"> <li>▪ We will keep pace with the national high-level waste management program. We will apply the regulatory framework to pre-licensing 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.</li> <li>▪ NRC will continue authorizing licensee activities only after determining that these proposed activities will be conducted consistent with the regulatory framework.</li> </ul>	X	<p>The LSN supports the high-level waste repository hearing for Yucca Mountain. Specifically, the LSN:</p> <ul style="list-style-type: none"> <li>▪ Makes discovery documentary material available to the parties and potential parties to the proceeding, thereby reducing significantly the time needed for discovery once the adjudicatory proceeding begins, thus aiding the agency in meeting the three-year time frame for reaching a licensing determination imposed by Congress in the Nuclear Waste Policy Act.</li> <li>▪ Allows parties to develop more focused contentions, thereby enhancing the efficiency of the hearing process by aiding the agency in meeting the three-year time-frame for reaching a licensing determination imposed by Congress in the Nuclear Waste Policy Act.</li> <li>▪ Allows scientific and technical staff to better understand and analyze data resulting in a more comprehensive review for public health and safety (NRC's mission).</li> <li>▪ Provides parties with limited resources (e.g., local tribes, county governments) access to powerful tools (text search and retrieval) for building contentions on vast amounts of data (estimated at over 4 million pages).</li> </ul>
<b>4. International Nuclear Safety Support:</b> Support U.S. interests in the safe and secure use of nuclear materials and in nuclear non-proliferation			<ul style="list-style-type: none"> <li>▪</li> </ul>

NRC's Strategic Goals	NRC Strategies	Support	How Does Your Initiative Support this NRC Goal or Corporate Management Strategy?
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.	<ul style="list-style-type: none"> <li>■ We will keep pace with the national high-level waste management program. We will apply the regulatory framework to pre-licensing 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.</li> <li>■ NRC will continue authorizing licensee activities only after determining that these proposed activities will be conducted consistent with the regulatory framework.</li> </ul>	X	<p>The LSN is in support of the high-level waste repository hearing for Yucca Mountain. Specifically, the LSN:</p> <ul style="list-style-type: none"> <li>■ Makes discovery documentary material available to the parties and potential parties to the proceeding, thereby reducing significantly the time needed for discovery once the adjudicatory proceeding begins, thus aiding the agency in meeting the three-year time frame for reaching a licensing determination imposed by Congress in the Nuclear Waste Policy Act.</li> <li>■ Allows parties to develop more focused contentions, thereby enhancing the efficiency of the hearing process by aiding the agency in meeting the three-year time-frame for making a licensing determination imposed by Congress in the Nuclear Waste Policy Act.</li> <li>■ Allow scientific and technical staff to better understand and analyze data resulting in a more comprehensive review for public health and safety (NRC's mission).</li> <li>■ Provides parties with limited resources (e.g., local tribes, county governments) access to powerful tools (text search and retrieval) for building contentions on vast amounts of data (estimated at over 4 million pages).</li> </ul>
NRC Corporate Management Strategy 4: Communicate strategic change.			■

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

<b>Presidents Management Agenda (PMA)</b>	<b>Supports</b>	<b>How Does Your Initiative Support This PMA Item?</b>
<i>Human Capital</i>		
<i>Competitive Sourcing</i>		
<i>Financial Performance</i>		
<i>E-Government</i>	X	<p>The LSN support E-Government by:</p> <ul style="list-style-type: none"> <li>▪ Providing federal, state, local governmental entities and other potential stakeholders (e.g., Indian tribes and the public), easy, single point of access to relevant high-level waste repository licensing data</li> <li>▪ Providing entities with limited resources access to tools (e.g., advanced text search and retrieval technology) for analyzing the provided data.</li> <li>▪ Sharing information more quickly and easily with other government and non-government (e.g., not-for-profit) organizations.</li> </ul>
<i>Budget and Performance Integration</i>		

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

*There are no alternative sources in the public or private sectors that could perform this function. The LSN, which automates the discovery process in the High-Level Waste (HLW) repository licensing proceeding, is by definition unique to the case being heard. It represents an innovative application of technology to address a particular problem -- the conduct of discovery prior to the commencement of the licensing proceedings -- in the potentially contentious, highly visible HLW repository licensing proceeding. In addition, it is a direct administrative support activity to the presiding officer and other parties to this specific case.*

*To complete the HLW repository licensing process in the three years mandated by Congress, the Commission envisioned that the information and data supporting a DOE license application needed to be available simultaneously, in a centralized database, to all interested parties before the application was submitted and formal NRC review began. Thus in 1989, 10 CFR Part 2, Subpart J, was promulgated to establish the framework for a Licensing Support System (LSS) as it was then known, a centralized database system intended to ensure that all documents relevant to the licensing are made equally accessible in a timely manner to all parties and potential parties. Then-emerging information management technologies for issue identification, electronic storage and retrieval, and electronic mail were recommended to achieve the objectives of more effective and efficient review.*

*Ultimately, it was recognized that technological advances, particularly the emergence of web technology, called for changes in the proposed system design. Subpart J was revised in late 1998 to allow the implementation of the renamed Licensing Support Network (LSN) using web technologies. As a web-based method of access to the combined participant collections, the LSN will be available to anyone who has access to the Internet, in particular the World Wide Web (WWW). Moreover, as was the case with the LSS, it has been designed to accommodate the fact that representatives of the parties to the proceeding, e.g., approximately 500 individuals, will need to be provided with a mechanism for priority access to the LSN, especially during the discovery and motions practice phases.*

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



*This question is not applicable because there are no alternative sources in the public or private sectors that could perform this function in a manner that would meet the needs of the agency relative to the HLW licensing proceeding .*

**5. Who are the customers for this project?**

*The customers for this project are the parties and potential parties to the high-level waste repository licensing hearing. They include the Department of Energy and the affiliated Nuclear Waste Technical Review Board, the Nuclear Regulatory Commission, the Environmental Protection Agency, the State of Nevada, Nevada county governments (Nye, Lander, White Pine, Lincoln, Churchill, Clark, Eureka, Mineral, Esmeralda), Inyo county (CA), tribal interests (e.g., National Congress of American Indians) environmental/public Interest groups and individuals (e.g., Nevada Nuclear Waste Task Force), and the nuclear industry (e.g., the Nuclear Energy Institute).*

*As an additional benefit, and as negotiated in the original rulemaking, the general public will be able to access the system and search for information. The LSN has been configured to let all users access generally accessible materials, but will give parties to the hearing "priority" access should a significant spike in usage occur.*

**6. Who are the stakeholders of this project?**

*The stakeholders are the parties and potential parties to the HLW repository licensing hearing. They include the Department of Energy and the affiliated Nuclear Waste Technical Review Board, the Nuclear Regulatory Commission, the Environmental Protection Agency, the State of Nevada, Nevada county governments (Nye, Lander, White Pine, Lincoln, Churchill, Clark, Eureka, Mineral, Esmeralda), Inyo county (CA), tribal interests (e.g., National Congress of American Indians) environmental/public Interest groups and individuals (e.g., Nevada Nuclear Waste Task Force), and the nuclear industry (e.g., the Nuclear Energy Institute).*

*As an additional benefit, and as negotiated in the original rulemaking, the general public will be able to access the system and search for information. The LSN has been configured to let all users access generally accessible materials, but will give parties to the hearing "priority" access should a significant spike in usage occur.*

*According to 10 CFR Part 2, Subpart J, to become a "party" to the proceeding, a party or potential party must post all relevant documents on a web server for the LSN to "crawl/spider" and index so they are available to all other parties of the proceeding.*

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

*This is not a multi-agency initiative. All parties and potential parties to the HLW repository licensing proceeding must post their relevant documentary materials on a web server for the LSN to crawl/index, but the LSN portal web-site itself is solely under the operational control of the NRC's Atomic Safety and Licensing Board Panel (ASLBP). Thus, NRC and DOE document collections are established under the operational control of the respective agencies' line organizations that will be parties to the proceeding. Currently, the Department of Energy and Nuclear Regulatory Commission are the only two federal agencies identified as parties to the proceeding. The LSN team has been working closely with the Department of Energy (who is expected to provide 90% of the data for the LSN) and Nuclear Regulatory Commission to ensure their web sites integrate into the LSN. In addition, the LSN team has begun working with the State of Nevada and local governments (e.g., Clark, White Pine and Lincoln counties) to ensure that the servers housing their document collections are able to integrate into the LSN with minimal*

resource impacts. Currently, approximately 17 potential parties have been identified as stakeholders and customers to this project. However, if high-level waste transportation becomes part of the hearing, approximately 40 more parties could be identified (i.e., States the waste could travel through).

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

As outlined in 10 CFR Part 2, Subpart J, the LSN will establish a system that provides shared document discovery for the adjudicatory hearing on DOE's license application to construct a HLW repository. The system achieves time saving by replacing classic "discovery" exchanges among parties which, in large proceedings, can be very time consuming.

There are identifiable monetary savings to ratepayers who contribute to the Nuclear Waste Fund that can be impacted by an expeditious HLW repository licensing hearing. In this context, the LSN Return on Investment (ROI) analysis is based on an analysis used in the original Licensing Support System (LSS) - subsequently renamed as the Licensing Support Network (LSN) - authorization: cost avoidance to the utilities.

The original LSS cost benefit analysis performed by DOE, when it initially had the lead for design and implementation of the system, was presented to OMB's Office of Information Resources Management (as a Presidential Priority System) in late 1989 and early 1990 and was justified by comparing the cost of the system versus the costs incurred by having to add at-plant storage that might be incurred as a result of delays in opening the repository. Mr. Jack Arthur of OMB found this approach persuasive and DOE was allowed to go forward with its LSS design work.

In congressional testimony in early 1999, industry officials indicated that the costs of adding storage capacity in lieu of the Yucca Mountain repository being ready to receive waste shipments was \$4.3 billion over an eight-year period - roughly \$537 million per year (constant dollars) in additional costs to the ratepayers. The same costs could be attributed to not having the LSN implemented on time, or its ability to accomplish its mission of helping to ensure that the hearing process is completed in the mandated three years.

Therefore, with the LSN providing for a more efficient and timely (three year) hearing, the licensing of the repository can be achieved faster with significant savings to the utilities and ultimately, ratepayers.

9. List all other assets that interface with this asset. Have these assets been reengineered as part of this project? Yes\_\_\_\_, No\_X\_\_\_\_.

Web servers operated by all the parties and potential parties (e.g., DOE, NRC, State of Nevada) will interface with the LSN. They will act as document servers for the LSN portal which will provide the search and retrieval capability (index and hyperlink).

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

<b>Strategic Goal(s) Supported</b>	<b>Existing Baseline</b>	<b>Planned Performance Improvement Goal</b>	<b>Actual Performance Improvement Results</b>	<b>Planned Performance Metric</b>	<b>Actual Performance Metric Results</b>
Prevent significant adverse impacts	No baseline as the	Maintain safety, protection of the environment,		▪ No deaths resulting from acute radiation	

from radioactive waste to the current and future public health and safety and the environment, and promote the common defense and security.	high-level waste repository (Yucca Mountain) is a unique first-of-its-kind project	and the common defense and security.		exposures from radioactive waste. <ul style="list-style-type: none"> <li>▪ No events resulting in significant radiation exposures from radioactive waste.</li> <li>▪ No releases of radioactive waste causing an adverse impact on the environment.</li> <li>▪ No losses, thefts, diversions, or radiological sabotages of special nuclear material or radioactive waste.</li> </ul>	
Corporate Management Strategies: Provide proactive information management and information technology services	For the next update/revision cycle for the Strategic Plan, the NRC will develop measures for Corporate Management Strategies				

**I.D. Program Management [All Assets]**

1. Is there a program manager assigned to the project? If so, what is his/her name?

*Dan Graser, NRC/ASLBP, 301-415-7401*

Yes   X   No       

3. Is there a contracting officer assigned to the project? If so, what is his/her name?

*Sharon Stewart, NRC/ADM/DCPM, 301-415-7314*

Yes   X   No       

3. Is there an Integrated Project Team?

Yes   X   No

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

*Project Management, Technical Project Management, Procurement, Executive Management, Business Area Expert*

*The LSNARP is a FACA-chartered panel of parties and potential parties that provide stakeholder input on the design, implementation, and operation of the LSN on an ongoing basis. The membership includes the Department of Energy, the Nuclear Regulatory Commission, the Environmental Protection Agency, the State of Nevada, Nevada county governments (Nye, Lander, White Pine, Lincoln, Churchill, Clark, Eureka, Mineral Esmeralda), Inyo county (CA), tribal interests (e.g., National Congress of American Indians), environmental/public interest groups and individuals (e.g., Nevada Nuclear Waste Task Force), and the nuclear industry (e.g., the Nuclear Energy Institute).*

4. Is there a sponsor/owner?

G. Paul Bollwerk, III, ASLBP/Chief Administrative Judge, 301-415-7454      Yes   X   No       

## 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?

*Yes, the LSN has been identified in NRC's in-progress enterprise architecture (EA).*

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

*The LSN falls within the scope of NRC's baseline 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 the infrastructure required to carry out NRC's mission. Though outsourced, The LSN utilizes 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. NRC is working 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.*

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 LSN support are:*

- 1. Public Health (Illness prevention)*
- 2. Environmental Management (Pollution prevention and control)*
- 3. Regulated Activity Approvals (Licensing issuing and control)*
- 4. Legal (Judicial Hearings)*

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

*The LSN supports the business lines and sub-functions Public Health (Illness prevention) and Environmental Management (Pollution prevention and control) by providing an electronic environment that facilitates a thorough technical review of relevant documentary material regarding the HLW repository license application and ensures equitable access to the information for the parties to the hearing. For example, ground water contamination by nuclear material is likely to be an important issue in deciding whether to license the storage of nuclear material at Yucca Mountain. By using the LSN, experts can quickly search and retrieve information about this issue. Further, organizations or individuals with limited resources, such as a local Indian tribe or its members, have access to the same LSN resources as those from large federal agencies. This will allow experts, from all interested parties, to quickly and easily research areas of interest facilitating a thorough review of important issues.*

*The LSN supports the business lines and sub-functions Regulated Activity Approvals (Licensing issuing and control) and Legal (Judicial Hearings) by supporting the NRC's congressional mandate in the Nuclear Waste Policy Act to make a determination regarding the construction authorization for a HLW repository within a three-year period following submission of a DOE license application. Providing a fully electronic high-level waste hearing "discovery" process will allow all interested parties to efficiently submit and gather information relative to the high-level waste hearing. In addition, advanced text search and retrieval tools available in a simple-to-use web portal will allow organizations to develop more focused contentions, thus further reducing overall hearing time.*

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

*During the original CPIC process the project was evaluated and approved by NRC's Information Technology Business Council. In addition, the LSN team submitted the proposed software and hardware for review against the NRC Technical Reference Model and was approved as per agency procedure at that time. The now operational LSN hardware and software suite will be reviewed by the NRC EA Review Committee and is expected to be approved in light of the technical reference model review and approval received during system development.*

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

*No business process reengineering was required as this system is new to the agency and new as an IT business model in the regulatory/litigation arena.*

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

*No organizational restructuring, training, or change management is required. The system represents a new litigation support paradigm in that the discovery process will actually be conducted before the license application is submitted, but in a manner that is totally consistent with all existing NRC rules of procedure. Its web-based functionality is easy to use and intuitive.*

**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?**

*The implications for the agency business architecture are that automated legal information systems will be increasingly introduced into ASLBP case management procedures.*

**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 be used by parties to build their case either for or against issuing a license permitting the storage of high-level nuclear waste at Yucca Mountain. The data, or documents used, can include:*

- 1. Technical reports and analyses by all participants (including those developed by contractors).*
- 2. Quality assurance records*
- 3. External correspondence*
- 4. Internal memoranda*
- 5. Meeting minutes/transcripts*
- 6. Draft documents on which a nonconcurrence has been registered*
- 7. Congressional questions and answers*
- 8. Other documents (for 8.1 through 8.9, include references to other data bases)*
  - 8.1 Draft and final environmental assessment for the site characterized*
  - 8.2 Site characterization plan*
  - 8.3 Site characterization study plans*
  - 8.4 Site characterization progress reports*
  - 8.5 Issue-resolution reports*
  - 8.6 License application*
  - 8.7 Topical reports, data, and data analyses*
  - 8.8 The U.S. Department of Energy (DOE) Environmental Impact Statement*
  - 8.9 Recommendation report to the President of the United States (notice of disapproval, if submitted)*

- 8.10 Any publicly available information on rulemakings
- 8.11 Public and agency comments on documents
- 8.12 Response to comments
- 8.13 NRC technical positions
- 8.14 NRC regulatory guides
- 8.15 The DOE project-decision schedules
- 8.16 DOE program-management documents

- 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?

*The data for this project will come from entities at the federal, state, and local levels. Parties to the hearing are to make their documents (data) available on their web site for the LSN to crawl/spider. For example, the NRC, DOE, the State of Nevada, Nye County Nevada, and Nuclear Energy Institute, will place relevant documentary material in their possession on their respective sites, and the LSN will crawl/spider and index the data and make it available to all other parties (and the public) for search and retrieval.*

- 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?

*Some documentary material can be represented only by a bibliographic description because the underlying text or image version of the document is protected by legal privilege, or is considered nonpublic because it is protected as business proprietary, copyrighted, etc. The procedures to protect such classes of materials are incorporated in 10 C.F.R. Part 2, Subpart J.*

- 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.

*Spatial data is not anticipated.*

### **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.

*NRC's enterprise architecture is not impacted as there is no direct connectivity, the system does not reside in the NRC environment, and data exchange protocols are based on web standards and are defined in 10 C.F.R. Part 2, Subpart J. For example, fielded data is transferred using XML and documents are exchanged in PDF or HTML format.*

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

*No. The LSN hardware and software are outsourced, externally located, and hosted at a web-hosting facility that does not interact with any NRC infrastructure element except by "spidering" an NRC document*

*collection on a separately operated hardware and software configuration.*



**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)?

*System security is administered by the program office, with policy, oversight and consultative support provided by the Office of the Chief Information Officer. Active security operations for the web-hosting facility, network, and application server are provided via the web-hosting contract.*

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

*The total dollar amount allocated for FY 2004 is \$80,060.*

**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?

*We are currently completing the GISRA accreditation process using NIST guidance and expect to have approval to operate by October 1, 2002.*

**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?

*Yes. August 15, 2001.*

**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.

*We are currently undergoing the certification and accreditation process using NIST guidance. We expect to complete the review by October 1, 2002.*

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

*Currently, the National Security Agency (NSA) is conducting a review of the LSN security controls. This review should be completed by September 1, 2002. Based on the results of this review, we will develop a plan to ensure any major security deficiencies identified are corrected.*

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

*Users have not yet been trained.*

**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?

*The system is monitored (including intrusion detection) by the hosting facility (AT&T and Zone of Trust, Inc.). Should an incident occur, the NRC LSN point of contact is notified by AT&T of the incident and any corrective action taken or planned. The NRC LSN point of contact then notifies the NRC OCIO security office of the incident, which then is responsible for reporting to GSA's FedCIRC as appropriate.*

- 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?"

*Yes, The system is operated by contractors at a contractor facility. When a new person joins the company they receive an initial security briefing. Annually thereafter there is a refresher briefing. The briefings cover protection, handling, etc. and the topics are provided by the Defense Security Service (DSS). The contractors security procedures are done in accordance with the National Industrial Security Program DoD 5220.22-M.*

- 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?

*No privacy data is stored on the LSN. In addition, persistent cookies are not used and a policy statement regarding privacy is available on the LSN for public review.*

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

*No personal information is stored on the LSN.*

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

*A Privacy Impact Assessment was not conducted. However, the NRC Office of General Council did review the privacy statement that is posted on the LSN to ensure it is adequate and accurate.*

## **II. C. Government Paperwork Elimination Act (GPEA)**

- II. 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.

*This application maintains no record of transactions nor does it house actual agency records.*

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

*No GPEA plan was produced because this application maintains no record of transactions nor does it house actual agency records.*

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

*There are no OMB Paperwork Reduction Act (PRA) control numbers from information collections that are tied to this investment.*