

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

Agency Nuclear Regulatory Commission
 Bureau N/A
 Account Title Salaries and Expenses
 Account Identification Code 31-0200-0-1-276
 Program Activity Nuclear Materials
 Name of Project License Tracking System (LTS)
 Unique Project Identifier:
 (IT only)(See section 53) 429-00-01-04-01-1000-00
 Project Initiation Date 1987
 Project Planned Completion Date
 This Project is: Initial Concept _____ Planning _____ Full Acquisition _____ Steady State _____
 Mixed Life Cycle X

Project/useful segment is funded: Incrementally _____ Fully X

Was this project approved by OMB for previous Year Budget Cycle? Yes X No _____

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 X 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 X¹ No _____

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 _____

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 X² No _____

¹ See I.A.2 below.

² The current LTS does not implement electronic transactions. Paper submissions are scanned and recorded in ADAMS, the NRC electronic records system, and data is hand-entered into LTS.

NMSS is awaiting approval of a Rule which will allow licensees to submit transactions electronically through the NRC Electronic Information Exchange (EIE).

Electronic transactions and record keeping with minimal duplication of data entry will be a requirement of the replacement for LTS in accordance with the Freedom of Information

Act, exemptions 5

FOIA- 2003-241

A/10

If so, is it included in your GPEA plan (and does not yet provide an electronic option)?

Yes X No

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

d.1 If yes, were any weaknesses found?

Yes X³ 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? *

Yes 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 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.*

*Current LTS***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)

	<i>PY-1 and Earlier⁴</i>	<i>PY 2002⁵</i>	<i>CY 2003</i>	<i>BY 2004</i>
<i>Planning:</i>				
<i>Budgetary Resources</i>		.000	.000	.000
<i>Outlays</i>		.000		
<i>Acquisition :</i>				
<i>Budgetary Resources</i>		.000	.000	.000
<i>Outlays</i>		.000		
<i>Total, sum of stages:</i>				
<i>Budgetary Resources</i>		.000	.000	.000
<i>Outlays</i>		.000		
<i>Maintenance</i>				
<i>Budgetary Resources</i>		.164 ⁶	.162 ⁷	.159 ⁸
<i>Outlays</i>		.118		
<i>Total, All Stages:</i>				
<i>Budgetary Resources</i>		.164	.162	.159
<i>Outlays</i>		.118		

*Replacement for LTS***SUMMARY OF SPENDING FOR PROJECT STAGES⁹****(In Millions)****(Estimates for BY+1 and beyond are for planning purposes only
and do not represent budget decisions)**

	<i>PY-1 and Earlier</i>	<i>PY 2002</i>	<i>CY 2003</i>	<i>BY 2004</i>
<i>Planning:</i>				
<i>Budgetary Resources</i>		.275	.350	.150
<i>Outlays</i>		.000		
<i>Acquisition :</i>				
<i>Budgetary Resources</i>		.200	.400	.400
<i>Outlays</i>		.000		
<i>Total, sum of stages:</i>				
<i>Budgetary Resources</i>		.475	.750	.550
<i>Outlays</i>		.000		
<i>Maintenance</i>				
<i>Budgetary Resources</i>		.000	.000	.000
<i>Outlays</i>		.000		
<i>Total, All Stages:</i>				
<i>Budgetary Resources</i>		.475	.750	.550
<i>Outlays</i>		.000		

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.

This Exhibit 300 addresses the NRC Licensing Tracking System (LTS), a steady state system, and its replacement which is in the CPIC conceptual phase.

LTS is used by the Office of Nuclear Material Safety and Safeguards (NMSS) to manage the licensing and inspection of medical, academic, and industrial users of nuclear materials, and is critical to our ability to carry out our responsibility as an independent regulatory agency. NRC issues some 3,000 new licenses, license renewals, and license amendments for nuclear material licenses annually, and conducts about 1,500 health and safety inspections each year. NRC also tracks and maintains contact with 5,000 active licensees at any one time. By serving as the information repository for these activities, LTS supports NRC's strategic goal of ensuring that nuclear materials are used in a manner that adequately protects public health and safety, and safeguards the environment.

The current LTS is a legacy system designed and implemented over 15 years ago using the RAMIS II Data Base Management System. It is in the Evaluation Phase of its life-cycle. The current system provides basic license processing including:

- *Recording and tracking license applications, renewals, approvals, and inspections*
- *Maintaining information about NRC licensees and the conditions of their licenses*
- *Providing a management tool for milestone tracking, application status, etc.*
- *Providing response for information inquiries from the public*

LTS has provided good service; however, it is increasingly falling short of providing necessary support to efficient and effective business processes. It is difficult to use and does not support the integrated, automated workflow needed by the professional staff. The current situation, in which professional staff relies on administrative and data entry personnel to access LTS, is inefficient and leads to inaccuracies. The current system is also difficult to change, so as new requirements have arisen, supplemental systems have been created to track information not handled in LTS, leading to a patchwork of non-standard systems in NRC regions.

Moreover, LTS's current technology platform—RAMIS II operating on a mainframe computer—is obsolete and not suitable for future needs. It is difficult to find programmers to maintain or develop it. At the same time, it faces major new requirements for which it is incompatible, including Internet-based licensing, electronic record keeping, and electronic information exchange (EIE.) We believe that cost/benefit analysis will favor more modern technology for implementing and maintaining these new requirements.

NMSS is currently planning to replace LTS in order to enhance its functionality, modernize its technical platform, and give better support to NMSS business processes. NMSS envisions this project as part of a process of improving its business processes and integrating all its significant information systems in the materials and waste management arenas.

The first step in NRC's CPIC process, a Screening Form, has been approved for the LTS replacement, and development of the Business Case will take place in FY 2003. NMSS is also carrying out a Licensing Business Process Improvement (BPI) in the same time frame. The scope of the Licensing BPI is broader than the LTS business processes; nonetheless, the BPI will be a major input to identifying the system requirements for the LTS replacement.

The enhanced functionality we envision for the new LTS includes:

- *Secure, Internet-based licensee self-service (submission of applications and renewals, semi-automated processing of certain standard submissions, update of information)*
- *Greater integration and automation of "back office" licensing processes in NMSS*
- *Integration with the inspection and enforcement processes*
- *Expansion of the license types currently processed through LTS*
- *Expansion of automated support for inspections, including greater use of hand-held or other small computers*
- *Greater flexibility in configuring the system for new license types, license conditions, user roles, workflow, reporting requirements, etc.*
- *More automated approach to generating and tracking correspondence with licensees*
- *Greater integration of license processing with access to licensing guidance*

NMSS is working with the Office of the CIO to ensure that the emerging Web-based architecture will support these requirements.

In parallel to the Licensing BPI, NMSS is conducting market research into off-the-shelf licensing software, used in numerous states' professional licensing applications. To date, we believe that viable off-the-shelf options exist, and should be considered in the eventual replacement for LTS.

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

Legislation recently introduced in Congress may substantively change the direction of the LTS replacement project. The Nuclear Security Act of 2002 may require NRC to develop or participate in the development of a national classification and tracking system to control nuclear sources, helping to prevent materials loss or theft. Such loss or theft could lead to malicious use of a "dirty bomb"-- a conventional explosive which carries nuclear materials and releases them on detonation.

If this or similar legislation is approved, the scope of the LTS project may dramatically change in significant ways:

- *The system would track sources of nuclear materials. LTS now tracks licensees and how much nuclear material they are authorized to use, but it does not inventory or track the materials themselves. The legislation is expected to require tracking nuclear devices and sources from their manufacture, through their "life-cycle" of transfer to and ownership by licensees, including their eventual disposal at authorized facilities.*
- *The system would bring together all source and license data nationally, not just that processed by NRC¹⁰. LTS currently contains data from non-Agreement States only. Agreement States maintain similar databases, but do not integrate with LTS. Under the new law, a means would need to be found to bring together data nationally.*
- *The system would process license types not currently handled through LTS. LTS does not process all licenses for nuclear materials that may be covered under the new law. In particular, we envision a requirement to track devices under general licenses—those granted automatically on purchase of certain devices. General licenses are now handled through NMSS's General Licensing Tracking System (GLTS.) Under the new law, GLTS would probably be integrated with the LTS replacement.*

When legislation is passed, and we know the scope of the new requirements, NRC will provide an updated Exhibit 300 with more specific information on how this project will support the new statutory requirements.

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

Significant upgrading or replacement of LTS was one of the recommendations made by a 2001 Licensing Task Force made up primarily of NRC regional licensing staff. In its Phase I report, the Task Force examined safety concerns, making programmatic recommendations following an operational event at an NRC licensee's work site. In its Phase II report, the Task Force examined and made recommendations on the administrative processes and systems that support licensing and inspections.

In Phase II, Task Force members urged NMSS to expedite updating LTS, as it does not support the regions' modern business practices. As part of the upgrade, they recommended implementing Web-based submission of licensing applications and other transactions. The Task Force felt that such licensee self-service could help reduce the time NRC staff spends on routine application processing, reduce errors, and free regulatory technical staff to handle substantive issues.

¹⁰ NRC has relinquished its regulatory authority to some state governments to process licenses for nuclear materials. 32 of the 50 states have opted to exercise this authority and are known to NRC as Agreement States. Agreement States collect their own fees and fund their own license processing operations, including IT systems. NRC processes licenses and collects fees for non-Agreement States—those who may feel that their resources do not permit them to take on this responsibility. LTS currently contains data from non-Agreement States only.

I.B. Justification (All Assets)

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

The following two charts address the current, steady-state LTS and the replacement for LTS, respectively:

Current LTS

NRC's Strategic Goals	NRC's Strategies	Supports	How Does Your Initiative Support this NRC Goal and Objective?
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	<ul style="list-style-type: none"> Authorize licensee activities only after determining that these will be conducted consistent with the regulatory framework. 	X	<ul style="list-style-type: none"> LTS records and tracks license applications renewals, amendments, and in certain cases, inspections.
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			
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.			

Replacement for LTS

NRC's Strategic Goals	NRC's Strategies	Supports	How Does Your Initiative Support this NRC Goal and Objective?
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	■ Authorize licensee activities only after determining that these will be conducted consistent with the regulatory framework.	X	■ The replacement for LTS will help improve business processes for license application, review, approval, and inspection.
	■ Communicate more clearly. Add focus, clarity, and consistency to our message; be timely.	X	■ Web-based self-service and improved internal NRC processing will shorten application time frames and allow more timely, consistent correspondence with licensees and other members of the public.
	■ Identify, prioritize, and modify processes based on effectiveness reviews to maximize opportunities to improve those processes.	X	■ Improved internal NRC processing may reduce licensing labor costs.
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	■ Authorize licensee activities only after determining that these will be conducted consistent with the regulatory framework.	X	■ The replacement for LTS will help improve business processes for license application, review, approval, and inspection.
	■ Communicate more clearly. Add focus, clarity, and consistency to our message; be timely.	X	■ Web-based self-service and improved internal NRC processing will shorten application time frames and allow more timely, consistent correspondence with licensees and other members of the public
	■ Identify, prioritize, and modify processes based on effectiveness reviews to maximize opportunities to improve those processes.	X	■ Improved internal NRC processing may reduce licensing labor costs.
4. International Nuclear Safety Support: Support U.S. interests in the safe and secure use of nuclear materials and in nuclear non-proliferation			

NRC's Strategic Goals	NRC's Strategies	Supports	How Does Your Initiative Support this NRC Goal and Objective?
NRC Corporate Management Strategy 1: Employ innovative and sound business practices	<ul style="list-style-type: none"> Improve customer service, balancing internal customer needs with agency priorities and resources 	X	<ul style="list-style-type: none"> Web-based self-service will offer more direct communication with NRC, and shorten license processing time.
	<ul style="list-style-type: none"> Find new and better ways of doing business to increase effectiveness and efficiency of operations. 	X	<ul style="list-style-type: none"> Eliminating paper processes, integrating databases, providing hand-held computer support inspectors in the field, and automating internal NRC processing will increase effectiveness and efficiency of operations.
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"> Make it easier for staff to acquire, access, and use information. 	X	<ul style="list-style-type: none"> LTS will provide easy-to-use, online access to integrated program information.
	<ul style="list-style-type: none"> Provide a robust, reliable, cost effective, and "user friendly" infrastructure. 	X	<ul style="list-style-type: none"> LTS will be implemented in a modern technology platform suitable for integrating all significant nuclear materials and waste management information systems in the future.
	<ul style="list-style-type: none"> Work jointly with stakeholders to deliver IT management. 	X	<ul style="list-style-type: none"> The replacement LTS will be designed using IT management best practices and tools approved by both program and IT management in NMSS.
	<ul style="list-style-type: none"> Improve the ability to conduct business electronically. 	X	<ul style="list-style-type: none"> Web-based module will allow electronic communication with licensees and the public.
	<ul style="list-style-type: none"> Provide external stakeholders the ability to easily access desired information. 	X	<ul style="list-style-type: none"> The replacement for LTS will facilitate communication between NRC and those requesting information about our licensing.
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	<p>The project to replace LTS is in the conceptual phase. Our vision is that the new system will include Web-based self-service for the public, including:</p> <ul style="list-style-type: none"> ■ Submission of license applications and renewals ■ Semi-automated processing of certain standard applications ■ Licensing guidance, question and answer ■ Look up licensee information and update if appropriate <p>We anticipate that this E-government approach will provide the public with more direct and timely communication with NMSS, reduce regulatory burden, and reduce internal NMSS operating costs.</p>
Budget and Performance Integration		

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

NRC has relinquished its regulatory authority to some state governments to process licenses for nuclear materials. 32 of the 50 states have opted to exercise this authority and are known to NRC as Agreement States. Agreement States collect their own fees and fund their own license processing operations, including IT systems. NRC processes licenses and collects fees for non-Agreement States—those who may feel that their resources do not permit them to take on this responsibility. Aside from the Agreement States, no alternative source is available or authorized to grant licenses for nuclear materials in the United States.

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

Agreement States have opted to assume authority to regulate licenses for nuclear material in their jurisdictions. NRC processes licenses and collects fees for non-Agreement States—those who may feel that their resources do not permit them to take on this responsibility.

5. Who are the customers for this project?

The public is LTS's ultimate customer, since NRC uses LTS to carry out its mission to protect public health and safety by regulating use of nuclear materials. Individual licensees are also LTS customers, since LTS is used to process their license applications. Licensees include medical, academic and industrial users of nuclear materials.

6. Who are the stakeholders of this project?

LTS stakeholders include NRC management and staff, who use the system to carry out their licensing function, as well as medical, industrial, and research licensees, who pay for the licensing service in the form of license fees to NRC.

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

The current LTS is not a multi-agency initiative. The replacement to LTS is also not currently envisioned to be a multi-agency initiative. This may change, depending on the outcome of the legislation discussed in I.A.2 (the Nuclear Security Act of 2002).

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

The project to replace LTS is in the conceptual phase. Our vision is that the new system will enable several efficiencies such as the following:

- *Web-based licensee self-service will allow data entry, inquiry, and some processing of license applications and renewals with minimal NRC staff intervention.*
- *Integrated, automated workflow will help NRC staff process licenses more accurately and quickly.*
- *Regulatory technical staff will be freed from many administrative processing chores to pursue more substantive issues.*
- *NRC will be able to reduce and eventually eliminate its use of the National Institute of Health (NIH) data center, where the current LTS resides.*
- *NRC inspectors will have greater access to licensee information and automated inspection forms.*
- *Table-driven system administration will make changing the system possible for non-IT staff.*

9. List all other assets that interface with this asset. Have these assets been reengineered as part of this project?

The current LTS interfaces directly only with NRC's fee collection systems, passing them information on fees due from licensees. The replacement to LTS will continue to interface with these systems, which should not require reengineering.

On the other hand, because the new LTS may accept electronic transactions, it may become the electronic system of record for license applications and related documents, eliminating the current need to scan paper-based applications into NRC's Agency-wide Document Access and Management System (ADAMS.)

In addition, depending on the outcome of the legislation discussed in I.A.2 (the Nuclear Security Act of 2002), the replacement for LTS may be designed to subsume and add to the functionality of the General Licensing Tracking System (GLTS), the Reciprocity Tracking System (RTS)¹¹, and National Sealed Source

¹¹ RTS tracks Agreement State licensees who are granted the temporary right to operate in non-Agreement States (i.e., in those states in which NRC issues licenses.)

and Device Regulation¹² system (NSSDR.) In that case, there would be a need for significant reengineering. The new LTS may also interface with comparable systems in the states.

I.C Performance Goals and Measures (All Assets)

Current LTS

The chart below for FY 2002 and FY 2003 reflects our current operations using the current LTS. Note that although we exceed performance goals, those goals reflect a largely manual operation—e.g., 90 days to complete 85% of applications, one year to complete 100%.

Fiscal Year	Strategic Goal(s) Supported	Existing Baseline	Planned Performance Improvement Goal	Actual Performance Improvement Results	Planned Performance Metric	Actual Performance Metric Results
2002	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.	Complete 85% of the new applications and amendments within 90 days. Complete 100% within 1 year.	The current LTS is primarily used as a tracking system, and not as a tool to gain efficiencies.			Through 6/02, we completed 2,405 of 2,471 (97%) within 90 days, and 2,464 of 2,471 within a year (99.7%).
2002	Same as above.	Complete 85% of the license renewal applications and sealed source and device reviews within 90 days. Complete 100% within 2 years.				Through 6/02, we completed 516 of 540 (96%) within 180 days, and all 540 within 2 years (100%).
2002	Same as above.	Complete materials inspections so that no more than 10% are overdue in accordance with the prescribed frequencies in NRC Inspection Manual Chapter 2800.				As of 6/02, approximately 1% of the inspections are overdue.
2003	Same as above.	Same as above.				

¹² NSSRDR tracks approved designs for sealed sources and devices. Certificates for approved designs are issued to licensed manufactures of approved sources and devices.

Replacement for LTS

The FY 2003 Business Case for the replacement for LTS, informed by the Licensing Business Process Improvement (BPI) project discussed in I.A.1 above, will set performance goals and metrics for the other strategic goals described in I.B.1.

I.D. Program Management [All Assets]

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

Current LTS:

Yes X No

*Maureen Moriarty, Project Manager,
Materials Safety and Inspection Branch
Division of Industrial and Medical Nuclear Safety,
Office of Nuclear Material Safety and Safeguards
301-415-7876*

Replacement to LTS:

Yes X No

*Tom Essig, Branch Chief, Materials Safety and Inspection
Division of Industrial and Medical Nuclear Safety
Office of Nuclear Material Safety and Safeguards
301-415-7231*

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

Current LTS:

Yes X No

*Sharon Stewart, Chief,
Contract Management Center 1,
Division of Contracts,
Office of Administration
301-415-7314*

Replacement to LTS:

Yes X No

*Sharon Stewart, Chief,
Contract Management Center 1,
Division of Contracts,
Office of Administration
301-415-7314*

3. Is there an Integrated Project Team?**Current LTS:**

Yes X No

*Maureen Moriarty, Project Manager,
Materials Safety and Inspection Branch
Division of Industrial and Medical Nuclear Safety,
Office of Nuclear Material Safety and Safeguards
301-415-7876*

*Sharon Stewart, Chief,
Contract Management Center 1,
Division of Contracts,
Office of Administration
301-415-7314*

*Bill Usilton—Team Leader,
Materials and Waste Applications Team,
Applications Support and Integration Branch,
Applications Development Division
Office of the CIO
301-415-5798*

Replacement to LTS:

Yes X No

*Tom Essig, Branch Chief, Materials Safety and Inspection
Division of Industrial and Medical Nuclear Safety
Office of Nuclear Material Safety and Safeguards
301-415-7231*

*Sharon Stewart, Chief,
Contract Management Center 1,
Division of Contracts,
Office of Administration
301-415-7314*

*Bill Usilton—Team Leader,
Materials and Waste Applications Team,
Applications Support and Integration Branch,
Applications Development Division
Office of the CIO
301-415-5798*

*Jesse Cloud, Team Leader,
IT and Business Process Team,
Program Management and Policy Development,
Office of Nuclear Material Safety and Safeguards
301-415-7218*

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

*Budgetary/financial management
Capital planning
Procurement/contracting
IT analysis and management
Program/user expertise*

4. Is there a sponsor/owner?**Current LTS:**Yes **X** No

*Dr. Donald Cool, Director,
Division of Industrial and Medical Nuclear Safety (IMNS),
Office of Nuclear Material Safety and Safeguards
301-415-7197*

Replacement to LTS:Yes **X** No

*Dr. Donald Cool, Director,
Division of Industrial and Medical Nuclear Safety (IMNS),
Office of Nuclear Material Safety and Safeguards
301-415-7197*

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 current LTS 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 current LTS 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," and provides the data required by NRC's business functions in ensuring public health, protecting the environment, and fulfilling its regulatory obligation.

LTS 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 subfunctions 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.

LTS is involved in the following Lines of Business and Sub-functions within the Federal Enterprise Architecture Business Reference Model:

Services to Citizens:

- *Public Health—Illness prevention*
- *Environmental Management—Pollution prevention and control*
- *Regulated Activity Approvals—License*
- *Regulated Activity Approvals—Permit*

Support Delivery of Services:

- *Business Management of Information—Information Collection*
- *Business Management of Information—Information Sharing*
- *Controls and Oversight—Corrective Action*

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

The NRC Licensing Tracking System (LTS) is used by the Office of Nuclear Material Safety and Safeguards (NMSS) to manage the licensing and inspection of medical, academic, and industrial users of nuclear materials, and is critical to our ability to carry out our responsibility as an independent regulatory agency. Carrying out our regulatory duties helps prevent disease and death due to radiation overexposure, and safeguards the environment by protecting it from radioactive contamination.

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

Yes, the current LTS was approved through the NRC EA Review Committee..

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

In FY 2003, NMSS is carrying out a Licensing Business Process Improvement (BPI) to identify process simplification/reengineering and design specification for the replacement LTS. Process improvements we anticipate include:

- *Web-based licensee self-service will allow data entry, inquiry, correction, and some processing of license applications and renewals. This will lead to efficiencies for both licensees and NRC staff.*
- *Integrated, automated workflow will allow more efficient organization of NRC staff with fewer paper processes, hand-offs, searching in multiple databases, concurrences, etc.*
- *Regulatory technical staff will be freed from many administrative processing chores to pursue more substantive issues.*

- *NMSS inspectors will have licensee information and automated inspection forms at their finger tips on hand-held or other small devices in the field, eliminating research and inspection preparation time, as well as post-inspection administrative work.*

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

The Licensing BPI will identify organization restructuring, training, and change management projects that will be needed.

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

LTS is involved in the following Agency lines of business as expressed in the 1997 NRC Enterprise Architecture:

- *Licensing Approval—Effective new licensing, renewal and guidance*
- *Licensing Approval—Safe facility operation and responsiveness*
- *Inspections, Investigations, Enforcement—Independent review of NRC activities*
- *Inspections, Investigations, Enforcement—Effective new licensing, renewal and guidance*

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

There are no new implications for either the current LTS, or the replacement for LTS to the agency business architecture, since neither changes our mission or lines of business.

II.A.2 Data

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

The replacement for LTS will capture information used in managing license applications, reviews, amendments, renewals, and inspections, for medical, industrial, and research users of nuclear materials. A long term goal is to capture information used in managing these and other functions used in regulating nuclear waste facilities as well. Examples of information captured include:

- *Licensees facilities*
- *Insurance coverage*
- *Authorized procedures*
- *Nuclear devices, sources, and amounts authorized*
- *Authorized personnel and their professional certifications*
- *Applicable regulations*
- *Prior inspections*
- *Citations and enforcements*
- *Applicable regulations*

The data requirements for this system will come from the existing LTS and from the outcome of the Licensing Business Process Improvement project currently underway, which may propose consolidating the data from other systems, for example, the General Licensing Tracking System (GLTS) into the LTS replacement project.

Depending on the outcome of the pending legislation described in I.A.2, Nuclear Security Act of 2002, there may be significant new data requirements. When the legislation is passed, and we know the scope of the new

requirements, NRC will provide an updated Exhibit 300 with more specific information about the data needed to support the new statutory requirements.

- 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 in the current LTS does not exist in any other federal, state, or local system.

The data in the replacement for LTS, as currently planned, does not exist in any other federal, state, or local system.

Depending on the outcome of the pending legislation described in I.A.2, Nuclear Security Act of 2002, there may be significant new data requirements which may necessitate integration of NRC data with that from existing systems in the Agreement States. When the legislation is passed, and we know the scope of the new requirements, NRC will provide an updated Exhibit 300 with more specific information about the data needed to support the new statutory requirements.

- 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?

We do not think there will be legal reasons not to transfer data from Agreement States, should this become a statutory requirement.

- 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.

This project does not process spatial data.

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 current LTS is a legacy system, slated for replacement. It currently operated in the RAMIS II database environment on a mainframe computer. The current LTS is included in the application and technology layers of NRC's 1997 Enterprise Architecture.

The acquisition strategy the replacement for LTS will prefer solutions which are compatible with the emerging new Enterprise Architecture for the agency.

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

Yes, the hardware, applications, and infrastructure requirements for the current LTS are included in the current EA Technical Reference Model.

The replacement for LTS is in the conceptual stage, so not all requirements have been identified at this time. The acquisition strategy will prefer hardware, applications, and infrastructure already identified in the Technical Reference Model. If appropriate, we will perform a cost benefit risk analysis to explore the alternative of introducing new technology into the Enterprise Architecture. If cost effective, we will pursue NRC's Environment Change Control process to explore the feasibility and cost-benefit of adding additional services to the Technical Reference Model.

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)?

OCIO is responsible for maintaining and funding the underlying NRC network infrastructure on which LTS relies for general network and system security.

The program office, NMSS, pays for:

- *The LTS Security Plan, Risk Assessment, Disaster Recovery Plan, security testing, security training, and system certification and accreditation.*
- *The contract with National Institutes of Health to host the current LTS at its data center, which provides mainframe security. This contract will not be needed once the replacement for LTS is operational.*

In the future, NMSS will also pay for building in security features and controls into the replacement for LTS.

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

\$67K is allocated to operational security for the current LTS in FY 2004.

As the replacement for LTS is in the conceptual stage, the only FY 2004 expense will be in system development, budgeted at \$550 for that year. We believe that the security component, including planning for security, implementing functionality for difference business roles, audit trail processing and password administration, may constitute up to 20% of development.

- 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?

- 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?

The first annual GISRA-required IT security review for LTS was conducted in 2001, following NIST guidance. The 2002 self assessments were conducted in June 2002.

Currently, in August 2002, NMSS is completing the first GISRA-required Security Plan, Risk Assessment, Business Continuity Plan (BCP), and Security Test and Evaluation (STE) Plan for LTS. Once these reports are finalized, the STE will be implemented (i.e., the System Security Plan will be tested), and BCP training and testing will take place. This will bring NMSS systems, including LTS, into compliance with GISRA Level 4.

- 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 anticipate certifying and accrediting LTS as a result of the GISRA-required processes currently underway. (See II.B.2.A.) A certification report identifying any failures and needed actions will be issued as a result of the Risk Assessment and System Test and Evaluation, and signed by the NMSS system owner. The CIP will then sign off on the system, signaling its accreditation and indicating compliance with GISRA Level 5.

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

These tests will be performed as part of implementing the System Test and Evaluation Plan described in II.B.2.A.

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

This training will be performed as part of the Business Continuity Plan training and testing described in II.B.2.A.

- 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 current LTS is operated on a mainframe computer under a Memorandum of Understanding with the National Institutes of Health (NIH). NIH incorporates intrusion detection, audit log reviews, and incident handling into its procedures, and reports significant incidents to GSA's FedCIRC.

The replacement for LTS is in the conceptual stage. These safeguards and policies will be required of the new system.

- 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 current LTS is operated on a mainframe computer under a Memorandum of Understanding with the National Institutes of Health (NIH.) NIH operates in conformance with NRC security requirements.

The replacement for LTS is in the conceptual stage. Security requirements as required by law and policy will be required of the new system.

- 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?

There is no public access to LTS.

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

Information in LTS is not private. Citizens may request to see license information.

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

The current LTS does not contain personal information about individuals.

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 current LTS does not implement electronic transactions. Paper submissions are scanned and recorded in ADAMS, the NRC electronic records system, and data is hand-entered into LTS.

NMSS is awaiting approval of a Rule which will allow licensees in the near future to submit transactions electronically through the NRC Electronic Information Exchange (EIE). LTS-related data on these submission will still be hand-entered into LTS in the short term. However, direct electronic transactions and record-keeping with minimal duplication of data entry will be a requirement of the replacement for LTS.

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

NMSS's GPEA plan is current as of August 2002.

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

OMB Paperwork Reduction Act (PRA) control numbers from information collections that are tied to this investment include:

- 3150-0010
- 3150-0014
- 3150-0016
- 3150-0017
- 3150-0020
- 3150-0032
- 3150-0120 31
- 3150-0028
- 3150-0132