

October 23, 1997

FOR: The Commissioners

FROM: L. Joseph Callan /s/ Executive Director for Operations

SUBJECT: STAFF REQUIREMENTS MEMORANDUM - BRIEFING ON THE BUSINESS PROCESS REDESIGN PROJECT ON THE REDESIGNED MATERIALS LICENSING PROCESS (SECY-97-034)

**PURPOSE:**

This memorandum responds to the Staff Requirements Memorandum (SRM) dated April 14, 1997, in which the Commission requested the time schedule for implementation and integration of the new portable gauge licensing process with the new Agency infrastructure under development. In that SRM, the Commission also requested the staff to proceed as rapidly as possible with the implementation phase.

**BACKGROUND:**

The first phase of the Business Process Redesign (BPR) was completed in May 1995. The second phase began in September 1995. The Commission was provided status reports on the progress of this phase in SECY-96-139, dated June 26, 1996; SECY-97-04, dated February 14, 1997; and in briefings to the Commission on July 3, 1996, and February 18, 1997, respectively.

After the February 18, 1997, briefing, a SRM was issued on April 14, 1997, which requested, "...the time schedule for implementation and integration of the new portable gauge licensing process with the new agency infrastructure being developed by the CIO, and urged the staff to proceed rapidly, to the greatest extent possible, with the implementation phase."

**DISCUSSION:****1.0 Implementation of Consolidated Licensing Guidance**

Much of the benefit of the new licensing process resulted from the consolidation of the licensing guidance. The Office of Nuclear Material Safety and Safeguards (NMSS) has proceeded rapidly to implement the development and use of this consolidated guidance. The first guidance development effort, "Portable Gauge Licenses," was completed in May 1997 with the publication of the final NUREG-1556, Vol. 1. This guidance, on which the licensing of portable gauges is now based, is available in hard copy and has been placed on the Internet so that licensees can easily access the information and start processing their portable gauge applications using the new guidance. Guidance documents presently under development include radiography, sealed sources and devices, self-shielded irradiators, and fixed gauges. The radiography guidance, NUREG-1556, Vol. 2, was published for comment in September 1997, and guidance for sealed sources and devices will be published in October 1997. Self-shielded irradiator and fixed gauge guidance documents are scheduled to be published for comment in October 1997 and are expected to be published in final form within 8 months from the date the drafts are published for comment.

Over the next three years the guidance consolidation project will update and consolidate approximately 1000 documents consisting of policy and guidance directives, regulatory guides, technical assistance requests and bulletins. In addition, the guidance development process incorporates review, and if necessary, revision of each NUREG in the NUREG-1556 series at respective three year intervals. The development of consolidated guidance, using a team based approach in the Regulatory Product Development Center, implements the original BPR vision laid out in SECY 95-114.

These documents, as they are completed, will be placed on the Internet and implemented by the Regions. The staff has developed a detailed plan to consolidate existing NMSS guidance, in the NUREG-1556 series, as part of the NMSS/Division of Industrial and Medical Nuclear Safety, Operating Plan, and will incorporate this information into the Agency Planning Framework being developed by the Executive Director for Operations.

**2.0 LIONS Prototype**

The Licensing and Inspection Online System (LIONS) prototype, demonstrated in Region II, was a success and accomplished its intended goals. This prototype validated the new automated licensing concept and contained the basic functionality for electronically reviewing a new portable gauge license application. It was not intended to include all the functionality of a

production system (e.g., security of data; backup of the system; interfaces to the Licensing Tracking System (LTS); addition of other license categories; or the ability to process amendments, renewals, and terminated licenses). The staff considered implementing the prototype "as-is" and making it a stand-alone system in response to the Commission's interest to proceed rapidly with the implementation phase. The associated high maintenance costs and risks of having no backup capability and lack of security for the data, however, did not warrant implementing the current prototype. Before widespread use of the system could occur, the prototype needed to be converted into a robust production system. Several steps are necessary in order to convert the existing prototype into a production system.

First, the data used by LIONS needs to reflect the final guidance document. The prototype was based on the draft consolidated license guidance for portable gauges.

Second, the design of the production system needs to take advantage of and be compatible with the Agency's underlying information technology infrastructure. Two new infrastructure initiatives that will impact LIONS are now underway: the Agency-wide Document and Management System

(ADAMS) which will provide the document management and workflow required by LIONS; and the conversion to Windows NT as the Agency's desktop computer operating system.

Third, the production design needs to include additional functionality, as indicated above, for an operational system.

Lastly, the production design needs to be scalable, so that other license categories can be added and modified with minimal effort. The prototype design was written strictly for review of only new portable gauge license applications and was not scalable, as written.

With the contractor's assistance, and in coordination with the Office of the Chief Information Officer (OCIO), an assessment of the prototype was performed to determine the resources necessary, considering the steps required for a production system, in deploying a production system in Region II. The contractor estimated that it would take 372 labor weeks (18-24 months of effort depending on the number of persons placed on the project) and approximately \$970,000 (implementation for new portable gauge licenses only). The actual costs are now expected to be lower since the estimate included developing functionality that ADAMS will now provide.

### **3.0 LIONS Implementation**

The implementation date for LIONS depends on resolution of the following items:

- LIONS is now at a stage in its life cycle that requires a Capital Planning and Investment Control (CPIC) analysis, in accordance with the Clinger-Cohen Act (formerly the Information Technology Management Reform Act). At the start of the LIONS development, a CPIC analysis was not required. The information collected for justification and support of the LIONS system under the BPR process is similar but additional information is required, to adequately perform the CPIC analysis. Further development of LIONS depends on favorable results from the CPIC analysis.
- LIONS will be implemented using ADAMS functionality and, therefore, depends on the new infrastructure schedule (i.e., ADAMS and the Windows NT environment). Early operational deployment of ADAMS is expected in the fourth quarter of fiscal year 1998, for a limited number of Agency users. The current schedule for ADAMS deployment in the Regions is for January 1999 through March 1999. The exact sequence and priority of users are still being determined. Close coordination with OCIO management and staff responsible for ADAMS deployment has already begun, and will continue throughout the ADAMS development life cycle, to ensure that LIONS' integration is accomplished as early as possible. The scheduled completion date for the Agency-wide upgrade to Windows NT Workstation is December 31, 1998.
- Currently, \$300,000 is available for developmental work for LIONS, which will provide a generic design for which other license categories can be easily added, and conversion of the prototype portable gauge review modules into a production system. This work will not begin unless the results of the CPIC analysis are favorable. In FY 1999, \$300,000 is available to implement the production modules for review of portable gauge applications in Region II based on the new Agency infrastructure and to commence development of review modules for other licensing categories. Funds are presently budgeted for FY 2000 and FY 2001 to continue this process. If additional funds are available, further work in FY 1998 and FY 1999 on LIONS can be completed through the acceleration of development schedules.

### **4.0 LIONS Implementation Schedule**

The LIONS implementation schedule, based on the conditions above, is estimated as follows:

October 1997 - LIONS CPIC analysis is expected to begin.

February 1998 - Provided the results of the CPIC analysis are favorable, LIONS development work is expected to start. The initial task will be to convert some of the functionality in the prototype into a production system. At the conclusion of this task, the contractor is to provide a plan listing the resources required to implement the electronic portable gauge license process in Region II, and a schedule for additional LIONS functionality and development using a phased implementation methodology. LIONS deployment is expected to begin in Region II and then expand to the remaining Regions.

January 1999 - LIONS is expected to be implemented in Region II beginning in the January 1999 to March 1999 time frame in concert with the current schedule for deployment of ADAMS.

Additional work on LIONS would provide inclusion of additional licensing categories (priority will be based on number of licenses affected and on the scheduling of when the consolidated licensing guidance documents are completed); interfaces with LTS and other Agency systems; management reports; and maintenance, etc. This work will be planned and scheduled once the requirements have been further defined.

#### **COORDINATION:**

The Office of the General Counsel has reviewed this paper and has no legal objection. This paper has been coordinated with the OCIO, and the CIO has no technical objection. The Office of the Chief Financial Officer has reviewed this Commission Paper for resource implications and has no objections.

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