ATTACHMENT 4

July 25, 2003

Statement of Work for SEI Analysis and Expert Assistance
NRC Process Improvement for Software Acquisition (SA-CMM)

Background

The U.S. Nuclear Regulatory Commission (NRC) is an independent agency established by the Energy Reorganization Act of 1974 to regulate civilian use of nuclear materials. Specifically, the NRC mission is to regulated the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of the public health and safety, to promote the common defense and security, and to protect the environment. The NRC's regulatory mission covers three main areas: Reactors, Materials, and Waste.

The NRC's Office of the Chief Information Officer (OCIO) plans, directs and oversees the delivery of centralized information technology (IT) infrastructure, applications, and information management (IM) services and the development and implementation of IT and IM plans, architecture, and policies to support the mission, goals, and priorities of the NRC.

A significant number of the requests for IT services received by the OCIO result in an outsourcing activity that acquires application software solutions. The NRC is embarking on a program to improve it processes associated with the management of acquiring software to ensure that objectives and schedules are consistently met and costs are controlled.

Scope

The scope of this project is to evaluate the NRC's current software acquisition environment and processes, develop a GAP analysis document using NRC current state against the SEI SA-CMM, develop an Action Plan for Process Improvement based on the Gap Analysis, and formally brief senior management on the GAP Analysis and Action Plan.

The evaluation of the NRC's current software acquisition processes will entail reviewing lessons learned reports developed as part of the NRC's Capital Planning and Investment Control program (5-6 reports averaging 40 pages each [see Exhibit 1]), the NRC's internal guidance documents relating to software acquisitions (6-7 documents averaging 150 pages-[see Exhibit 2]), and interviewing Project Managers of selected past software acquisition projects and knowledgeable NRC staff (probably no more then 15 persons [Exhibit 3]) who are associated with the acquisition planning, authorization, systems development and receipt/implementation, and contracting activities.

Objective

The objective of this project is to improve the NRC's software acquisition processes and the identify actions that should be taken to address weaknesses and improve our processes. Process improvements recommended in the Action Plan should be based on best practices. Options should be provided.

Statement of Work

1. The NRC will provide the Contractor with Lessons Learned Reports, internal guidance documents and standards, process descriptions, and a list of interviewee names and their area of expertise. From these inputs, the Contractor shall develop an **Project Plan** with schedule and work breakdown structure addressing the objectives of this SOW. Significant milestones for this project are the delivery of the GAP Analysis, the Action Plan, and the Senior Management Briefing. This Project Plan shall be delivered to the NRC within 10 workdays of work startup authorization.

2. The Contractor shall review the materials, conduct interviews, and perform a Gap analysis that results in an identification of process areas that need strengthening. The best practices reflected in the SA-CMM shall be used as the baseline (Levels 2 and 3 only). The Gap analysis shall identify the areas where the NRC meets or exceeds the best practice based on maturity level, and shall identify specific areas of weakness based on the breakout structure of the SA-CMM (KPA, Goals, Commitments, Ability, Activity, Measurement, and Verification). The results shall be documented and delivered the NRC as a **Gap Analysis Report** within 6 work weeks of the approval of the Project Plan. A draft of the Gap Analysis Report shall be provided to the NRC contract point of contact for review and comment at least one (1) work week prior to the final delivery date. The Contractor shall schedule a meeting to discuss NRC's comments on the second business day after of delivery of this draft.

3. Based on the findings reflected in the Gap Analysis Report as they correspond to the levels and the KPAs in the SA-CMM, the Contractor shall develop an **Action Plan** that identifies steps that should be taken, examinations that should be conducted, etc., to improve the NRC's processes. This Action Plan shall define, based on knowledge of the organizational structures of the OCIO and NRC, the lead responsibility for the action and an estimate of level of effort (significant = over 500 staff hours, moderate = between 200 and 500 staff hours, quick = less than 200 staff hours). The Contractor shall deliver this Action Plan within 3 work weeks of the delivery of the GAP Analysis Report. A draft of the Action Plan shall be provided to the NRC contract point of contract for review and comment at least one (1) work week prior to the final delivery date. The Contractor shall schedule a meeting for discussion of NRC comments on the second business day after delivery of this draft.

4. The Contractor shall develop an **briefing** for Senior Management describing the approach taken to develop the Gap Analysis, the findings, and the proposed Action Plan for process improvement. The Contractor shall be prepared to answer questions posed by Senior Management regarding any of the briefing materials including requests to provide examples of findings and actions that are indicated. This briefing shall be delivered at the NRC headquarters location within 2 weeks of the delivery of the Action Plan, but shall have allowed at least one work week for the Senior Staff to review the Gap Analysis and the Action Plan.

5. The Contractor shall also provide brief **Letter Reports** on progress based on the items defined in the Project Plan. These Letter Reports shall report status of the tasks, progress made during the reporting period, problems identified and options for correction, and plans for the next reporting period. The reports shall be delivered to the NRC contract point of contact on a monthly basis. Since this is a very short work effort, it is expected that at least bi-weekly the NRC Project Manager and the SEI Project Manager will discuss status and schedule by telephone or e-mail.

Period of Performance

The period of performance for this work effort is 12-13 calendar weeks.

Level of Effort

The level of effort defined is estimated to be approximately 490 hours.

Place of Performance

Interviews, meetings on draft deliverables, and briefings shall be conducted at the NRC headquarters at 11545 and 11555 Rockville Pike, Rockville, MD. 20852-2738. Analysis and deliverables preparation shall be at the Contractor's site.

NRC Project Manager

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Travel and Lodging

These expenses shall be listed as Other Direct Costs and shall be subject to prescribed limitations regarding allowable costs for the region of the United States visited **(DC Metropolitan Area).**

Deliverables

Name of Deliverable	Responsibility	When Due
Project Plan	SEI	10 workdays from project start date
Gap Analysis Report (draft)	SEI	5 work weeks from approval of Project Plan
Gap Analysis Report (final) incorporates comments from draft review	SEI	6 work weeks from approval of Project Plan
Action Plan (draft)	SEI	2 work weeks from deliver of final Gap Analysis Report
Action Plan (final) incorporates comments from draft review	SEI	3 work weeks from delivery of final Gap Analysis Report

Briefing Materials and Delivery of Briefing	SEI	2 work weeks from delivery of final Action Plan
Letter Reports	SEI	bi-weekly through period of performance

EXHIBIT LISTS

EXHIBIT 1 - Lessons Learned Reports

1. Lessons Learned from STARFIRE Core Accounting Module (1/26/01)
2. Capital Planning and Investment Control Process Lessons Learned Analysis (9/00)
3. Agencywide Documents Access and Management System Lessons Learned Analysis (1/01)
4. Lessons Learned Paper for the General License Tracking System (GLTS) (3/02)
5. Lessons Learned for Licensing Support Network (due in within the next month)

EXHIBIT 2 - Policy and Guidance to review

MD 2.1 - Information Technology Architecture
MD 2.2 - Capital Planning and Investment Control
MD 2.4 - Acquisition of Federal Information Processing Requirements
draft MD 2.5 - Applications Systems Life Cycle Management (SDLCMM)
MD 11.1 - NRC Acquisition of Supplied and Services
MD 11.7 - NRC Procedures for Placement and Monitoring of Work with U.S. Department of Energy (DOE)
MD 11.8 - NRC Procedures for Placement and Monitoring of Work with Other Federal Agencies Other than DOE

EXHIBIT 3 - Potential Interviews

Acquisition/Procurement	Guy Wright, Sally Adams, other DCPM
Project/Acquisition Mgmt	Michael MacWilliams-RPS, Daniel Graser/Mathew Schmidt-LSN, Thomas Rich/Joel Bristor-GLTS
Capital Planning and Investment Control	Stuart Reiter, John Sullivan, Jesse Funches (or CFO party)
Budgeting Process	CFO party
SDLCMM/CCM	Karen VanDuser, Ron Deavers/Glenn Hollenbeck/Jim Cobb
IDPM	Wm Szyperski, Arnold Levin