

#### Department of Energy National Nuclear Security Administration Washington, DC 20585 October 18, 2005

OFFICE OF THE ADMINISTRATOR

The Honorable A. J. Eggenberger Chairman Defense Nuclear Facilities Safety Board 625 Indiana Avenue, N.W. Suite 700 Washington, D.C. 20004-2901

Dear Mr. Chairman:

In my letter of February 25, 2004, I forwarded to you a copy of the Status Report of the Recommendations from the NNSA Lessons Learned Review of NASA's Columbia Accident Investigation Board Report. I have completed my review of the recommendations and have enclosed a status report summarizing my decisions concerning which recommendations to act on and my rationale for deferring one recommendation. The report also describes the current status of actions to address the recommendations that we have adopted.

If you have any questions, please contact me or have your staff contact Jim McConnell at 202-586-4379 or Dick Crowe at 301-903-6214.

Sincerely. Turto FBronk

Linton F. Brooks Administrator

Enclosure

cc: M. Whitaker, DR-1



Status Report of Recommendations from the NNSA Lessons Learned Review of NASA'S Columbia Accident Investigation Board Report

September 2005

## 1.0 BACKGROUND

## 1.1 NNSA Lessons Learned and Recommendations from Review of NASA's Columbia Accident Investigation Board Report

By memorandum dated September 9, 2003, the NNSA Administrator assigned Brigadier General Haeckel to lead a team to review the lessons learned from the space shuttle Columbia Accident Review Board (CAIB) and compare those lessons learned to operations in NNSA.

The primary focus of the team's review was Defense Programs (NA-10) and the Office of Nuclear Nonproliferation (NA-20), their relationship with the Service Center and the eight Site Offices, and on how the conclusions of the CAIB might provide insight to improve the management culture, organization, and technical capability of the NNSA. All reference to the NNSA organization within this report excludes Naval Reactors (NA-30) because of their already established and recognized strong safety program.

The review team was divided into three sub-teams (Management and Safety Culture Improvement (CI), Corporate Organization Improvement (OI) and Technical Capability (TC)), which developed ten lessons learned themes, as follows:

- Oversimplification of technical information could mislead decision-making
- Proving operations are safe instead of unsafe
- Management must guard against being conditioned by success
- Willingness to accept criticism and diversity of views is essential
- Effective centralized and de-centralized operations require an independent, robust safety and technical requirements management capability
- Assuring safety requires a careful balance of organizational efficiency, redundancy and oversight
- Effective communications along with clear roles and responsibilities are essential to a successful organization
- Workforce reductions, outsourcing, and loss of organizational prestige for safety professionals can cause an erosion of technical capability
- Technical capability to track known problems and manage them to resolution is essential
- Technical training program attributes must support potential high consequence operations

## 1.2 Recommendations from NASA's Lessons Learned for NNSA

From the outset of the team's review of the CAIB Report, the similarity of problems and challenges for NNSA and NASA were evident. *The NNSA Lessons Learned and Recommendations from Review of NASA's Columbia Accident Investigation Board Report* was issued February 19, 2004.

The NNSA CAIB review team developed 30 recommendations. The team advised that the NNSA Leadership Coalition and the Management Council carefully consider all recommendations and communicate the cultural and organizational lessons learned to all NNSA organizations. The following is a summary of the disposition and status of those recommendations.

## 2.0 DISPOSITION AND STATUS OF NNSA CAIB REPORT RECOMMENDATIONS

As a result of Leadership Coalition decisions, the NNSA Lessons Learned Report recommendations are dispositioned as indicated below. Recommendations annotated in **bold** indicate those the NNSA Lessons Learned Team recommended "must" be implemented by NNSA management or an alternative approach must be found to address the underlying problem or lesson learned. Those that are not bolded "should" be considered and implemented, as management considers appropriate. The identifier for each recommendation is from the NNSA Lessons Learned Report. A summary table is included at the end of the report.

## **Recommendation:**

1. Site Offices and contractors should also submit their Lessons Learned reports from the CAIB review applicable to their operations to the Administrator. The NNSA should then establish an enterprise-wide team to examine the collective findings, integrate the results, and develop complex-wide (Site generic and enterprise-wide) recommendations for action.

## Status of Action Taken:

Lessons learned reports from the following organizations were submitted and reviewed:

- LLNL
- LSO
- LANL
- LASO
- SNL
- SSO
- KCP
- KCSO
- NSO and BN
- PXSO and BWXT Pantex
- WSRC
- SRSO
- YSO and BWXT- Y12
- OST

The generic lessons learned in these reports were encompassed in the NNSA Lessons Learned Report. Most sites developed local lessons learned and are pursuing action plans.

## **Action Complete**

POC: Dick Crowe, NA-2.1

## **Recommendation:**

2. Naval Reactors has an established and recognized safety program. Operations related to NNSA's relationship with the Department of Defense as a designer and supplier of weaponized nuclear explosives were not thoroughly examined. A review of safety methods/culture in NA-30 and our relationship with DoD may deserve follow-on action in order to improve the NNSA safety culture.

## **Status of Action Taken:**

The Acting Chief of Defense Nuclear Safety reviewed the Naval Reactors safety program. This included a visit to the Naval Reactors offices and discussions with several senior officials. The insight gained was used in the development of the model for the Office of Chief of Defense Nuclear Safety.

#### **Action Complete**

POC: Dan Glenn

#### **Recommendation:**

## OI-1.1 Establish a Chief Engineer (in lieu of an ES&H Advisor).

The Leadership Coalition held significant discussions on this topic. The decision was made to establish a Chief of Defense Nuclear Safety (CDNS) "*in addition to*" vs. "*in lieu of*" an ES&H Advisor. This decision was based on the following points:

First, historically all of DOE's fatalities and the majority of employee injuries resulted from standard industrial accidents, and therefore, continued attention associated with occupational safety is warranted.

Secondly, NNSA works with materials and conducts activities generally categorized as "inherently hazardous" and can present unique consequences far more severe than standard industrial accidents. While we continually strive to minimize the risks and secure a safe work environment, we must recognize that we deal with uniquely hazardous materials. This work demands continual, <u>focused attention</u> to make sure we are doing everything within our capability to assure high-consequence accidents do not occur.

It was concluded that by separating the "standard industrial scenarios" from the lowprobability, high-consequence nuclear scenarios, NNSA would not dilute either area with the other, and could dedicate and focus specific expertise to better perform its responsibilities to safeguard the worker, public and environment.

#### **Action Complete**

POC: Dan Glenn/Jim McConnell, NA-2.1

#### **Recommendation:**

TC-3.1 Re-baseline the Technical Qualification Program (TQP) to ensure that the correct personnel are in the program and establish performance expectations for those personnel in the program.

#### **Status of Action Taken:**

All sites and HQ have completed re-baseline. Updated data has been entered in the Service Center database.

#### **Action Complete**

POC: Frank Russo, NA-3.6

#### **Recommendation:**

TC-3.2 Revitalize the TQP. Establish performance metrics that will be reviewed by the Administrator and senior management on a periodic basis.

#### **Status of Action Taken:**

The Service Center has assumed coordinating duties for the TQP. A TQP Administrator has been hired and the office is up and running. Performance metrics have been set by the Federal Technical Capabilities Panel (FTCP) and reported to senior management quarterly. The TQP Plan was approved by NA-1 and is being implemented.

#### **Action Complete**

POC: Frank Russo, NA-3.6

#### **Recommendations:**

CI-1.1 Re-evaluate decision-maker qualifications and technical development for key decision-makers. All key NNSA managers involved in potential high consequence operations should have technical educational backgrounds or complete a rigorous

technical training program for eligibility for these positions. Encourage continued technical growth of key NNSA decision-makers. (See also OI-3.2 and TC-3.3)

TC-1.4 Provide the necessary resources and priority for continued technical growth of ES&H staff throughout their careers through additional academic training, industrial rotations, and detail assignments within NNSA. Develop succession plans for safety and program professionals that recognize their respective equal value to the organization and mission. Provide an NNSA career progression that defines the safety and program positions, and timeframes for professional development that equally values safety and program objectives. Use the Facility Representative (FR) program as a model to develop technical competence of all safety professionals. Consider alternate career paths for technical growth including the Richland technical career path model created in 1998.

CI-1.2 Consider minimum term appointments (5 years) for key decision making positions, such as Site Office Managers.

OI-3.2 NNSA should develop succession planning, development, and mentoring programs for risk acceptance officials. (See also CI-1.1 and TC-3.3)

## **Status of Action Taken:**

The NNSA Safety Professional Development Program (NNSA SPDP) is being drafted and will provide for technical training and technical growth. The plan will contain minimum term appointments and will provide for succession planning, development, etc. The plan will provide a career path from entry level to Deputy Administrator.

#### **Action Plan**

Promulgate NNSA SPDP by the end of 2005.

POC: Frank Russo, NA-3.6

#### **Recommendation:**

TC-3.3 Establish a training and qualification program for senior management positions with safety management responsibilities. (See also CI-1.1 and OI-3.2)

#### Status of Action Taken:

The Nuclear Executive Leadership Training (NELT) course has been implemented. First course completed May 2005.

## **Action Complete**

POC: Frank Russo, NA-3.6

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## **Recommendation:**

OI-3.3 Laboratory and Production Site Office Manager responsibilities, including oversight responsibilities, must be defined with respect to the balance of safety and program priorities.

## **Status of Action Taken:**

A revision to the NNSA FRAM was promulgated that defines NNSA roles and responsibilities.

#### Action Complete

**POC:** Frank Russo, NA-3.6

## **Recommendation:**

TC-1.5 Develop a Safety Professional of the Year Award that recognizes most effective safety improvements, innovation in solutions to safety issues, and contribution to improvements to the NNSA safety culture. In addition, implement the recognition programs for federal employees in safety areas.

## Status of Action Taken:

A memo to establish award is in the concurrence process.

#### **Action Plan:**

- The memo was sent out in June 2005
- Nominations are being received presently
- Award in December 2005 and yearly thereafter

**POC:** Frank Russo, NA-3.6

#### **Recommendation:**

OI-2.1 Until the NNSA oversight model is defined and LO/CAS is fully implemented and evaluated as effective, NNSA should reinstate on-site reviews of Site Office oversight systems.

#### **Status of Action Taken:**

The Department issued its revised Implementation Plan for DNFSB Recommendation 2004-01 in June 2005. NNSA will proceed according to the Implementation Plan.

## **Action Plan:**

The Office of the CDNS has developed a protocol and schedule for conducting on-site reviews of nuclear safety performance biennially and has begun performing the periodic reviews.

The Implementation Plan contains commitments for oversight activities, specifically the issuance of a DOE policy, order, and manual. The DOE Policy was issued in June 2005; the DOE Order was issued in September 2005; and work has begun on the oversight manual. The DOE Order will require oversight plans from the program offices and the sites, which will be worked in conjunction with the existing LO/CAS efforts.

The 2004-01 Implementation Plan also contains commitments for the re-invigoration of Integrated Safety Management such as an increased focus on work planning and feedback and improvement and the conduct of periodic ISM reviews. The completion of the Implementation Plan actions, plus the CDNS reviews, will constitute adequate closure on this item.

POC: Jerry Paul/Kim Davis, NA-2

## **Recommendation:**

OI-3.1 Headquarters must provide clear guidance as necessary to Site Managers with respect to delegated safety authorities (e.g., risk acceptance process and when to request support for accepting risks outside "normal" circumstances).

#### **Status of Action Taken:**

The Department issued its revised Implementation Plan for DNFSB Recommendation 2004-01 in June 2005. NNSA will proceed as specified in the Implementation Plan. There are actions associated with the implementation plan that specifically address delegations of safety authorities. As an interim measure, NA-1 established a delegation of startup authorities for NA-2 and NA-10 on April 20, 2005.

In related activities, NNSA issued a Functions, Responsibilities and Authorities Manual update to document functions, roles and responsibilities of safety authorities in February 2005 and, broad roles and responsibilities were established for the Central Technical Authority and signed by the Secretary of Energy on April 26, 2005.

#### **Action Plan:**

The CDNS is issuing periodic technical bulletins to aid field offices in technical interpretations.

NNSA is also developing a concept for risk acceptance in the areas of safety and security. A NNSA interface workshop was held in Germantown, MD in August 2005.

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The Implementation Plan also contains commitments for safety delegations. The Implementation Plan will ensure NNSA documents and executes a defined process for determining safety delegations. The completion of the Implementation Plan actions will constitute adequate closure of this item.

POC: Jerry Paul/Kim Davis, NA-2

## **Recommendation:**

OI-2.2 Headquarters, as well as Site Office managers must routinely conduct self-assessments of their Federal operations.

## **Status of Action Taken:**

The Department issued its revised Implementation Plan for DNFSB Recommendation 2004-01 in June 2005. NNSA will proceed as specified in the 2004-01 Implementation Plan.

## Action Plan:

The Implementation Plan contains commitments for oversight activities, specifically the issuance of a DOE policy, order, and manual. The DOE Policy was issued in June 2005; the DOE Order has been through Departmental concurrence and was approved in September 2005; and work has begun on the oversight manual. The DOE Order will require oversight plans from the program offices and the sites, which will be worked in conjunction with the existing LO/CAS efforts.

The Implementation Plan also contains commitments for the development of quality assurance program plans and integrated safety management system description documents and reviews for DOE elements. The completion of the Implementation Plan actions will constitute adequate closure of this item.

POC: Jerry Paul/Kim Davis, NA-2

#### **Recommendation:**

OI-2.3 Headquarters should routinely review the primary sources of technical information resident in Site Offices (e.g., Facility Representative's periodic reports). (See also TC-2.1)

## **Status of Action Taken:**

The Department issued its revised Implementation Plan for DNFSB Recommendation 2004-01 in June 2005. NNSA will proceed as specified in the Implementation Plan.

## **Action Plan:**

The Chief of Defense Nuclear Safety, supporting the NNSA Central Technical Authority, frequently reviews primary sources of technical information from the field in order to achieve operational awareness. This technical information includes occurrence reports, safety analysis reports, etc.

NA-10 and Service Center personnel also periodically review technical information from the field.

The 2004-01 Implementation Plan contains commitments for oversight activities, specifically the issuance of a DOE policy, order, and manual. The DOE Policy was issued in June 2005; the DOE Order was approved in September 2005; and work has begun on the oversight manual. The DOE Order will require oversight plans from the program offices and the sites, which will be worked in conjunction with the existing LO/CAS efforts. The completion of the 2004-01 Implementation Plan actions will constitute adequate closure of this item.

POC: Jerry Paul/Kim Davis, NA-2

## **Recommendation:**

TC-2.1 NNSA should re-establish an analysis/trending function for complex-wide issues at either HQ or the Service Center to be periodically reviewed by NNSA senior leadership.

## **Status of Action Taken:**

The Department issued its revised Implementation Plan for DNFSB Recommendation 2004-01 in June 2005. NNSA will proceed as specified in the Implementation Plan.

#### **Action Plan:**

The 2004-01 Implementation Plan contains commitments for the improving the Department's operational experience program. A draft operating experience order has been drafted and is ready to go into RevCom. The completion of the 2004-01 Implementation Plan actions will constitute adequate closure of this item.

POC: Jerry Paul/Kim Davis, NA-2

## **Recommendation:**

TC-2.2 NNSA should revise the current NNSA voluntary corporate Lessons Learned Program to one of mandatory participation for key NNSA personnel, including the periodic review of past DOE/NNSA accidents and near misses.

## **Status of Action Taken:**

The Department issued its revised Implementation Plan for DNFSB Recommendation 2004-01 in June 2005. NNSA will proceed as specified in the Implementation Plan.

## **Action Plan:**

The 2004-01 Implementation Plan contains commitments for the improving the Department's operational experience program and lessons learned through the Department's review of the Columbia and Davis-Besse events. The Department has issued a corporate Columbia and Davis-Besse action plan. A draft operating experience order has been drafted and is ready to go into RevCom. Completion of the 2004-01 Implementation Plan and corporate Columbia and Davis-Besse plan actions will constitute adequate closure of this item.

POC: Jerry Paul/Kim Davis, NA-2

#### **Recommendation:**

OI-2.4 The NNSA should further define OA's role in the oversight process through a formal agreement. In particular, clarify OA's role in providing assurance to the Administrator regarding the effectiveness of NNSA's risk acceptance.

#### **Status of Action Taken:**

An Interface Protocol between NNSA (NA-3.6) and OA was signed in July 2002. This protocol requires OA to provide the schedule, subject, and scope of their reviews to NA-1 for review and comment. The protocol requires NNSA to identify potential topics of concern and sites for inclusion in the OA review plan and to comment on the schedule, subject, and scope of their reviews. Implementation of this protocol addresses this recommendation.

#### **Action Complete**

**POC:** Frank Russo, NA-3.6

#### **Recommendation:**

CI-4.1 NNSA senior management should communicate the cultural and organizational lessons learned for NNSA from the NASA CAIB Report.

## **Status of Action Taken:**

The NNSA Report was issued in February 2004. Activities to address the report recommendations have been informally communicated through meetings and publications.

## **Action Plan:**

A formal report of the status of implementation of recommendations and action plans will be issued in October 2005 with periodic updates issued until all recommendation are closed out.

POC: Jim McConnell/Dick Crowe, NA-2.1

## **Recommendations:**

CI-4.3 Develop and publish a safety culture policy statement that clearly defines NNSA's commitment and expectations regarding the role of safety within NNSA. The policy statement must be agreed upon by all the major NNSA organizational elements and NNSA should consider bringing in outside expertise to give the NNSA Administrator independent assistance in development and implementation steps toward improving NNSA's safety culture.

CI-1.3 Change the safety behavior of NNSA in meetings in order to encourage diverse viewpoints. (See also CI-4.2)

CI-2.1 Establish consistent safety expectations in strategic and operational plans.

CI-3.1 Reinforce expectations (e.g., safely accomplishing NNSA's mission by development and implementation of a NNSA Safety Culture) through individual and contractor performance standards.

## **Status of Action Taken:**

The NA-10 has developed a NNSA Roadmap for Nuclear Facility Quality Assurance Excellence. This effort has been coordinated with the CDNS, DNFSB staff, all NA-10 sites, and the DNFSB Recommendation 2004-01 implementation team. Integration of these efforts are well underway.

## Action Plan:

The safety culture recommendations will be addressed in the implementation of the QA Roadmap and implementation of the enhancements to ISM described in the Implementation Plan for DNFSB Recommendation 2004-01. The completion of the Implementation Plan actions will constitute adequate closure of this item.

POC: Rabi Singh, NA-10; Jim McConnell/Dick Crowe, NA-2.1; Kim Davis, NA-2

## **Recommendation:**

CI-4.4 Establish an NNSA Senior Safety Council that is comprised of experienced safety professionals to guide NNSA and provide long-term consistency and continuity of safety policies, standards, and practices. Hold periodic (no less than semi-annual) safety forums to discuss, at a minimum, trends, issues, lessons learned and best practices from both internal and external sources.

## Status of Action Taken:

The NNSA Leadership Coalition has determined that they, as line managers, comprise the NNSA Senior Safety Council. The CDNS and the site and headquarters representatives that comprise the Nuclear Safety Group support them. The Nuclear Safety Group held the first safety forum in May 2005. Designation of these groups addresses this recommendation and it is considered complete.

#### **Action Complete**

POC: Jerry Paul, NA-2; Jim McConnell, NA-2.1

## **Recommendation:**

CI-4.2 Change the safety behavior of NNSA to be more open to alternate views and minority opinions. Develop and implement Site specific and key organizational (Service Center, NN, DP) procedures on differing professional opinions. Develop and implement a formal standardized minority opinion disposition process such as that used by the Nuclear Explosives Safety Study group. (See also CI-1.3)

#### **Status of Action Taken:**

NNSA is issuing NAP XXX Differing Professional Opinion Process to address this recommendation. This action is complete when the NAP is issued.

## **Action Plan:**

The NAP is in concurrence and will be coordinated with the DOE-wide policy on differing professional opinion.

**POC:** Jim McConnell, NA-2.1

#### **Recommendation:**

OI-1.2 Elevate the management and oversight of operational and infrastructure issues within NA-10 and provide adequate resources by creating an organization that reports directly to the Deputy Administrator.

#### **Status of Action Taken:**

NA-10 has evaluated this recommendation and concluded that no immediate action is required.

#### **Action Plan:**

No immediate action is planned. This recommendation will be re-considered and factored in when making any future organization changes.

#### Justification for Completed or Deferred Action:

The Deputy Administrator is responsible for management and oversight of operational and infrastructure issues for the nuclear weapon complex. In exercising this responsibility the Deputy Administrator is supported by the Assistant Deputy Administrator for Research, Development and Simulation (NA-11) and the Assistant Deputy Administrator for Military Application and Stockpile Management (NA-12). This arrangement assures integration of safety considerations into program decisions. In addition to its internal resources, the Deputy Administrator receives advice from the Chief, Defense Nuclear Safety and the NNSA ES&H Advisor and resource support for executing its oversight responsibilities from the NNSA Service Center.

POC: Tom D'Agostino, NA-10

#### **Recommendation:**

TC-1.1 In the very near future, convene a working meeting between the Service Center (emphasis on safety expertise within the ES&H Department) and potential customers (Site Offices, HQ Offices) to map out expectations of the Service Center for the next year or two. (See also TC-1.3)

#### **Status of Action Taken:**

The role of the Service Center (SC) in the safety and health activities of NNSA has been identified through the NNSA Functional Matrix, and described in the NNSA Functions, Responsibilities, and Authorities Manual. More detailed expectations on the types of work best suited for the SC, and the types of expertise that should reside there have come through the NNSA Leadership Coalition meetings (composed of the NNSA Site Office Managers, the Service Center Director, Heads of Program Offices, and the Administrator). These activities, with emphasis on the timeframe from mid-2003 to the

present, have provided a consistent management direction with solidifying expectations on the safety expertise that needs to be developed and maintained within NNSA and with the NNSA/SC as a core technical support organization. The most recent NNSA Staffing Summit results, published on May 2, 2005, illustrate this.

A variety of meetings and discussions have taken place since mid-2003 between SC senior and middle managers, and their counterparts at Site and HQ Program offices to discuss the expertise available in the Service Center's ES&H Department (ESHD); areas and type of work that can be supported; and, the detailed interactions for requesting and performing work, providing direction to staff, and securing feedback on performance. These interactions have resulted in developing and improving processes for requesting work from the Service Center, and in the development of an ESHD annual staffing plan based on customer forecasts of support needs for the past two years (discussed in TC-1.3).

Overall, these activities have provided clarity on the type of work that Site Offices are particularly interested in receiving, and these services have been provided. The Service Center has also used this annual staffing plan to adjust its skills mix through hiring and retraining.

Meetings have been held with NNSA customers to reach understanding about the types of work and specific tasks that they would like the Service Center to perform. Meetings of this nature and resulting staffing studies will continue to be periodically performed. The intent of this recommendation has been met.

## **Action Complete**

POC: Mike Kane, NA-60

#### **Recommendation:**

TC-1.2 Complete an integrated NNSA Staffing Study at a similar level of detail compared to those completed in 1995 and 1998, and use the results of this updated study to validate staffing plans.

#### **Status of Action Taken:**

NNSA's Director of Human Resources, Ray Greenberg, briefed the Administrator in June 2005 on a strategic approach to an NNSA-wide workforce analysis and planning approach to integrated staffing. Linton Brooks directed Mr. Greenberg to develop and implement this approach, completing it during FY 2006.

#### Action Plan:

An implementation memorandum has been drafted for the Administrator's signature to formally implement NNSA's Workforce Analysis and Planning approach:

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- 1. Issue Administrator's implementation memorandum in November 2005.
- 2. Brief the Management Council and Leadership Coalition on the details of this approach and next steps in December 2005.
- 3. Issue companion guidance on the revision of component-level Managed Staffing Plans, conforming to approved staffing targets, to create the Staffing Baseline against which to analyze current and future staffing needs in January 2006.
- 4. Conduct analysis of staffing needs by having managers make assessments against an automated work breakdown structure derived from NNSA's official Matrix of Functions and Activities by Location in January – February 2006.
- 5. Complete documented analysis of staffing needs as part of NNSA's Workforce Plan by March 2006, with a parallel objective to incorporate and integrate NNSA's staffing decisions into the PPBE cycle.

## **POC:** Ray Greenberg, NA-60

## **Recommendation:**

TC-1.3 The NNSA Service Center should employ sufficient technical resources, including support service contractors, to fill peak demand in support of Site Offices and Headquarters requirements, and to provide specific technical assistance on subjects that do not require a full time employee at any single Site Office. (See also TC-1.1)

#### **Status of Action Taken**:

The SC published a Staffing Analysis in March 2004 that analyzed customer forecast needs with respect to areas of expertise and numbers of staff available at that time. Several iterations of discussion took place with customers as specific tasks were discussed among technical staff as well as management during customer visits. Some site offices very specifically requested support for areas that they did not plan to staff locally because of infrequent demand at that location. This analysis influenced the specific technical areas of expertise that were targeted for hire, and also influenced the retraining and redeployment of staff to areas of greater need. The analysis was also of use in Service Center staffing decisions.

A second staffing analysis was performed in April 2005, employing the same methodology. This analysis showed a continuing strong demand in certain nuclear safety areas and that hiring decisions made on the basis of the first analysis had closed the gap significantly. Work requests by customers were generally met for the previous year. The analysis discussed the effect of a particularly demanding peak situation forecast at the Los Alamos Site Office through FY06. This analysis will be used in future staffing decisions in a manner similar to the first. As for the previous year, specific areas of technical expertise that cannot be met with federal staff and for some peak demand situations, support service contractors have been and will be used as the budget allows. Justification for program direction and support service contractor funding will be provided on an ongoing basis.

Actions taken to date to determine staffing levels and type of expertise that the Service Center should employ to meet customer requests have resulted in filling key staff vacancies and in redeployment of staff resources at the SC to meet critical customer needs. The intent of this recommendation has been met as evidenced by the high level of support that the SC has provided to NNSA customers over the past two years. However, vital support service contractor resources are needed to supplement the SC Federal staff in the areas of ORR/RA and software QA, and adequate FY06 and 07 program direction budgets are critical to successful support for the Site Offices. This is especially true in FY06 with the special support effort for LASO underway.

## **Action Complete**

POC: Mike Kane, NA-60

#### No. Recommendation POC **O-open** Comment C-closed Site Reports Crowe С Generic lessons included 1 2 NR/DOD CDNS С Glenn interact with NR OI-1.1 Chief Engineer CDNS С CDNS vice Chief Engineer TC-3.1 NA-3.6 С FTCP Re-baseline TQP TC-3.2 **Revitalize TOP** С FTCP NA-3.6 CI-1.1 Decision-maker NA-3.6 0 NNSA Safety Professional quals Development Program (SPDP) 12/05 TC-1.4 ES&H Staff NA-3.6 0 SPDP 12/05 Technical Growth CI-1.2 Minimum term for NA-3.6 0 SPDP 12/05 key positions OI-3.2 Mentoring NA-3.6 0 SPDP 12/05 program for risk accepting officials TC-3.3 T&Q for Sr NA-3.6 С Nuclear Executive Management Leadership Training (NELT) 5/05 class complete OI-3.3 NA-3.6 С NNSA FRAM Line responsibilities TC-1.5 Safety Prof of NA-3.6 0 Establish and issue Year annual award 12/05 OI-2.1 HQ oversight 0 2004-01 implementation NA-2 CDNS reviews OI-3.1 Delegation NA-2 0 2004-01 guidance FRAM, CTA HO/Site Office NA-2 OI-2.2 0 2004-01 Self-assessments OI-2.3 HO review of site NA-2 0 2004-01 NA-10, CTA, CDNS info TC-2.1 Reestablish NA-2 0 2004-01 analysis/trending function TC-2.2 Lessons learned NA-2 0 2004-01 program OI-2.4 OA role NA-3.6 С 7/2002 Interface Protocol

# **Summary of NNSA CAIB Recommendations**

No.	Recommendation	POC	O-open	Comment
			C-closed	
				between NNSA and OA
CI-4.1	Communicate LL	NA-2.1	0	Formal Status reports
	from report			until closeout
CI-4.3	Safety Culture	NA-10/NA-2	0	QA Roadmap and 2004-
	Policy	NA-2.1		01
CI-1.3	Meeting behavior	NA-10/NA-2	0	QA Roadmap and 2004-
		NA-2.1		01
CI-2.1	Safety	NA-10/NA-2	0	QA Roadmap and 2004-
	expectations in	NA-2.1		01
	Strat Plans			
CI-3.1	Safety in	NA-10/NA-2	0	QA Roadmap and 2004-
	performance plans	NA-2.1		01
CI-4.4	Senior Safety	NA-2/NA-2.1	С	Leadership Coalition
	Council			Nuclear Safety Group
				(CDNS)
CI-4.2	DPO	NA-2.1	0	NAP in concurrence
OI-1.2	Elevate ops and	NA-10	No immediate	To be re-considered in
	infrastructure in		action planned	future organizational
	NA-10			changes
TC-1.1	Service center	NA-60	С	Staffing summits and
	customer needs			needs surveys
TC-1.2	Staffing Study	NA-60	0	Workforce analysis plan
TC-1.3	Service center	NA-60	С	Staffing analyses and PD
	sufficient staff			funding