Department of Energy
National Nuclear Security Administration
Nevada Site Office
P.O. Box 98518
Las Vegas, NV 89193-8518

JAN 31 2007

Roy J. Schepens, Chairman, Federal Technical Capability Panel, DOE/ORP, Richland, WA

NATIONAL NUCLEAR SECURITY ADMINISTRATION NEVADA SITE OFFICE (NNSA/NS0) FY 2007 ANNUAL WORKFORCE ANALYSIS AND STAFFING PLAN REPORT

Please find enclosed the NNSA/NSO Annual Workforce Analysis and Staffing Plan Report. This report was prepared in accordance with your guidance of October 28, 2006.

In summary, the current shortages at NNSA/NSO are:

High Priority

- None

Medium Priority

- Four Senior Technical Safety Managers
- One Criticality Safety FTE
- Three Facility Representative FTEs
- One Safety System Oversight FTE
- Two Safeguard and Security FTEs
- Two Technical Program Manager FTEs
- One Federal Project Director FTE

Other Positions

- 0.3 Civil/Structural Engineer FTE
- 0.5 Aviation Safety Officer
- One Facility Maintenance FTE
- One Industrial Hygiene FTE

The enclosed plan outlines our strategy to meet these requirements in FY 2007.

If you have any questions regarding this plan please contact Stephen A. Mellington, Assistant Manager for Environmental Management, at (702) 295-2123.

Gerald L. Talbot, Jr.
Manager

EM:2761.SM

Enclosure:
As stated

cc:
D. A Chaney, ESHD, NNSA/SC,
Albuquerque, NM
S. J. Coleman, DOE/ORP, M/S H6-60,
Richland, WA
D. C. Bryson, DOE/ORP, Richland, WA
S. A. Mellington, AMEM, NNSA/NSO,
Las Vegas, NV
R. D. Betteridge, AMBCM, NNSA/NSO,
Las Vegas, NV

Annual Workforce Analysis and Staffing Plan Report
As of December 31, 2006
Reporting Office: Nevada Site Office

Section One: Current Mission(s) of the Organization and Potential Changes

1. Nuclear Facilities (Category I, II & III)-Approved Documented Safety Analysis
   - Device Assembly Facility (DAF)
   - Area 3 Radioactive Waste Management Complex (RWMS)
   - Area 5 RWMS
   - Area 12 Core Library

1.1 Nuclear Activities
   - Sub-critical Experiments Assembly
   - Sub-critical Experiments Execution
   - SNM Storage (TA-18)
   - Waste Management
   - Transportation
   - Test Readiness
   - Environmental Restoration
   - Nuclear Materials Management
   - Emergency Response operations

1.2 Hazardous non-nuclear Facilities (includes radiological): radiological facilities are technically nuclear facilities
   - Joint Actinide Shock Physics Experiment Research Facility (JASPER)
   - U1a
   - High Explosive Storage Facilities (Area 27)
   - Clean Slates II/III
   - RADNUCCTEC
   - Criticality Examinations Facility (CEF)
   - Non-proliferation Test and Evaluation Center (NPTEC)
   - Environmental Restoration (D&D) – numerous facilities used to support stockpile stewardship and the nuclear engine program.
   - Atlas Facility
   - Big Explosive Experimental Facility
   - Various Underground Tunnel Complexes
   - Aviation Air Strips and Helo-stops
   - North Las Vegas RTBF facilities
   - Los Alamos Office RTBF facility
   - Livermore Office RTBF facility
   - Remote Sensing Laboratories located at Andrews and Nellis Air Force Bases
   - Special Technologies Laboratory
   - Counter-Terrorism Facilities

1.2.1 Hazardous non-nuclear activities including radiological: radiological is technically nuclear
   - Shock Physic Experiments
   - Work-for-Others Projects (i.e. Homeland Security, DTRA, DOD, Others)
   - High Energy Physics Experiments (High Voltage/Amps)
   - Explosives Experiments
   - *Construction, Drilling & Mining
   - Radiological, chemical, and biological stimulant releases
   - Aviation Operations
   - Lasers
   - Non-proliferation detection development
   - Environmental Restoration
   - Radiographic
   - Attribution

2.0 Potential Changes:
   - Resumption of nuclear weapons testing.
   - Dismantlement of nuclear weapon systems.
   - Glovebox Nuclear Hazard Category 3 Startup (at DAF)
   - RADNUCCTEC Radiological Facility Start-up.
   - CEF Nuclear Hazard Category 2 Startup

- Environmental Restoration cleanups.
- 2030 Stockpile Stewardship Initiatives

Section Two: Technical Staffing

Site Characterization Table

Number of Hazard Category 1, 2 or 3 Nuclear Facilities/Operations, Radiological facilities, or High/Moderate Non-Nuclear Facilities, Low Hazard Facilities	FY 07	FY 08	FY 09	FY 10	FY 11
HC-1	0	0	0	0	0
HC-2	4	6	6	6	6
HC-3	1	1	1	1	1
Radiological Facilities	35 (*)	35	35	35	35
High/Moderate Non-Nuclear Facilities	4 (**)	4	4	4	4
Low Hazard Facilities	601	601	601	601	601

Cat II Nuclear Facilities: (DAF, G-Tunnel, RWMS (2x), CEF (2008), RADNUCCTEC (2008))
Cat III Nuclear Facilities: (Core Technical Library Area 12)
* Facility that handles or contains nuclear materials, but at levels below the threshold (e.g., .25 grams for Co-60) for a Nuclear Category 3 facility as defined in DOE-STD-1027-92 as defined in NV M 412..X-1D, Real Estate/Operations Permit

** The quantity of chemicals contained in the facility exceeds the threshold quantity for those chemicals covered under the Occupational Safety and Health Administration's Chemical Process Safety regulation, 29 CFR 1910, Section 119, Appendix A (e.g., 10,000 pounds for anhydrous ammonia); as defined in NV M 412..X-1D, Real Estate/Operations Permit

Other Functions		FY 07		FY 08		FY 09		FY 10		FY 11	
Number of DSA		5		7		7		7		7	
Number of Safety Systems		19		24		24		24		24	
Number of Site Contractor FTE (See Employment Report with 3% increase) only includes contractors which NSO has Contracting Officer approval)		3334		3537		3643		3752		3865	
Number of Federal Office FTE's- (NNSA)	Number of Federal Office FTE's (NNSA + EM)	108	135	108	135	108	135	108	135	105	135

FY 2007 TECHNICAL STAFFING [1] Technical Staffing Summary Table (see Notes below)					
TECHNICAL CAPABILITY	For All Hazardous Facilities[1]		For Defense Nuclear Facilities[2]		Comments
	Number of FTEs Needed[1]	Number of FTEs Onboard[1]	Number of FTEs Needed [2]	Number of FTEs Onboard[2]	
Senior Technical Safety Managers	12	8	12	8	Vacant:: D/AMEM, D/AMSP, D/AMSO, D/AMSS Occupied: MGR, D/MGR, AMNS, D/AMNS, AMSO, AMSP , AMEM, STA
Safety System Oversight Personnel[3]	3	2	3	2	
Facility Representatives[4]	11	8	6	4	
Other Technical Capabilities:[5]	-----	-----	-----	-----	
Aviation Safety Manager	1	1	0	0	
Aviation Safety Officer	0.5	0	0	0	Support Services Contractor
Chemical Processing	0	0	0	0	
Civil/Structural Engineering	0.3	0.2	0	0	SC Support
Construction Mgmt	1	1	1	1	
Criticality Safety	1	0	1	0	
Deactivation and Decommissioning	0	0	0	0	
Electrical Systems	1	1	1	1	
Emergency Management	3	3	1	1	
Environmental Compliance	7	7	1	1	
Environmental Restoration	7	7	1	1	
Facility Maintenance Mgmt	2	1	1	1	SC Support
Fire Protection Engineering	2	2	1	1	
Industrial Hygiene	1	0	1	0	SC Support
Instrumentation and Control	.05	0	1	0	SC Support
Mechanical Systems	0	0	0	0	
Nuclear Explosive Safety	1	1	1	1	
Nuclear Safety Specialist	4	4	4	4	
Occupational Safety	4	4	2	2	
Quality Assurance	1.5	1.5	1.5	1.5	
Radiation Protection	1	1	1	1	
Safeguards and Security	15	13	5	5	
Safety Software Quality Assurance	0.5	0.5	0.5	0.5	
Technical Program Manager	27	24	6	6	
Technical Training	1	1	1	1	
Transportation & Traffic Mgmt	1	1	0.5	0.5	Support Services Contractor
Waste Management	6	6	2	2	

Notes:

1. These columns are the number of FTEs needed to perform the Federal Safety Assurance function for all hazardous facilities, including defense and non-defense nuclear facilities, radiological facilities, and other hazardous facilities. The Federal Safety Assurance function is described in the DOE *Implementation Plan to Improve Oversight of Nuclear Operations* (in response to Defense Nuclear Facilities Safety Board Recommendation 2004-1).
2. These columns apply only to defense nuclear facilities, and are a subset of the previous columns. These positions are being specified in order to report the status of shortages and any actions taken to fill them to the DNFSB in December 2006 under Commitment 15 in the DOE 2004-1 IP.
3. SSO staffing analysis worksheets can be found at http://www.ftcp.org.
4. Facility Representative staffing analysis worksheets can be found at http://www.ftcp.org.
5. Any additional required technical capabilities should be added to this list. No listed technical capabilities should be deleted.
6. Interns were not included in this staffing analysis.

FY 2008 TECHNICAL STAFFING [1] Technical Staffing Summary Table (see Notes below)					
TECHNICAL CAPABILITY	For All Hazardous Facilities[1]		For Defense Nuclear Facilities[2]		Comments
	Number of FTEs Needed[1]	Number of FTEs Onboard[1]	Number of FTEs Needed [2]	Number of FTEs Onboard[2]	
Senior Technical Safety Managers	12	8	12	8	
Safety System Oversight Personnel[3]	3	2	3	2	
Facility Representatives[4]	11	8	6	4	
Other Technical Capabilities:[5]	-----	-----	-----	-----	
Aviation Safety Manager	1	1	0	0	
Aviation Safety Officer	0.5	0	0	0	Support Services Contractor
Chemical Processing	0	0	0	0	
Civil/Structural Engineering	0.3	0.2	0	0	
Construction Mgmt	1	1	1	1	
Criticality Safety	1	1	1	0	
Deactivation and Decommissioning	0	0	0	0	
Electrical Systems	1	1	1	1	
Emergency Management	3	3	1	1	
Environmental Compliance	7	7	1	1	
Environmental Restoration	7	7	1	1	
Facility Maintenance Mgmt	2	1	1	1	SC Support
Fire Protection Engineering	2	2	1	1	
Industrial Hygiene	1	0	1	0	SC Support
Instrumentation and Control	1	0	1	0	SC Support
Mechanical Systems	0	0	0	0	
Nuclear Explosive Safety	1	1	1	1	
Nuclear Safety Specialist	4	4	4	4	
Occupational Safety	4	4	2	2	
Quality Assurance	1.5	1.5	1.5	1.5	
Radiation Protection	1	1	1	1	
Safeguards and Security	15	13	5	5	
Safety Software Quality Assurance	0.5	0.5	0.5	0.5	
Technical Program Manager	27	24	6	6	
Technical Training	1	1	1	1	
Transportation & Traffic Mgmt	1	1	0.5	0.5	Support Services Contractor
Waste Management	6	6	2	2	

Notes:

7. These columns are the number of FTEs needed to perform the Federal Safety Assurance function for all hazardous facilities, including defense and non-defense nuclear facilities, radiological facilities, and other hazardous facilities. The Federal Safety Assurance function is described in the DOE *Implementation Plan to Improve Oversight of Nuclear Operations* (in response to Defense Nuclear Facilities Safety Board Recommendation 2004-1).
8. These columns apply only to defense nuclear facilities, and are a subset of the previous columns. These positions are being specified in order to report the status of shortages and any actions taken to fill them to the DNFSB in December 2006 under Commitment 15 in the DOE 2004-1 IP.
9. SSO staffing analysis worksheets can be found at http://www.ftcp.org.
10. Facility Representative staffing analysis worksheets can be found at http://www.ftcp.org.
11. Any additional required technical capabilities should be added to this list. No listed technical capabilities should be deleted.
12. Interns were not included in this staffing analysis.

FY 2009 TECHNICAL STAFFING [1] Technical Staffing Summary Table (see Notes below)					
TECHNICAL CAPABILITY	For All Hazardous Facilities[1]		For Defense Nuclear Facilities[2]		Comments
	Number of FTEs Needed[1]	Number of FTEs Onboard[1]	Number of FTEs Needed [2]	Number of FTEs Onboard[2]	
Senior Technical Safety Managers	12	8	12	8	
Safety System Oversight Personnel[3]	3	2	3	2	
Facility Representatives[4]	11	8	6	4	
Other Technical Capabilities:[5]	-----	-----	-----	-----	
Aviation Safety Manager	1	1	0	0	
Aviation Safety Officer	0.5	0	0	0	Support Services Contractor
Chemical Processing	0	0	0	0	
Civil/Structural Engineering	0.3	0.2	0	0	
Construction Mgmt	1	1	1	1	
Criticality Safety	1	1	1	0	
Deactivation and Decommissioning	0	0	0	0	
Electrical Systems	1	1	1	1	
Emergency Management	3	3	1	1	
Environmental Compliance	7	7	1	1	
Environmental Restoration	7	7	1	1	
Facility Maintenance Mgmt	2	1	1	1	SC Support
Fire Protection Engineering	2	2	1	1	
Industrial Hygiene	1	0	1	0	SC Support
Instrumentation and Control	1	0	1	0	SC Support
Mechanical Systems	0	0	0	0	
Nuclear Explosive Safety	1	1	1	1	
Nuclear Safety Specialist	4	4	4	4	
Occupational Safety	4	4	2	2	
Quality Assurance	1.5	1.5	1.5	1.5	
Radiation Protection	1	1	1	1	
Safeguards and Security	15	13	5	5	
Safety Software Quality Assurance	0.5	0.5	0.5	0.5	
Technical Program Manager	27	24	6	6	
Technical Training	1	1	1	1	
Transportation & Traffic Mgmt	1	1	0.5	0.5	Support Services Contractor
Waste Management	6	6	2	2	

Notes:

13. These columns are the number of FTEs needed to perform the Federal Safety Assurance function for all hazardous facilities, including defense and non-defense nuclear facilities, radiological facilities, and other hazardous facilities. The Federal Safety Assurance function is described in the DOE *Implementation Plan to Improve Oversight of Nuclear Operations* (in response to Defense Nuclear Facilities Safety Board Recommendation 2004-1).
14. These columns apply only to defense nuclear facilities, and are a subset of the previous columns. These positions are being specified in order to report the status of shortages and any actions taken to fill them to the DNFSB in December 2006 under Commitment 15 in the DOE 2004-1 IP.
15. SSO staffing analysis worksheets can be found at http://www.ftcp.org.
16. Facility Representative staffing analysis worksheets can be found at http://www.ftcp.org.
17. Any additional required technical capabilities should be added to this list. No listed technical capabilities should be deleted.
18. Interns were not included in this staffing analysis.

FY 2010 TECHNICAL STAFFING [1] Technical Staffing Summary Table (see Notes below)					
TECHNICAL CAPABILITY	For All Hazardous Facilities[1]		For Defense Nuclear Facilities[2]		Comments
	Number of FTEs Needed[1]	Number of FTEs Onboard[1]	Number of FTEs Needed [2]	Number of FTEs Onboard[2]	
Senior Technical Safety Managers	12	8	12	8	
Safety System Oversight Personnel[3]	3	2	3	2	
Facility Representatives[4]	11	8	6	4	
Other Technical Capabilities:[5]	-----	-----	-----	-----	
Aviation Safety Manager	1	1	0	0	
Aviation Safety Officer	0.5	0	0	0	Support Services Contractor
Chemical Processing	0	0	0	0	
Civil/Structural Engineering	0.3	0.2	0	0	
Construction Mgmt	1	1	1	1	
Criticality Safety	1	1	1	0	
Deactivation and Decommissioning	0	0	0	0	
Electrical Systems	1	1	1	1	
Emergency Management	3	3	1	1	
Environmental Compliance	7	7	1	1	
Environmental Restoration	7	7	1	1	
Facility Maintenance Mgmt	2	1	1	1	SC Support
Fire Protection Engineering	2	2	1	1	
Industrial Hygiene	1	0	1	0	SC Support
Instrumentation and Control	1	0	1	0	SC Support
Mechanical Systems	0	0	0	0	
Nuclear Explosive Safety	1	1	1	1	
Nuclear Safety Specialist	4	4	4	4	
Occupational Safety	4	4	2	2	
Quality Assurance	1.5	1.5	1.5	1.5	
Radiation Protection	1	1	1	1	
Safeguards and Security	15	13	5	5	
Safety Software Quality Assurance	0.5	0.5	0.5	0.5	
Technical Program Manager	27	24	6	6	
Technical Training	1	1	1	1	
Transportation & Traffic Mgmt	1	1	0.5	0.5	Support Services Contractor
Waste Management	6	6	2	2	

Notes:

19. These columns are the number of FTEs needed to perform the Federal Safety Assurance function for all hazardous facilities, including defense and non-defense nuclear facilities, radiological facilities, and other hazardous facilities. The Federal Safety Assurance function is described in the DOE *Implementation Plan to Improve Oversight of Nuclear Operations* (in response to Defense Nuclear Facilities Safety Board Recommendation 2004-1).
20. These columns apply only to defense nuclear facilities, and are a subset of the previous columns. These positions are being specified in order to report the status of shortages and any actions taken to fill them to the DNFSB in December 2006 under Commitment 15 in the DOE 2004-1 IP.
21. SSO staffing analysis worksheets can be found at http://www.ftcp.org.
22. Facility Representative staffing analysis worksheets can be found at http://www.ftcp.org.
23. Any additional required technical capabilities should be added to this list. No listed technical capabilities should be deleted.
24. Interns were not included in this staffing analysis.

FY 2011 TECHNICAL STAFFING [1] Technical Staffing Summary Table (see Notes below)					
TECHNICAL CAPABILITY	For All Hazardous Facilities[1]		For Defense Nuclear Facilities[2]		Comments
	Number of FTEs Needed[1]	Number of FTEs Onboard[1]	Number of FTEs Needed [2]	Number of FTEs Onboard[2]	
Senior Technical Safety Managers	12	8	12	8	
Safety System Oversight Personnel[3]	3	2	3	2	
Facility Representatives[4]	11	8	6	4	
Other Technical Capabilities:[5]	-----	-----	-----	-----	
Aviation Safety Manager	1	1	0	0	
Aviation Safety Officer	0.5	0	0	0	Support Services Contractor
Chemical Processing	0	0	0	0	
Civil/Structural Engineering	0.3	0.2	0	0	
Construction Mgmt	1	1	1	1	
Criticality Safety	1	1	1	0	
Deactivation and Decommissioning	0	0	0	0	
Electrical Systems	1	1	1	1	
Emergency Management	3	3	1	1	
Environmental Compliance	7	7	1	1	
Environmental Restoration	7	7	1	1	
Facility Maintenance Mgmt	2	1	1	1	SC Support
Fire Protection Engineering	2	2	1	1	
Industrial Hygiene	1	0	1	0	SC Support
Instrumentation and Control	1	0	1	0	SC Support
Mechanical Systems	0	0	0	0	
Nuclear Explosive Safety	1	1	1	1	
Nuclear Safety Specialist	4	4	4	4	
Occupational Safety	4	4	2	2	
Quality Assurance	1.5	1.5	1.5	1.5	
Radiation Protection	1	1	1	1	
Safeguards and Security	15	13	5	5	
Safety Software Quality Assurance	0.5	0.5	0.5	0.5	
Technical Program Manager	27	24	6	6	
Technical Training	1	1	1	1	
Transportation & Traffic Mgmt	1	1	0.5	0.5	Support Services Contractor
Waste Management	6	6	2	2	

Notes:

25. These columns are the number of FTEs needed to perform the Federal Safety Assurance function for all hazardous facilities, including defense and non-defense nuclear facilities, radiological facilities, and other hazardous facilities. The Federal Safety Assurance function is described in the DOE *Implementation Plan to Improve Oversight of Nuclear Operations* (in response to Defense Nuclear Facilities Safety Board Recommendation 2004-1).
26. These columns apply only to defense nuclear facilities, and are a subset of the previous columns. These positions are being specified in order to report the status of shortages and any actions taken to fill them to the DNFSB in December 2006 under Commitment 15 in the DOE 2004-1 IP.
27. SSO staffing analysis worksheets can be found at http://www.ftcp.org.
28. Facility Representative staffing analysis worksheets can be found at http://www.ftcp.org.
29. Any additional required technical capabilities should be added to this list. No listed technical capabilities should be deleted.
30. Interns were not included in this staffing analysis.

Section Three: Current Shortages and Plans for Filling Them

High Priority Positions:

None

Medium Priority Positions:
Four Senior Technical Safety Managers (STSMs) will be hired by the end of FY 2007 to fill four Deputy Assistant Manager positions. One for the Office of Safety Programs, one for the Office of Environmental Management, one for the Office of Site Operations, and one for the Office of Safeguards and Security.

One additional FTE is required to perform Safety System Oversight (SSO) functions. Based on the past year's experience and recommendations from the recently conducted Chief Defense Nuclear Safety (CDNS) Assessment, NNSA/NSO has concluded that effective implementation of the SSO Program cannot be achieved by assigning collateral SSO duties to existing Subject Matter Experts (SMEs) and Technical Program Managers; although, in some situations this approach may be feasible. The additional FTE will oversee instrumentation and control systems.

Three facility representatives will be hired by the end of FY 2007 utilizing normal recruitment processes. One position is to cover additional activities at the Device Assembly Facility (DAF) resulting from the startup and operation of the critical experiment facility, one position to cover the start-up and operation of the Rad/NucCTEC facility and one position to augment the current Balance of Plant Facility Representative.

Two additional Safeguards and Security positions are required to achieve adequate federal staffing for ensuring secure operations at NNSA/NSO. These positions include staffing for a Physical Security Specialist, and a Classification Officer. These positions will be filled by the end of FY 2007.

Two additional Technical Program Managers are currently needed for National Security Programs. One for Stockpile Stewardship and one for Work for Others activities. These positions are expected to be filled by the end of FY 2007.

One Criticality Safety position will be needed to cover start-up and operation of the Critical Experiments Facility and TA-18 material storage at the DAF. This position will be filled by the end of FY 2007.

One Federal Project Director FTE is required to manage line item and operating projects. This position will be filled by the end of FY 2007.

Other Positions:

The analysis indicated a current need for Facility Maintenance Management, Industrial Hygiene, Aviation Safety Officer, and Civil/Structure Engineering support for a total of 1, 1, 0.5, and 0.3, FTEs, respectively. To provide resources for these functions, NNSA/NSO will procure this expertise through support services contract and/or NNSA Service Center support.

Section Four: Projected Shortage/Surplus Over Next Five Years

After FY 2007 the only projected significant increase in staffing would result from the continued growth in counter terrorism activities funded through the Department of Homeland Security as well as others. At the same time the Area 3 Radioactive Waste Management Site will go into cold standby and the Waste Examination Facility will be decommissioned, which will result in a decrease demand for oversight and safety basis resources. At this time we are not able to project additional shortages/surpluses.

In FY 2008 the Rad/NucCTEC facility becomes operational as well as an increase in site activities in preparation for the start-up of the Critical Experiment Facility. In addition the shipping campaign of materials from TA-18 to the DAF will near completion. These additional activities will require three additional FTEs. One for criticality safety, one for instrumentation and control, and one for an additional facility representative

Section Five: General Concerns or Recommendations Related to the Technical Staffing

NNSA/NSO continues to have significant concerns related to staffing levels overall. Specifically, the current FTE allocation only allows NNSA/NSO to be one deep in most of our critical positions. Although the NNSA Service Center concept was developed to account for this, our experience so far does not indicate that this vehicle is effective for addressing the issue.