



U.S. Department of Energy
NNSA Production Office
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MEMORANDUM FOR KAREN BOARDMAN
CHAIRPERSON
FEDERAL TECHNICAL CAPABILITY PANEL

FROM: KENNETH A. HOAR
ASSISTANT MANAGER
ENVIRONMENT, SAFETY & HEALTH

SUBJECT: Staffing Plan for the National Nuclear Security Administration
Production Office

REFERENCE: DOE Memorandum, *ANNUAL WORKFORCE ANALYSIS AND
STAFFING PLAN REPORT FOR CALENDAR YEAR (CY) 2012*,
Boardman/Agents, dated October 24, 2012

We have completed our analysis of staffing needs per the guidance in the referenced memorandum. Our revised staffing plan for the NNSA Production Office is attached.

Should you have any questions, please contact me at (806) 477-7158 or Susan Morris at (865) 576-3545.

Attachment

cc w/attachment:
S. Morris, NPO-60, Y-12
W. Shoemaker, NPO-60, PX

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

1. NPO, B&W Pantex, LLC, and B&W Y-12 LLC share a joint vision for the Pantex and Y-12 Plant that includes securing America as the NNSA's production integrator and provider of the nuclear deterrent to the Department of Defense; expert in nuclear technology and special nuclear materials processing and manufacturing technologies; serving the Nuclear Security Enterprise through our Highly Reliable people, processes, infrastructure, and business systems. One of NPO's primary roles is maintaining effective oversight of all contracts and contracting operations managed at the Pantex and Y-12 production Plants.

This jointly held vision ensures alignment for the plant and, though through different roles and responsibilities, highlights the common objective for the Plant. The NPO mission supports this common vision and is grouped into the following topical areas:

- **National Security** – protect critical National Security mission elements by being the best led, best trained, and best equipped in protecting strategic nuclear material, weapon components, and infrastructure.
- **Nuclear Technology and Materials** - manufacture complex components to extremely high levels of precision that includes processing highly enriched uranium to propel nuclear submarines in the Naval Reactors Program. This includes a collaborative partnership with other federal agencies and industry to apply the best scientific discoveries to real-world manufacturing challenges, developing processes and producing prototypes. Create prototypes of complex equipment.
- **Nuclear Explosives Operations** - ensure a safe and reliable nuclear deterrent through assessment, surveillance and refurbishment that includes life extension, surveillance and dismantlement.
- **High Explosives Operations** - provide our customers with high explosive products and services through unique core technologies in explosive manufacturing, engineering and physics, materials evaluation and analytical services, and Work for Others Program.
- **Nuclear Materials Management and Storage Program** - receives, stores, protects, dispositions, and manages strategic and special nuclear materials and provides programmatic planning, analysis, and forecasting for national security material requirements supporting the Stockpile Stewardship and other DOE programs.
- **Nuclear Packaging System Program** - provides certified and economical packaging for transporting and storing weapon components and assemblies, radioactive materials, and other materials.
- **Naval Reactors** - NPO Y-12 Plant processes highly enriched uranium for use by the Naval Reactors Program for Naval Nuclear Propulsion. Our support of the Naval Reactors program began in Fiscal Year 2002 and is currently planned through FY 2050 and beyond. We use dismantled weapons to provide feedstock, moving the material off-site and reducing Y-12's storage footprint and risk.
- **Stewardship** - provides the environmental, infrastructure, human capital and energy management stewardship to support the unique production processes at both the Pantex and Y-12 Plants.

2. There are a number of special initiatives and potential changes in requirements that could impact NPO staffing levels in the future. Major areas include the following:
 - Impacts due to implementation of the Nuclear Posture Review (NPR) and Strategic Arms Reduction Treaty (START).
 - Increased in line item projects are expected to increase significantly over the next several years.
 - The Y-12 and Pantex Site Offices were merged in FY 2012 to support the consolidation of the Pantex Plant and the Y-12 National Security Complex Contracts. NPO staff will be required to support the NNSA HQ cost accountants in validating cost savings and avoidance. NPO has streamlined the monthly performance evaluation and assessment process by more heavily relying on contractor performance indicators, metrics, and contractor self-assessments. NPO has instituted cross training/qualification for multiple positions in order to align the work load with available staff and to provide backup

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capability. Cross training/qualification has been implemented for Nuclear Safety Specialists and Safety System Oversight, Facility Representatives, and other subject matter experts.

- NPO added two individuals from the NNSA Future Leaders (FL) Program in 2011. These positions are not counted in the FTE baseline level. These positions are funded separately for the first 2-year period while they complete a prescribed training program. In June of 2013, these positions will be counted against the FY2013 NPO baseline. One of the Future Leader Candidates participates in the Technical Qualification Program in Criticality Safety; the second will be in a Budget Analyst position.

Section Two: Technical Staffing

Number of Hazard Category 1, 2, or 3 Nuclear Facilities:	HC 1: <u>0</u>	HC 2: <u>84</u>	HC 3: <u>0</u>
Number of Radiological Facilities:	<u>62</u>		
Number of Chemically Hazardous Facilities:	<u>19</u>		
Number of Documented Safety Analyses:	<u>31</u>		
Number of Safety Systems:	<u>119</u>		
Number of Site Contractor FTEs:	<u>8,500</u>		
Number of Federal Office FTEs:	<u>160*</u>		

*: This is NPO's current staffing ceiling and includes technical and administrative federal personnel.

Table 1: NPO Staff Positions

For All Facilities ¹			
TECHNICAL FUNCTIONAL AREA	No. of FTEs Needed ¹	No. of FTEs Onboard ¹	COMMENTS
Senior Technical Safety Managers	14	13	1 vacancy due to retirement; working to re-organize and adjust responsibilities
Safety System Oversight (SSO)	11	9.5	
Facility Representatives	18	18	
Nuclear Safety Specialist (NSS)	11	9.75	
Other Technical Capabilities:			
Aviation Manager	0	0	
Aviation Safety Officer	0	0	
Chemical Processing	0	0	Function covered by SSO Engineer (see Note 2)
Civil/Structural Engineering	0	0	Functions covered by Project Managers; support from Service Center as needed.
Construction Mgmt	1	1	
Criticality Safety	2.25	2.25	
Electrical Systems	0	0	Function covered by SSO Engineer (see Note 2)
Decontamination & Decommissioning	0	0	
Emergency Management	2	2	
Environmental Compliance	1	1	
Facility Maintenance Mgmt	1	1	
Fire Protection Engineering	2.5	2.5	
Industrial Hygiene	2	2	
Instrumentation and Control	0	0	Function covered by SSO Engineer (see Note 2)
Mechanical Systems	4	2	Function at Y-12 covered by SSO Engineer (see Note 2)

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For All Facilities ¹			
TECHNICAL FUNCTIONAL AREA	No. of FTEs Needed ¹	No. of FTEs Onboard ¹	COMMENTS
Occupational Safety	2	2	
NNSA Packaging Cert. Engineer	0	0	
Nuclear Explosive Safety	0	0	
Nuclear Operations Engineer	1	1	
Weapons QA Specialist	0	0	Function covered by Weapons QA Engineer position
Weapons QA Engineer	2	2	
Quality Assurance	11	11	
Radiation Protection	1	1	
Safeguards and Security	19	19	
Safety Software Quality Assurance	2	2	Function covered by Weapons QA Engineer at NPO Y-12(See Note 2)
Technical Program Manager	13	13	
Technical Training	2	2	
Transportation & Traffic Mgmt	1	1	Function covered by SSO Engineer at NPO Y-12
Waste Management	0	0	Function covered by Environmental Compliance position (See Note 2)
Federal Project Director (Non-UPF)	7	7	
Notes:			
1. These columns identify the number of FTEs needed to perform the Federal Safety Assurance function for your site or office based on potential facility and operational hazards.			
2. SSO staffing analysis worksheets may be used in this process. They are posted at http://www.hss.energy.gov/deprep/ficp .			
3. Facility Representative staffing analysis worksheets are posted at http://www.hss.energy.gov/deprep/ficp .			
Federal Project Managers/Directors are not qualified via the Technical Qualification Program, but are qualified in accordance with DOE O 360.1A using the Project Management Career Development Program.			

Section Two: Technical Staffing

Table 1: NPO Staff Positions

UPF Project Team			
Federal Project Director	5	5	Quals in progress for 1 individual
Technical Program Manager	1	1	
Project Quality Assurance	1	1	
Project Facility Representative	1	1	
Project Engineering & Design	1	0	Not in baseline FTE target; needed in FY13
Nuclear Safety Engineer	1	0	Not in baseline FTE target; needed in FY13
Criticality Safety Engineer	1	0	Not in baseline FTE target; needed in FY13
Construction Quality Assurance	1	0	Not in baseline FTE target; needed in FY14
System Testing Engineer	1	0	Not in baseline FTE target; needed in FY15
Total Technical Positions	13	8	

Note 1: Facilities, systems, personnel and authorities listed should be those in the organization's immediate line authority. The NPO list includes Federal Staff, Future Leaders, and Support Contractors.

Note 2: Many of the current NPO staff members are covering multiple functional areas. Fortunately, this is due to the high level of technical expertise and experience of the individuals in these areas. This capability will not necessarily be available in future years, resulting in a need for additional staffing.

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Section Three: Current shortages and plans for filling them

The following are the anticipated shortages for NPO in the critical technical capabilities/positions. These positions are contingent upon retaining current staff.

1. Assistant Manager (AM) for Safeguards and Security (SS)
 - a. Deputy Assistant Manager (Pantex)
 - b. Protective Force Manager (Pantex)
 - c. Nuclear Materials Control and Accountability (Pantex)
2. AM for Nuclear Safety and Engineering (NSE)
 - a. AM for (NSE)
 - b. Authorization Basis (AB) Engineer (Y-12)
 - c. AB Team Leader (Pantex)
 - d. Deputy Assistant Manager for (NSE)
3. AM Governance and Performance Assurance (GPA)
 - a. AMGPA
 - b. Weapons Quality Assurance Engineer (Pantex & Y-12)
4. AM Operations Management
 - a. Facility Representative (Pantex)
5. AM Programs and Projects
 - a. UPF Core Team Support – A total of six Technical FTEs are needed (NOT in baseline FTE target) to serve full time on the UPF Core Team starting in 2012. Options for filling these positions are being evaluated.

Section Four: Projected shortage/surplus over next five years

The following table shows the NPO technical positions occupied by individuals who meet retirement eligibility and will represent a potential staffing shortage.

Position/Function	2013	2014	2015	2016	2017
Nuclear Safety Specialist					2
Technical Program Manager	4	1	1		1
Facility Representative	1	1	4	2	2
Senior Technical Safety Manager	2			1	
Classification Specialist					
Federal Project Director					1
Safety System Oversight					
Security Specialists	1			2	1
NMC&A Specialists					
Weapons QA Engineer	1				
Facility Quality Assurance					
Criticality Safety Engineer	1				
Technical Training Manager		1			
Environmental Compliance					1
Environmental Management	1				
Occupational Safety					1
Sub Totals	9	3	5	5	7