



The Deputy Secretary of Energy
Washington, DC 20585

December 6, 2005

MEMORANDUM FOR DISTRIBUTION

FROM: CLAY SELL *Clay Sell*

SUBJECT: Involvement of Highly-Qualified and Experienced Personnel in the Qualification of Others in the Department of Energy "DOE"

The Department committed, in response to Defense Nuclear Facilities Safety Board Recommendation 2004-1, to identify highly qualified and experienced DOE personnel who will assist the Department in improving our overall technical capability. Based on the attached report, "Involvement of Highly-Qualified and Experienced Personnel in the Qualification of Others in DOE," the Department identified personnel in the following five functional areas: Criticality Safety; Fire Protection Engineering; Civil/Structural Engineering; Nuclear Explosives Safety; and Safety Software Quality Assurance to serve as DOE Sponsors for these areas. A list of these DOE Sponsors is in "Action 3" of the report.

Each DOE Sponsor is expected to be involved in the qualification of DOE personnel in the appropriate functional area and to coordinate the increased involvement of other highly qualified and experienced personnel in the functional area. This will be done by performing these roles:

1. Serve as the primary point-of-contact for reviewing and updating the technical content in the particular functional area qualification standard.
2. Serve as a subject matter expert in the assessment of trainees' competencies, as requested by a site or Headquarters office.
3. Evaluate proficiency standards.
4. Conduct training.
5. Be available as a resource to review and assist in the development of training.
6. Participate in interviewing or recruiting new candidates in a particular functional area when requested by a site or Headquarters office.

I encourage you and your organizations to rely on these DOE Sponsors as you enhance your staff's technical capabilities in the applicable functional areas.

Attachment



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Manager, Pacific Northwest Site Office
Manager, Pantex Site Office
Manager, Portsmouth Paducah Project Office
Manager, Richland Operations Office
Manager, Rocky Flats Project Office
Manager, Sandia Site Office
Manager, Savannah River Operations Office
Manager, Savannah River Site Office (NNSA)
Manager, Y-12 Site Office

Involvement of Highly-Qualified and Experienced Personnel in the Qualification of Others in DOE

Response to Commitment 11 in the DOE 2004-1 Rev. 1 Implementation Plan (June 2005)

BACKGROUND

The Department of Energy (DOE) Implementation Plan (IP), Revision 1, in response to Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2004-1 outlines actions DOE will take to upgrade Federal safety assurance and oversight. Commitment 11 of the 2004-1 IP Revision 1 is intended to improve the quality and rigor of technical qualifications across DOE. To achieve this, DOE will identify 2-3 people (i.e., "DOE Sponsors") who are the most experienced and technically capable in five selected functional areas and charge these individuals with a central role in the qualification of others. Once identified, these persons will assist DOE in improving overall technical capability. Activities may include assessing level of knowledge of DOE employees in a particular functional area, reviewing technical qualification standards, evaluating ongoing proficiency standards, and reviewing ongoing training. These personnel could also provide training to others in particular functional areas. This will use the high-quality technical talent that exists within certain areas of DOE to raise the overall standard of technical qualifications across the DOE complex.

The commitment from the 2004-1 IP Rev. 1 is:

Commitment 11: DOE will identify highly qualified and experienced personnel who will assist the Department in improving overall technical capability.

Lead Responsibility: Chairman, FTCP (as an agent for the Deputy Secretary)

Deliverable: A report identifying highly qualified and experienced personnel in select functional areas and describing their roles in improving overall technical capability, as well as a plan for implementing this concept and a mechanism for maintaining the list.

Due Date: July 2005

ACTIONS NEEDED TO COMPLETE THIS COMMITMENT

To fulfill this commitment, the following actions were completed:

1. Select applicable technical functional areas.
2. Identify the roles that the highly qualified and experienced personnel will fulfill.
3. Request nominations and select Primary and Alternate DOE Sponsors.
4. Identify how these roles will be institutionalized and how the roster of DOE Sponsors will be maintained.

ACTION 1: Select Applicable Technical Functional Areas

The following criteria were used to determine which functional areas would be included initially in this commitment:

1. Functional areas are needed to ensure nuclear safety, and
2. Functional areas are applicable to high-consequence, low probability accidents, and
3. Functional areas are highly specialized, and
4. Functional areas have limited personnel within DOE (i.e., DOE sites typically have fewer than 3 people in these functional areas).

Based on these criteria, the following functional areas were initially selected to be included in this action.

- Civil/Structural Engineering (DOE-STD-1182-2004)
- Criticality Safety (DOE-STD-1173-2003)
- Fire Protection Engineering (DOE-STD-1137-2000)
- Nuclear Explosive Safety (DOE-STD-1185-2004)
- Safety Software Quality Assurance (DOE-STD-1172-2003)

After one year of implementing this process, other functional areas will be evaluated to be included in this process, using the above criteria.

ACTION 2: Identify Roles of Personnel

For the functional areas above, highly qualified and experienced people are designated to perform the roles described below. These individuals are the DOE Sponsors for the functional area. One primary DOE Sponsor and two Alternates for each of the functional areas above were identified.

The DOE Sponsors are expected to be involved in the qualification of DOE personnel in the functional area and to coordinate the increased involvement of other highly qualified and experienced personnel in the functional area by performing the following roles:

1. Serve as the primary point of contact for reviewing and updating the technical content in the particular functional area qualification standard.
2. Serve as a subject matter expert to assess the competencies of trainees, as requested by a site or Headquarters office. This assessment could be performed through an oral/written review as set forth in DOE-HDBK-1080-97, *Guide to Good Practices for Oral Examinations*. This assessment review would focus on knowledge requirements and competencies from the applicable functional area qualification standard.
3. Evaluate proficiency standards.
4. Conduct training.
5. Be available as a resource to review and assist in the development of training in a particular functional area.
6. If available, participate in interviewing or recruiting new candidates in a particular functional area when requested by a site or headquarters office.

ACTION 3: Request Nominations and Select Primary and Alternate DOE Sponsors

The DOE Sponsor should be a highly qualified, experienced person who has demonstrated an exceptional level of scientific and technical capacity in the functional area. The DOE Sponsor should have extensive knowledge of the application of the functional area throughout DOE.

Personnel who will serve as a DOE Sponsor for a functional area were nominated by his/her Site Office Manager (for field personnel) or supervisor (for headquarters personnel). The nominations were submitted to a panel of senior managers representing various DOE programs and site offices. The panel provided recommendations for the DOE Sponsors to the FTCP Chairman for approval. The list of personnel will be maintained by the FTCP.

As guidelines for nominating and approving a DOE Sponsor, it is preferable that each possess the following:

1. Be fully qualified in the functional area.
2. Experience --15 years in the functional area, either at DOE or at a combination of DOE and other agencies.
3. Thorough knowledge of the application of functional area concepts and requirements at DOE sites, either through direct site office experience or by frequent assessment of sites and facilities.
4. Advanced degree in a discipline directly related to the functional area.
5. Professional certification in a discipline directly related to the functional area, if it exists.
6. Authorship of published technical paper(s) in topics directly related to the functional area.

Functional Area	Highly-Qualified and Experienced DOE Personnel (DOE Sponsor)
Civil/Structural Engineering (DOE-STD-1182-2004)	John Treadwell, ORP (Primary) Shah Jaghoory, NA-117 (Alternate) Jeff Kimball, NA-2 (Alternate)
Criticality Safety (DOE-STD-1173-2003)	Jerry McKamy, NA-117 (Primary) Adolf Garcia, NE-ID (Alternate) Robert Wilson, EM-22 (Alternate)
Fire Protection Engineering (DOE-STD-1137-2000)	Dennis Kubicki, EH-24 (Primary) Craig Christenson, ORP (Alternate) Bill Boyce, EM (Alternate)
Nuclear Explosive Safety (DOE-STD-1185-2004)	Bill Pecsok, NNSA Serv Ctr (Primary) Jim Fingerlos, NNSA Serv Ctr (Alternate) Steve Munoz, NNSA Serv Ctr (Alternate)
Safety Software Quality Assurance (DOE-STD-1172-2003)	Shiv Seth, OA-40 (Primary) Subir Sen, EH-31 (Alternate) Teresa Perry, ORO (Alternate)

ACTION 4: Institutionalizing the Process and Maintaining the List DOE Sponsors

This process will be described in the next revision to DOE M 426.1-1A, *Federal Technical Capability Manual*. The process will include renewal of nominations approximately every two years. After one year of implementing this process, other functional areas will be evaluated for inclusion in this process, using the criteria described herein.

The list of personnel is being maintained on the FTCP web site: <http://www.ftcp.org>.