




Department of Energy
National Nuclear Security Administration
Washington, DC 20585



June 21, 2010

MEMORANDUM FOR DISTRIBUTION

FROM: JAMES J. MCCONNELL 
ASSISTANT DEPUTY ADMINISTRATOR
FOR NUCLEAR SAFETY AND OPERATIONS
OFFICE OF DEFENSE PROGRAMS

SUBJECT: American Society of Mechanical Engineers (ASME) Nuclear Quality Assurance (NQA-1) Applicability in the National Security Enterprise

The National Nuclear Security Administration (NNSA) Office of Defense Programs (NA-10) has begun modernizing the National Security Enterprise (NSE) facilities and infrastructure. With this effort, a renewed and more focused emphasis on nuclear facility quality assurance is required. In consideration of DOE and nuclear industry developments and a recent NNSA analysis with respect to NQA-1, the ASME NQA-1 (Version 2008 with 2009 Addenda) shall be adopted as the preferred QA standard for new nuclear facilities not yet having an approved Critical Decision 1 (CD-1). Otherwise, continue to use approved Quality Assurance requirements.

The Department of Energy (DOE) is currently updating DOE O 414.1c (Quality Assurance). This revision is expected to require new Hazard Category 1, 2 and 3 new nuclear facility projects not having attained a Critical Decision 1 to adopt ASME NQA-1 (Version 2008 with 2009 Addenda) as its primary quality assurance standard. The Office of Environmental Management (EM) currently requires all EM nuclear facilities to use either ASME NQA-1 2000 (existing facilities) or 2004 with 2007 Addenda (new facilities not having an approved CD-1). Liaison with EM indicates they are in the process of updating this policy to require new facilities to use ASME NQA-1 (Version 2008 with 2009 Addenda). Additionally, the Nuclear Regulatory Commission (NRC) is expected to endorse ASME NQA-1 (Version 2008 with 2009 Addenda) very soon and expect new nuclear power plants to adopt it as the QA standard for these plants.

The NA-10 Quality Assurance (QA) community in conjunction with the NNSA / EFCOG Joint Quality Assurance Improvement Project, recently completed a study to evaluate and review the ramifications of implementing ASME NQA-1 for work in NA-10 nuclear facilities and nuclear construction projects, including evaluating the costs, benefits, and risks associated with adoption of ASME NQA-1. Some organizations within NNSA were



omitted from the study as they do not perform nuclear work. Copies of the complete report can be obtained from Anita Leivo of the Los Alamos Site Office.

Consistent with the recent analysis and the trends within the DOE and nuclear industry NA-10 fully supports these policies and plans. Use of NQA-1 throughout the NSE will enable the NSE to standardize, to the most recent nuclear industry standards, the many activities performed at the eight NSE nuclear sites, including the Savannah River Site under the EM contract. In addition to the many other benefits from using ASME NQA-1, this action to adopt the latest NQA-1 version is necessary to improve credibility throughout NNSA and the DOE as leaders within the nuclear industry. As such, use of ASME NQA-1 throughout the NSE establishes “what” the contractors are expected to do rather than directing “how” they will assure nuclear quality assurance.

The applicable QA requirements to better assure quality in nuclear work are summarized in the following table:

Applicable QA Requirements	
Existing Facilities	Continue to use approved Quality Assurance requirements for the particular facility.
New Nuclear Facilities	<p>CD-1 NOT YET APPROVED Use ASME NQA-1 Version 2008 with 2009 Addenda or later version with applicable Subparts of Part 2</p> <p>CD-1 APPROVED Continue to use approved Quality Assurance requirements</p>

It is generally expected that all projects to acquire new nuclear facilities in NNSA will invoke ASME NQA-1 version 2008 with the 2009 addenda. However, NNSA recognizes that there may be circumstances where it is technically or economically beneficial to invoke some other consensus quality standards. In those cases, a project may choose a different standard provided the specific justification is approved in advance by the Acquisition Executive. The NA-10 QA Manager, Sam Johnson, may be contacted at (202) 586-8854 on these matters.

DISTRIBUTION:

D. Nichols, NA-2.1
F. Russo, NA-3.6
G. Harencak, NA-10
S. Goodrum, NA-12
D. Monette, NA-14
J. Harrell, NA-15
M. Thompson, NA-172
M. Mistretta, NA-172.3
S. Johnson, NA-172.3
G. Udent, NA-172.3
T. Van Ober, NA-261
A. Williams, LSO
D. Winchell, LASO
A. Leivo, LASO
P. Wagner, SSO
S. Mellington, NSO
K. Smith, KCSO
S. Erhart, PXS
D. Dearolph, SRSO
T. Sherry, YSO
K. Boardman, SC, NNSA