



Statement of Policy

This policy affirms Bechtel Jacobs Company's commitment to excellence in nuclear criticality safety (NCS) by establishing objectives for an NCS program that emphasizes employee, public, and environmental safety; outlines a disciplined and rigorous approach for developing and maintaining nuclear safety controls; and promotes general awareness of NCS issues. This policy applies to all fissionable material operations managed by the Bechtel Jacobs Company for the Department of Energy, including such operations conducted by Bechtel Jacobs Company subcontractors. The majority of Environmental Management/Uraniun Program work scope involving fissionable material operations will be performed by subcontractors; therefore, the Bechtel Jacobs Company shall take appropriate actions to assure that NCS requirements are incorporated into subcontracts and that subcontractors meet NCS performance requirements.

Fissionable materials shall be handled and managed in accordance with a structured company-wide NCS program that includes an NCS program description, procedural controls for NCS program elements (including NCS evaluation approvals) appropriate for each Site, and requirements for criticality accident alarm systems. The intent of the NCS program is to prevent unsafe accumulations of fissionable materials within plant equipment and facilities and to use every practicable means to ensure NCS through the prevention or mitigation of the consequences of nuclear criticality accidents.

NCS program objectives shall include:

- Ensuring fissionable material remains subcritical during normal and credible abnormal conditions, by use of the double-contingency principle
- Ensuring fissionable material operations comply with applicable regulations, Work Smart Standards, industry standards, and authorization basis documents
- Ensuring that nuclear criticality safety is not circumvented for the sake of expediency, production, or economic pressure
- Emphasizing employee, public, and environmental safety
- Incorporating industrial safety standards into fissionable material operations as a best management practice
- Preferential use of engineering controls instead of administrative controls where practical
- Promoting general awareness of nuclear safety issues among onsite personnel

The NCS program shall include procedural controls for the following elements:

- Evaluating and approving fissionable material operations. Approval evaluations shall identify controls and barriers over nuclear criticality safety parameters as needed
- NCS posting and labeling
- Incorporating NCS controls into operating procedures
- Conducting and documenting NCS walkdowns to ensure that NCS requirements are incorporated into applicable operating procedures, as appropriate, and that operations comply with applicable NCS conditions of approval

- Identifying, reporting, and tracking NCS deficiencies
- Ensuring computer codes used to process NCS data are accurate, including formal verification and validation
- Requiring, installing, servicing, and testing criticality accident alarm systems as needed

The NCS program shall also address:

- NCS interfaces, including programmatic administration and document reviews
- Training and qualification requirements for NCS staff and fissile material operations workers and supervisors
- Oversight of fissionable material operations by the NCS staff for both self-performed and subcontractor performed work

Administration

The Nuclear Safety/Nuclear Criticality Safety Manager is responsible for establishing and assuring effective execution of the NCS program; maintaining a trained and qualified NCS staff; ensuring that the program is evaluated by an independent party annually; and ensuring that NCS staff remain administratively independent of operations management.

Where fissionable material operations are to be self-performed by Bechtel Jacobs Company personnel, the responsible Managers of Projects and their assigned project team members are responsible for ensuring that:

- Facilities are maintained, and operations performed, according to the requirements of the NCS program,
- NCS conditions of approval are performed and issued for new or modified fissionable material operations and equipment before initial use,
- Implementing procedures are developed or revised and approved as required before operations begin,
- Persons participating in fissionable material operations are trained on applicable implementing procedures and NCS conditions of approval, and
- Operations personnel are responsible and accountable for maintaining NCS controls when conducting fissionable material operations.

Where fissionable material operations are to be performed by Bechtel Jacobs Company subcontractors, the responsible Managers of Projects and their assigned project team members are responsible for ensuring that fissionable material operations are controlled to meet NCS program requirements, including:

- Fissionable material operations and associated hazards are properly identified in the subcontract request for proposal,
- NCS program requirements and associated industry standards are incorporated into the subcontract in accordance with the Bechtel Jacobs Company Work Smart Standards process,

- Facilities are maintained and NCS operations are performed, by the Subcontractor, according to the subcontract requirements,
- NCS conditions of approval are performed and issued for new or modified fissionable material operations and equipment before initial use,
- The Subcontractor’s implementing procedures are reviewed for compliance with the NCS program before operations begin,
- Subcontractor persons participating in fissionable material operations are trained on applicable implementing procedures and NCS conditions of approval, and
- Operations personnel are responsible and accountable for maintaining NCS controls when conducting fissionable material operations.

Source Requirements

- BJC/OR-64/R1, Environmental Management and Enrichment Facilities Phase 2 Work Smart Standards for Environment, Safety and Health, *including numerous ANSI standards applicable to nuclear criticality safety.*

Approval

[Approval Signature On File] 6/1/00

Joseph F. Nemecek Date
President

[Approval Signature On File] 6/1/00

Bruce A. Wilson Date
Nuclear Criticality Safety Program Manager