



Department of Energy
Washington, DC 20585

March 1, 1996

MEMORANDUM FOR ALL DEPARTMENTAL ELEMENTS

FROM: Archer L. Durham /s/
Assistant Secretary for
Human Resources and Administration

SUBJECT: DOE N 450.3, USE OF THE NECESSARY AND SUFFICIENT PROCESS

Pursuant to the Office of Environment, Safety and Health's concurrence of February 26, 1996, the attached subject Notice, previously approved on January 25, 1996, is being issued for simultaneous implementation and coordination for a six-month period. This document is being published in conjunction with the issuance of the Secretarial Policy Statement, DOE P 450.3, **AUTHORIZING THE USE OF THE NECESSARY AND SUFFICIENT PROCESS FOR STANDARDS-BASED ENVIRONMENT, SAFETY AND HEALTH MANAGEMENT** and DOE M 450.3-1, **THE DEPARTMENT OF ENERGY CLOSURE PROCESS FOR NECESSARY AND SUFFICIENT SETS OF STANDARDS** approved on January 25, 1996. These documents were prepared by the Department's Standards Committee under the leadership of the Assistant Secretary for Environment, Safety and Health (ES&H). The documents authorize use of the Necessary and Sufficient Process which addresses how the Department will select its standards to protect workers, the public, and the environment; and, form the basis for the Department's move to integrating standards activities into a consistent, coordinated system of standards-based safety management.

DOE N 450.3, **USE OF THE NECESSARY AND SUFFICIENT PROCESS**, is hereby approved for simultaneous implementation and coordination.

Attachment

1-25-96

Expires: 1-25-97

SUBJECT: USE OF THE NECESSARY AND SUFFICIENT PROCESS

1. **OBJECTIVE.** This Notice transmits DOE M 450.3-1, THE DEPARTMENT OF ENERGY CLOSURE PROCESS FOR NECESSARY AND SUFFICIENT SETS OF STANDARDS (Necessary and Sufficient Process), and provides requirements and guidance for transition to widespread use of the Necessary and Sufficient Process. Use of the Necessary and Sufficient Process is not mandatory; however, if the Necessary and Sufficient Process is used, adherence to the Process described in the Manual is mandatory. The Department of Energy (DOE) developed the Necessary and Sufficient Process with an awareness that the relationship among the Department's work, associated hazards, and requirements and standards has not always been clear. By working across program lines and using the Necessary and Sufficient Process to build agreements on standards into the front end of work planning, DOE believes that Departmental Elements can overcome this difficulty.

Standards-based work involves four activities:

- a. definition of work and hazards,
- b. identification of standards,
- c. performance of work in accordance with standards, and
- d. performance assessment.

The Necessary and Sufficient Process involves the first two of these activities.

2. **APPLICABILITY.** The Necessary and Sufficient Process is one example of the Department's commitment to using integrated management systems to ensure adequate protection for workers, the public, and the environment. Not every activity, facility, or site must use the Necessary and Sufficient Process. Where appropriate or required, Standards/Requirements Identification Documents (SRID), Safety Analysis Reports (SAR), and equivalent approaches may be used to meet this commitment. To avoid duplication of effort and rework, many sites may "stay the course" with these other approaches.
 - a. The Necessary and Sufficient Process can be used to determine whether any new nonregulatory Environment, Safety and Health (ES&H) standard should be applied to a given work scope. This may be particularly useful when deciding whether to include new DOE Orders in management and operating (M&O) contracts.

- b. Contract reform initiatives are intended to provide a flexible approach to how work is performed in the DOE complex. One approach being considered is substituting the approved set of standards developed using the Necessary and Sufficient Process for the ES&H requirements contained in standard contract clauses.
- c. The Department remains committed to rulemaking for nuclear safety requirements of general applicability. The Department intends to propose revisions to its rule on exemption procedures to provide for appropriate consideration of judgements, reached through the Necessary and Sufficient Process, that particular DOE rule requirements do not contribute to the achievement of adequate protection in particular circumstances.
- d. In implementing the Necessary and Sufficient Process, a transition period will be required to develop the expertise and program infrastructure to ensure that the Necessary and Sufficient Process will be properly applied. During this period, it will be necessary for management to carefully choose high-value candidate projects and provide priority management attention and support. Such choices must be consistent with the priorities set by the Department in implementing its integrated safety management program. The following considerations should guide these choices.
 - (1) Optimize benefits to the entire Department. Focus on work where significant safety benefits or high dollar cost savings/avoidance can be achieved by developing new or revised sets of standards. One way to accomplish this is to apply the Necessary and Sufficient Process to work conducted at several facilities or sites so that resulting knowledge and benefits can be shared. The Necessary and Sufficient Process has not been approved for privatization.
 - (2) Take advantage of current experience. As a result of the Department Standards Committee (DSC) authorized pilot demonstrations, pockets of experience have been developed. Management teams should integrate the experience and lessons learned into future applications of the Necessary and Sufficient Process.
 - (3) Achieve near-term successes. Focus on those types of projects that build on established infrastructure, expertise, experience, and enthusiasm to achieve near-term successes. Such successes would serve to further validate the robustness and effectiveness of the Necessary and Sufficient Process and provide more case studies for the benefit of the Department as a whole. This would also serve to quickly increase the number of people qualified to apply the Necessary and Sufficient Process and to speed the learning process for the rest of the Department.

- (4) Capitalize on additional learning opportunities. Early application of the Necessary and Sufficient Process to activities where higher levels of uncertainty or complexity exist will give the Department the opportunity to gain additional valuable experience. This will address Stakeholder concerns, and provide significant return on the Department's investment in the Necessary and Sufficient Process.

The criteria described below should be used to determine the overall benefit that would accrue from applying the Necessary and Sufficient Process when several potential candidate projects compete for resources. The criteria are intended to be considered as a set, not as individual decision points.

Environment, Safety and Health

- The environment, safety and health basis for the work is inadequate or non-existent.
- The Necessary and Sufficient Process can reduce confusion stemming from multiple or conflicting standards.

Work Start-up or Restart

- New work.
- Shutdown or restart.
 - Operations terminated for safety reasons.
 - Prolonged shutdown with lost or inadequate safety basis.
- Standards do not exist.
- Major mission change.

Cost Effectiveness

- Major business re-engineering.
- New design, construction, and/or activity.
- Excessive requirements.
- Business competitiveness.
- Tailored standards provide for equivalent performance.

3. REQUIREMENTS. Management teamwork is essential in introducing the Necessary and Sufficient Process across the Department. Therefore, during transition to use of the Process, Secretarial Officers, Field Managers, and Contractor Heads shall form line management teams to develop priorities for use of the Necessary and Sufficient Process, to select initial Process applications in accordance with these priorities, and to ensure that sufficient support

is available to conduct the Process properly. The DSC management training course on the Necessary and Sufficient Process, "Necessary and Sufficient: An Overview," is required for management team members.

Because the purpose of the management teams is to guide the transition, the teams will not necessarily perform the same functions or consist of the same individuals as the "Agreement Parties" or "Convened Groups" referenced in DOE M 450.3-1. The Department Standards Committee (DSC) should be advised of Necessary and Sufficient Process activities.

4. RESPONSIBILITIES.

- a. Secretarial Officers, Field Managers, and Contractor Heads are responsible for forming the line management teams.
- b. Management Teams.
 - (1) In guiding the transition to use of the Process, the management teams are responsible for maintaining the correctness of the Necessary and Sufficient Process and for (a) developing priorities for use of the Necessary and Sufficient Process, (b) selecting initial process applications in accordance with the priorities, (c) ensuring that sufficient support is available to conduct the Process properly, and (d) providing DSC approved training on the Necessary and Sufficient Process.
 - (2) Management teams should deploy the Necessary and Sufficient Process as follows:
 - (a) Communicate expectations to and provide training for those involved in the Necessary and Sufficient Process to create a common and accurate understanding of the Necessary and Sufficient Process.
 - (b) Redeploy existing resources to support application of the Necessary and Sufficient Process.
 - (c) Consider resources devoted to the Necessary and Sufficient Process an investment in the future. Improvements will be realized in terms of both enhanced safety and operating efficiencies.
 - (d) Improve planning by applying available expertise and developing the program infrastructure to ensure the Necessary and Sufficient Process is properly executed.

- (e) Initiate Necessary and Sufficient Process applications in stages in accordance with deployment criteria and resource availability.
 - (f) Optimize use of technical and management capabilities and seek input from outside experts as appropriate. Input from experts outside the Department is encouraged to promote stakeholder confidence and build the available knowledge base.
 - (g) Establish mentoring programs across internal DOE organizations to share Necessary and Sufficient Process knowledge.
 - (h) Capitalize on similarities among activities across the DOE complex while accounting for their differences. Maximize information transfer regarding issues common to multiple sites and Necessary and Sufficient Process lessons learned. It may be helpful to use personnel from other sites who have experience with the Necessary and Sufficient Process.
- (3) Management teams should develop success indicators and performance measures that provide DOE personnel, contractor management, and other interested parties with objective indices to determine the effectiveness of specific applications of the Necessary and Sufficient Process. These success indicators and performance measures should reflect the best knowledge of the various elements of the Department and its contractors.
- c. The Department Standards Committee (DSCI).
- (1) The DSC will not have direct authority over application of the Necessary and Sufficient Process. However, the DSC will maintain and interpret the Necessary and Sufficient Process description, which is contained in DOE M 450.3-1. The DSC will also answer questions and help resolve problems regarding application of the Necessary and Sufficient Process and will remain involved in other aspects of standards management.
 - (2). The DSC owns and will maintain the training curriculum. In additions the DSC will provide training on the use of the curriculum to those DOE and contractor personnel who are responsible for training Necessary and Sufficient Process team members. Mentoring and assistance are also available through the DSC to assist with deploying any aspect of the Necessary and Sufficient Process. Members of the management teams are encouraged to participate in the mentoring program.

5. CONTACT. Questions concerning this Notice should be addressed to the Department Standards Committee at (301) 903-0077.

BY ORDER OF THE SECRETARY OF ENERGY:



ARCHER L. DURHAM
Assistant Secretary for
Human Resources and Administration

CANCELED