SUPPLEMENTAL DIRECTIVE

NNSA SD 450.2-1

Approved: 10-22-18 Expires: 10-22-21

DELEGATION OF NUCLEAR SAFETY AUTHORITIES



NATIONAL NUCLEAR SECURITY ADMINISTRATION Office of Safety, Infrastructure and Operations



DELEGATION OF NUCLEAR SAFETY AUTHORITIES

- 1. <u>PURPOSE</u>. This Supplemental Directive (SD) establishes a documented process to ensure that delegations of nuclear safety authorities within the National Nuclear Security Administration (NNSA) follow Department of Energy (DOE) requirements.
- 2. <u>AUTHORITY</u>. DOE O (Order) 450.2 Chg 1 (MinChg), *Integrated Safety Management*, dated 1-17-17.
- 3. <u>CANCELLATION</u>. Business Operating Procedure (BOP) BOP-07.01, *Delegations of Nuclear Safety Authority*, dated 10-28-14.

4. APPLICABILITY.

- a. <u>Federal</u>. This policy applies to all NNSA elements with nuclear safety responsibilities or delegated nuclear safety authorities.
- b. <u>Contractors</u>. Does not apply to contractors.
- c. Equivalency. In accordance with the responsibilities and authorities assigned by Executive Order 12344, codified at 50 United States Code sections 2406 and 2511, and to ensure consistency throughout the joint Navy/DOE Naval Nuclear Propulsion Program, the Deputy Administrator for Naval Reactors (Director) will implement and oversee requirements and practices pertaining to this directive for activities under the Director's cognizance, as deemed appropriate.

5. SUMMARY OF CHANGES.

- a. The directive was changed from a BOP to an SD.
- b. The title and office of primary interest were corrected/updated.
- c. The purpose was revised for conciseness, and the authority was added.
- d. The applicability was revised to conform to standard terminology and format and to delete an inapplicable exemption.
- e. The requirements were revised to delete provisions that duplicate requirements and to add provisions that clarify the application of relevant requirements found in DOE directives.
- f. The responsibilities were revised to reflect the organization of safety management functions within the Office of Safety, Infrastructure and Operations and to delete provisions that are unrelated to the process for delegating nuclear safety authorities.
- g. The references were updated and are now included as Appendix D.

- h. The contact was updated to reflect safety management functions within the Office of Safety, Infrastructure and Operations.
- i. Appendix 1 (now A) was updated and revised to delete information that is duplicative, unnecessary, or more appropriately covered in Sections 6 and 7 of the SD. Appendix A, Section 1 was revised to update the descriptions of nuclear safety authorities, to delete one that is no longer necessary (Facility Safety), and to include applicability to delegation of NNSA Certifying Official authority. Section 3 now clarifies who is considered a senior manager for purposes of independently evaluating and concurring in delegation requests. Section 4 now makes clear that delegations of nuclear safety authority cannot be redelegated. Section 8 was deleted because there are no other safety authorities to which this procedure would apply. Section 8 (formerly Section 9) now clarifies the distinction between the circumstances under which delegations expire and the circumstances that may cause them to be rescinded. A flowchart is included at the end of the appendix.
- j. Appendix 2 (now B), the sample form for requesting delegation of a nuclear safety authority, has been simplified.
- k. Appendix 3, an image of a 2012 memorandum from the Administrator on the realignment of nuclear safety responsibilities and authorities within NNSA, was deleted since the realignment has been superseded. Appendix C, a delegation evaluation form to be completed following review of a request for delegation of authorities, has replaced the memorandum.

6. REQUIREMENTS.

- a. Requests for delegation of authorities applicable to Hazard Category 2 and 3 nuclear facilities (nuclear safety authorities) must be made in accordance with the process described in Appendix A.
- b. Response to a request for delegation must be timely (normally within 60 days). For requests where circumstances require review periods longer than 60 days, the revised evaluation timeline must be coordinated with the requesting field element or program office.
- c. The delegating official must evaluate requests for delegation of nuclear safety authorities and document the results of the evaluation in accordance with the process described in Appendix A. This evaluation serves as the basis for action in response to the request for delegation.
- d. When delegation of nuclear safety authorities is granted, the delegating official must document the following in a memorandum to the requesting official:
 - (1) The specific authorities granted.

- (2) Any limitations imposed, including compensatory measures.
- (3) The circumstances under which any limitations may be removed.
- e. The delegating official may modify or rescind a delegation of nuclear safety authority at any time. This change must be documented in a memorandum to the relevant organizational head (Associate Administrator or Field Office Manager) with a copy to the delegate, if different from the addressee.
- f. In cases when the conditions under which a delegation is granted no longer apply, the Associate Administrator or Field Office Manager must notify the delegating official of the expiration of the delegation and the effective date.
- g. Central Technical Authority (CTA) concurrence must be documented when delegations of nuclear safety authorities require CTA concurrence before being granted.
- h. DOE policy designates the Cognizant Secretarial Officer (CSO) as the safety basis approval authority in certain circumstances where no viable control strategy exists for accident consequences that exceed the Evaluation Guideline. In accordance with DOE-STD-1104-2016, this authority may not be delegated. This limitation must be referenced in any memorandum documenting delegation of safety basis approval authority.
- i. The following documents are considered records associated with the nuclear safety delegation process and must be maintained in accordance with applicable records management requirements:
 - (1) The request for delegation and any supporting information provided by the requestor.
 - (2) The evaluation, including documented judgment of at least two senior managers.
 - (3) Documented CTA concurrence.
 - (4) The memorandum(s) issued by the delegating official documenting the delegation and any subsequent changes.
 - (5) Local documentation related to implementation of delegated nuclear safety authorities.
- j. A list of active delegations of nuclear safety authorities must be posted on an NNSA website maintained by the Office of Safety, Infrastructure and Operations.
- k. Delegations of nuclear safety authorities must be reviewed every 2 years, and these reviews must be documented with the same criteria and rigor as for the original delegation.

7. RESPONSIBILITIES.

- a. <u>Cognizant Secretarial Officer (CSO)</u>. The CSO for safety-related matters is the delegating official for nuclear safety authorities.
 - (1) Approves requests for delegation of nuclear safety authorities in accordance with Appendix A, or takes other action on requests, as appropriate.
 - (2) Modifies or rescinds delegations of nuclear safety authorities when delegates or the organization's capabilities and capacities do not meet the criteria of Appendix A.
 - (3) Ensures that delegated nuclear safety authorities are reviewed every 2 years to verify that the necessary capability and capacity to perform the authorities still exist.

b. <u>Central Technical Authority (CTA)</u>.

- (1) Concurs with delegations of safety basis approval authority to individuals below the Deputy Field Office Manager.
- (2) Concurs with delegations of nuclear safety authorities when compensatory measures are required.
- (3) Documents concurrence with delegations of nuclear safety authorities, when required.
- c. <u>Chief of Defense Nuclear Safety</u>. The Deputy Associate Administrator for Safety serves as the Chief of Defense Nuclear Safety.
 - (1) Maintains the documented process to ensure that delegations of nuclear safety authorities are made consistent with the process criteria and attributes of DOE O 450.2.
 - (2) Ensures delegation reviews consider the judgment of at least two senior managers who are qualified to the Senior Technical Safety Manager Functional Area Qualification Standard.
 - (3) Documents determination that individuals and organizational capabilities and capacities meet established criteria for delegations granted.

- (4) Ensures reviews of delegated nuclear safety authorities such as those conducted every 2 years are documented with the same criteria and rigor as applied to the original delegation.
- (5) Annually reviews the implementation of the nuclear safety delegation process to evaluate whether it is adequate and functioning properly, and identifies concerns to the CTA and CSO.
- (6) Ensures records associated with the nuclear safety delegation process are maintained in accordance with the records management process established by the Office of Safety, Infrastructure, and Operations.
- (7) Ensures a list of the active NNSA nuclear safety delegations is available on an NNSA website.
- d. <u>Deputy Administrators/Associate Administrators/Field Office Managers.</u>
 - (1) Submit requests for delegation of nuclear safety authorities in accordance with Appendix A.
 - (2) Ensure through periodic (every 2 years) self-assessments, based on criteria in DOE O 450.2 Appendix A, that organizational capabilities and capacities to support the delegated nuclear safety authorities remain adequate.
 - (3) Notify the CSO of any changes in delegation status within their organization.
 - (4) Maintain local documentation related to implementation of delegated nuclear safety authorities.
- 8. <u>REFERENCES</u>. See Appendix D.
- 9. <u>CONTACT</u>. Office of the Deputy Associate Administrator for Safety, NA-51, 505-845-4404.

BY ORDER OF THE ADMINISTRATOR:

Lisa E. Gordon-Hagerty Administrator

Appendixes:

- Nuclear Safety Delegation Process for the National Nuclear Security Administration A. (NNSA).
- NNSA Delegation Nomination Form. NNSA Delegation Review Form. B.
- C.
- D. References.

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NUCLEAR SAFETY DELEGATION PROCESS FOR THE NATIONAL NUCLEAR SECURITY ADMINISTRATION (NNSA)

- 1. <u>APPLICABILITY</u>. This appendix is applicable to delegation of the following nuclear safety authorities:
 - a. <u>Safety Design Basis</u>: Approval authority for safety design basis documents developed in accordance with DOE-STD-1189-2016, *Integration of Safety into the Design Process*, for Hazard Category 2 and 3 nuclear facilities. This approval authority covers safety design basis documents prepared in accordance with DOE-STD-1189-2008 in cases where a project is following the previous version of the standard.
 - b. <u>Safety Basis</u>: Approval authority for safety basis documents for Hazard Category 2 and 3 nuclear facilities required by 10 CFR 830 Subpart B. This includes documented safety analyses, technical safety requirements, unreviewed safety question (USQ) procedures, documents that result from positive USQ determinations, and revisions to these documents.
 - c. <u>Startup</u>: Authorization authority for startup of Hazard Category 3 nuclear facilities and restart of Hazard Category 2 and 3 nuclear facilities.
 - d. <u>Certifying Official</u>: Approval authority for safety basis documents for packaging and offsite transportation operations, authority to revoke packaging and offsite transportation approval and user status, and approval authority for quality assurance programs for Type B and fissile material packages as specified in DOE O 460.1D and DOE O 461.1C. Because functions supporting the NNSA Certifying Official are assigned within the Office of Safety, Infrastructure and Operations, Sections 2.a, 3, 5, and 6 of this appendix do not apply to delegation of NNSA Certifying Official authority.

To illustrate the process described in this appendix, a flowchart is included as the last page.

2. REQUESTS FOR NUCLEAR SAFETY DELEGATION.

a. For an individual to receive a delegation of a nuclear safety authority, the Associate Administrator or Field Office Manager submits a memorandum to the Cognizant Secretarial Officer (CSO), with a copy to the Deputy Associate Administrator for Safety, requesting the specific delegation(s) for the identified individual(s) using the NNSA Delegation Nomination Form (Appendix B) to demonstrate that the individual, supporting organization, and processes meet the established criteria. Delegation requests must also provide specific details on the conditions of the proposed delegation (e.g., delegation is only for approval of revisions to documented safety analyses, delegation covers an extended absence).

b. The minimum expectations for individuals delegated nuclear safety authorities are listed in Table 1. While a field office may impose site-specific requirements associated with qualifying as a Senior Technical Safety Manager (STSM), fulfilling those requirements is not necessary for meeting the expectations of this process. Minimum expectations for organizational capabilities and capacities are discussed in Section 6.

Table 1. Minimum Expectations for Qualification and Training for Delegation of Nuclear Safety Authorities

Delegation	Minimum Expectations		
Safety Basis Approval Authority Safety Design Basis Approval Authority Certifying Official Authority	Qualified as a Senior Technical Safety Manager Completed Nuclear Executive Leadership Training		
Startup Authorization Authority	Qualified as a Senior Technical Safety Manager		

3. REVIEWING AND PROCESSING DELEGATION REQUESTS.

- a. Upon receipt of the delegation request, the Office of the Deputy Associate Administrator for Safety will conduct a thorough review of the delegation request to ensure that the appropriate criteria are met. When nominated individuals and their organizations meet all applicable requirements, the review is documented. Appendix C contains a typical delegation review form.
- b. For those delegations requiring Central Technical Authority (CTA) concurrence, the Office of the Deputy Associate Administrator for Safety will obtain CTA concurrence prior to delegation approval.
- c. The delegating official will consider the judgment of at least two senior managers. An acceptable method is for two senior managers to independently evaluate and concur with the nuclear safety delegation request review by signing the delegation review form. Office Directors and excepted service level 5 staff who are STSM qualified are considered senior managers for this purpose.
- d. Once a delegation is approved, delegations remain in effect as long as (1) the delegate maintains the position and qualifications and (2) the organization's capacities and capabilities remain adequate to support the delegate in the execution of the safety authorities.

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4. REDELEGATIONS.

a. Redelegation of nuclear safety authorities that are delegated by the CSO is not permitted.

- b. NNSA Certifying Official authorities may be delegated to the Office Director of the Office of Packaging and Transportation, but no further.
- c. Individuals may not execute nuclear safety authorities while in an acting capacity for the delegate unless the acting individual is delegated such authority in accordance with this procedure.

5. <u>COMPENSATORY MEASURES</u>.

- a. Individuals whose concurrence serves as a compensatory measure must meet the same qualification and training requirements as for an individual who is delegated a nuclear safety authority.
- b. Associate Administrators or Field Office Managers should specify in their request how compensatory measures will be implemented. General expectations include:
 - (1) Where neither the Associate Administrator nor Field Office Manager has a technical background, the primary compensatory measure is concurrence from a senior person in the organization with technical qualifications consistent with those listed in Table 1.
 - (2) When disagreement on a specific approval exists between the individual with a delegated authority and the person providing concurrence as a compensatory measure, the matter should be raised to the CSO for resolution
- c. Where reviews indicate a need for improvement in a functional area associated with a delegated authority, compensatory measures for the identified issues will be determined on a case-by-case basis.
- d. Organizations ensure the compensatory measures are documented each time the delegated authority is executed.

6. ORGANIZATIONAL CAPABILITY.

a. The request must include sufficient detail on the adequacy of the organizational capability and capacity. One acceptable method for addressing organizational capability and capacity is to cite the applicable results from the last nuclear safety biennial review of the organization. These reviews assess the organizational capabilities in nuclear safety functional areas such as startup/restart, safety basis, quality assurance, and criticality safety. Expectations for documenting organizational capability for functional areas examined during a biennial review are included in Table 2.

Table 2	Documentation	Expectations	for Org	ganizational	Capability
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Functional Area Result	Documentation Expectations	
Exceeds Expectations	Simple citation of biennial review result and date of review.	
Meets Expectations	Simple citation of biennial review result and date of review.	
Needs Improvement	Citation of the biennial review results and a short narrative describing extent and severity of the noncompliance and status of corrective actions.	
Does Not Meet Expectations	A thorough discussion of issues identified by the biennial review and description/discussion of corrective actions, including completion status and an analysis of the effectiveness of corrective actions.	

b. In lieu of using results of a biennial review, other suitable documentation, such as staffing analyses, self-assessments, or independent assessments, can be used to demonstrate the office has adequate capability to support the delegate in the execution of nuclear safety authorities.

7. <u>ASSESSMENTS</u>.

- a. The Office of the Deputy Associate Administrator for Safety reviews assigned safety responsibilities and delegated safety authorities every 2 years.
- b. The Office of the Deputy Associate Administrator for Safety reviews the delegation process annually to evaluate whether it is adequate and functioning properly.
- c. Organizations with delegated nuclear safety authorities ensure the organizational qualifications, procedures/processes, and capabilities and capacities are maintained so that delegated authorities can be properly carried out. This is accomplished through periodic self-assessments of areas related to delegation and implementation of appropriate actions to address identified issues.

8. CONDITIONS AFFECTING THE STATUS OF DELEGATIONS.

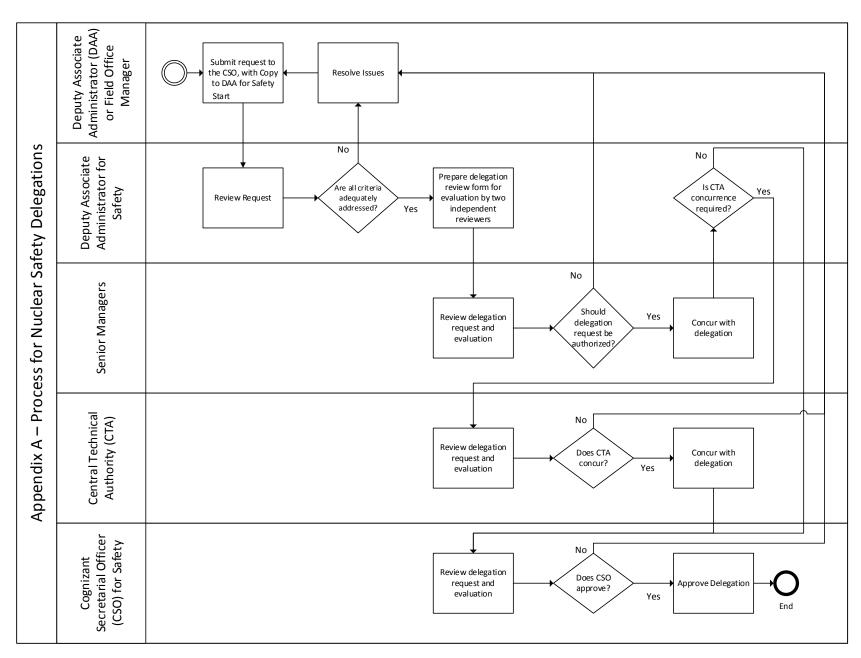
- a. Delegations expire or will be rescinded under the following conditions:
 - (1) The delegate transfers, retires, or otherwise leaves the position for which the delegated authority is defined. However, when the change in position

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- is a Deputy Manager becoming the Manager or acting Manager at the same office, or an acting Manager becoming Manager, then the original delegation remains in effect.
- (2) The delegate fails to maintain required qualifications. In this case, the organizational head notifies the CSO.
- (3) The organization's capability or capacity is determined by the CSO to inadequately implement the delegated authority.
- (4) For any cause as determined by the CSO.
- b. In the event that an individual's delegation is rescinded or otherwise cannot be exercised due to absence or recusal, and no other individual at the organization has received the delegated nuclear safety authority, the delegated authority reverts to the CSO.

9. MAINTENANCE OF DELEGATION RECORDS.

- a. The Office of the Deputy Associate Administrator for Safety ensures records associated with this process, such as the approval memorandum, CTA concurrence, evaluation documentation, the request with supporting information, and any memorandums affirming or documenting changes to an existing delegation, are appropriately maintained.
- b. The Office of the Deputy Associate Administrator for Safety maintains a list of nuclear safety delegations on a NNSA website and updates this list whenever the status of a delegation changes.



APPENDIX B: NNSA DELEGATION NOMINATION FORM

Delegate Name:

Delegate's Organization / Position:

Delegations Proposed:

List the appropriate delegation categories from Section 1 of Appendix A. Include any restrictions and conditions (e.g., delegate would approve only revisions to annual updates of documented safety analyses). Note if CTA concurrence is required.

Delegate's Education and Experience:

List technical or other degrees, professional licenses, certifications, and years of relevant experience with biography or resume attached.

Delegate's Qualification:

State whether delegate is STSM qualified (and requalification due date). Include attendance date for Nuclear Executive Leadership Training (NELT), if applicable.

Compensatory Measures:

List proposed compensatory measures, if necessary, and how these compensatory measures will be implemented and documented. Example:

Until such time as [the Field Office Manager, use name] completes NELT, the delegated authorities for Safety Basis and Startup will be exercised with the compensatory measure of documented concurrence from [the Deputy Field Office Manager], who meets all qualifications. [The Deputy Field Office Manager] will serve as an independent review, and disagreements related to these delegated authorities will be presented to the Cognizant Secretarial Officer for resolution. Upon completion of NELT by [the Field Office Manager], the documented concurrence of [the Deputy Field Office Manager] will no longer be required.

Organization's Capabilities / Capacity:

As discussed in Section 6 of Appendix A. Example:

Adequate site capabilities and capacities exist and were evidenced in the NNSA biennial review conducted in [date of last review]. The following are the results from the review:

Functional Area	Grade	Comments
Safety Basis	Meets Expectations	Demonstrates site's capability/capacity for safety basis delegations.
Startup/Restart	Needs Improvement	The review identified that the restart procedure did not meet the requirements of DOE O 425.1D. Procedure has been revised to incorporate all requirements of DOE O 425.1D. Field office personnel have trained on the changes and successfully executed a facility restart since the procedure revision.
Others as appropriate		

Other Conditions to Justify Delegation:

Include any other information that should be considered in evaluating the request for delegation.

APPENDIX C: NNSA DELEGATION REVIEW FORM

Delegated Authorities Requested	Criteria for Individuals and Review Results	Site Criteria and Review Results	Comments
A. <u>Safety Design Basis</u> : Approval authority for safety design basis documents for Hazard Category 2 and 3 nuclear facilities developed in accordance with DOE-STD-1189-2016, Integration of Safety into the Design Process.	(1) Senior Technical Safety Manager (STSM) qualified.(2) Successful completion of Nuclear Executive Leadership Training (NELT).Review:	Criteria: (1) Delegations shall be made only where the candidate's organization possesses or has access to sufficient staff with the necessary qualifications, experience, and expertise to support the candidate for the authorities being delegated. (2) Delegations shall be made only where the candidate's organization has the proper framework of processes and procedures, as well as adequate resources and funding, to implement the delegated authorities.	
B. Safety Basis: Approval authority for safety basis documents for Hazard Category 2 and 3 nuclear facilities as required by 10 CFR 830 Subpart B, Safety Basis Requirements, to include documented safety analyses, technical safety requirements, unreviewed safety question (USQ) procedures, documents that result from positive USQ determinations, and revisions to these documents.	Review:		
C. Startup and Restart: Startup authorization authority for startup of Hazard Category 3 nuclear facilities and restart of Hazard Category 2 and 3 nuclear facilities.	(1) Senior Technical Safety Manager (STSM) qualified. Review:		

<u>Summary</u> :			
Recommended Compensator	y Measures (when require	ed):	
<u>Conclusion</u> :			
NA-50 Senior Manager Concu	ırrences:		
Name Position and Office	Date	Name Position and Office	Date

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APPENDIX D: REFERENCES

1. Title 10, Code of Federal Regulations, Part 830 (10 CFR 830), Subpart B, Safety Basis Requirements.

- 2. DOE O 450.2 Chg 1 (MinChg), *Integrated Safety Management*, dated 1-17-17.
- 3. DOE O 460.1D, *Hazardous Materials Packaging and Transportation Safety*, dated 12-20-16.
- 4. DOE O 461.1C, Packaging and Transportation for Offsite Shipment of Materials of National Security Interest, dated 7-20-16.
- 5. DOE-STD-1104-2016, *Review and Approval of Nuclear Facility Safety Basis and Safety Design Basis Documents*, dated December 2016.
- 6. DOE-STD-1175-2013, Senior Technical Safety Manager Functional Area Qualification Standard, dated October 2013.
- 7. DOE-STD-1189-2016, *Integration of Safety into the Design Process*, dated December 2016.