

SUPPLEMENTAL DIRECTIVE

NNSA SD 450.2-1A

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DELEGATION OF NUCLEAR SAFETY AUTHORITIES



NATIONAL NUCLEAR SECURITY ADMINISTRATION
Office of Environment, Safety, and Health

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DELEGATION OF NUCLEAR SAFETY AUTHORITIES

1. PURPOSE. This Supplemental Directive (SD) establishes a documented process for Delegations of Nuclear Safety Authorities within the National Nuclear Security Administration (NNSA) to ensure consistency and follow Department of Energy (DOE) requirements.
2. AUTHORITY. DOE O (Order) 450.2 Chg 1 (Minchg), *Integrated Safety Management*, Dated 1-17-17.
3. CANCELLATION. Supersedes NNSA SD 450.2-1, *Delegations of Nuclear Safety Authority*, dated 10-22-18.
4. APPLICABILITY.
 - a. Federal. This policy applies to all NNSA Elements with nuclear safety responsibilities or delegated nuclear safety authorities.
 - b. Contractors. 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. Updates the office of primary interest.
 - b. Updates and expands the list of requirements (e.g., delegations, reviews, self-assessments).
 - c. Updates and expands the list of responsibilities of the NNSA Office of Environment, Safety, and Health (NA-ESH).
 - d. Updates the contact information to reflect safety management functions within NA-ESH.
 - e. Updates Appendix A to provide clear and comprehensive requirements (e.g., applicability, request for delegation, evaluating requests, and documenting/issuing delegation for nuclear safety authorities).
 - f. Deletes Appendix B and provides a link to the NNSA Delegation Nomination, which was revised to provide clear and comprehensive requirements/guidance.

- g. Deletes Appendix D and provides a link to the NNSA Delegation Evaluation, which was revised to provide clear and comprehensive requirements/guidance.
- h. Provides a link to the NNSA Delegation of Authority Order, which was revised to provide clear and comprehensive requirements/guidance.
- i. Changes Appendix D, *References*, to Appendix B, *References*, and updates the reference list.

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 of this SD.
- b. Delegations of safety basis approval authority must not be further delegated below the Deputy Field Office Manager, unless concurrence is obtained from the Central Technical Authority (CTA).
- c. Delegations must only be made to individuals who possess the necessary qualifications, experience, and expertise. The minimum individual qualification and training requirements are specified in Appendix A of this SD.
- d. Delegations must only be made where the candidate's organization possesses or has access to sufficient staff (e.g., NA-ESH) with the necessary qualifications, experience/expertise (capability/ capacity) to support the candidate for the authorities being delegated. If the capability/capacity is found lacking, compensatory measures and/or corrective actions must be developed.
- e. Delegation must only be made where the candidate's organization has the proper framework of processes and procedures to implement the delegated authorities.
- f. Response to a request for delegation must be timely (normally within 60 calendar days). For requests where circumstances (e.g., need for additional supporting data) require evaluation periods longer than 60 days, the revised evaluation timeline will be coordinated with the requesting office.
- g. An evaluation must be performed of the requests for delegation of nuclear safety authorities and results documented in accordance with the process described in Appendix A of this SD. This evaluation serves as the basis for action in response to the request for delegation.
- h. The evaluation of the request for delegation of nuclear safety authorities must be independently evaluated (considering the judgment of at least two senior managers) and concurred upon.
- i. The delegation of nuclear safety authorities must be granted and documented in accordance with the process described in Appendix A of this SD.

- j. The delegation of nuclear safety authorities may be modified or rescinded (terminated) in accordance with the specified conditions in Appendix A of this SD. The modification must be documented in a revised Delegation of Authority Order. The termination must be documented in a memorandum. The revised Delegation of Authority Order or memorandum must be issued to the delegate and/or relevant organization.
- k. The records associated with the delegation of nuclear safety authorities must be maintained in accordance with applicable records management requirements.
- l. The local process related to implementation of delegated nuclear safety authorities must be maintained.
- m. Active delegations of nuclear safety authorities must be posted on the NNSA SharePoint website.
- n. Review of issued delegations of nuclear safety authorities must be performed and documented, during the Chief of Defense Nuclear Safety (CDNS) Biennial Review (BR)¹, using the process criteria specified in Appendix A of DOE O 450.2.
- o. Self-assessment (SA) of the issued delegation of nuclear safety authorities must be performed and documented at a minimum biennially to verify that the necessary capabilities and capacities to support the delegated nuclear safety authorities remain adequate.
- p. The SA of the delegation of nuclear safety authorities process must be performed and documented, at a minimum biennially, using the process attributes specified in Appendix A of DOE O 450.2.
- q. An independent review of the SA must be performed and documented, to verify that the SA adequately verified that the capabilities and capacities supporting delegated nuclear safety authorities remain adequate.

7. RESPONSIBILITIES.

- a. Cognizant Secretarial Officer (CSO) for Safety². The CSO for Safety is the authorized designated delegating official for nuclear safety authorities.
 - (1) Approves delegation of nuclear safety authorities in accordance with Appendix A of this SD or takes other action on requests, as appropriate.

¹ Performed in accordance with NNSA SD 226.1B, *Headquarters Biennial Review of Nuclear Safety Performance*

² The CSO position designation is located on the NNSA Directives [website](#).

- (2) Requires that delegation evaluations consider the judgment of at least two senior managers. Senior managers must have a current Senior Technical Safety Manager qualification.
 - (3) Modifies or rescinds delegations of nuclear safety authorities based on the specified criteria in Appendix A of this SD.
 - (4) Requires organizations that delegated nuclear safety authorities to perform a SA at least biennially to verify that the necessary capability and capacity to support the delegated nuclear safety authorities remain adequate.
 - (5) Remains fully accountable for the outcome of any actions taken that are associated with the delegated function(s) during the time that the delegation of authority is in effect.
- b. Central Technical Authority³.
- (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, via the Delegation of Authority Order, which must include the CTA concurrence signature.
- c. Chief of Defense Nuclear Safety. The Deputy Associate Administrator for Safety serves as the CDNS.
- (1) Develops and maintains the documented delegation process so that issuance of delegations of nuclear safety authorities are made in accordance with Appendix A of this SD to be consistent with the process criteria and attributes specified in Appendix A of DOE O 450.2.
 - (a) Processes requests for delegation of nuclear safety authorities in accordance with Appendix A of this SD, to support the CSO for Safety's approval.
 - (b) Performs and documents an evaluation of the requests for delegation of nuclear safety authorities and documents the results in accordance with the process described in Appendix A of this SD.

³ The CTA position designation is located on the NNSA Directives [website](#).

- (c) Performs an independent evaluation (judgment) of the above evaluation by at least two senior managers. Concurrence will be captured by signing the NNSA Delegation Evaluation.
 - (d) Ensures reviews of delegated nuclear safety authorities are performed during the CDNS BR and are documented using the same process criteria and attributes specified in Appendix A of DOE O 450.2.
 - (e) Performs the SA of the delegation process biennially and must comply with the process criteria and attributes specified in Appendix A of DOE O 450.2.
- (2) Performs and documents an independent review of the SA performed by the Heads of NNSA Field Elements to verify that the SA adequately verified that the capabilities and capacities supporting delegated nuclear safety authorities remain adequate.
- (3) Posts and maintains a listing of the active NNSA nuclear safety delegations on the NNSA SharePoint website (Nuclear Safety Authorities – Current Delegations (energy.gov)).

d. Heads of NNSA Field Elements.

- (1) Submit requests for the delegation of nuclear safety authorities to the CSO for Safety with a copy to the Deputy Associate Administrator for Safety in accordance with Appendix A of this SD.
 - (a) Perform SAs at least biennially based on assessment criteria specified in Appendix A of DOE O 450.2 to verify that organizational capabilities and capacities supporting delegation remain adequate.
 - (b) Notify the CSO for Safety and CTA when SA results confirm that conditions under which the delegation was granted, change, or no longer apply (e.g., delegation is no longer valid) within their organization.
 - (c) Maintain the records associated with the delegation of nuclear safety authorities in accordance with the records management process.
- (2) Maintain the local process related to implementation of delegated nuclear safety authorities.

- e. Chief of Staff (NA-ESH-1.1).
- (1) Processes delegation packages (approval, modification, rescission) via the Electronic Document Online Correspondence and Concurrence System.
 - (2) Issues Delegation of Authority Order (initial approval or modification)' to delegate and relevant organization.
 - (3) Issues memorandum rescinding delegation to delegate and/or relevant organization.
 - (4) Maintains the records associated with the delegation of nuclear safety authorities in accordance with the records management process.
8. REFERENCES. See Appendix B.
9. CONTACT. Office of The Deputy Associate Administrator for Safety, NA-ESH-20, NA-ESH-22-FED@NNSA.DOE.GOV.

BY ORDER OF THE ADMINISTRATOR:

Jill Hruby
Administrator

Appendixes:

- A. Nuclear Safety Delegation Process for the National Nuclear Security Administration (NNSA)
- B. References

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

1. APPLICABILITY. This appendix applies to delegation of nuclear safety authorities.
 - a. Safety Design Basis. Safety Basis Approval Authority (SBAA) for safety design basis documents for hazard category (HC)-2 and 3 nuclear facilities developed in accordance with Department of Energy (DOE)-Standard (STD)-1189-2016, *Integration of Safety into the Design Process*, and as required by 10 Code of Federal Regulations (CFR) 830, Subpart B—*Safety Basis Requirements*. This includes Safety Design Strategy, Conceptual Safety Design Report, Preliminary Safety and Design Results, Preliminary Documented Safety Analysis, final documented safety analyses (DSAs), and technical safety requirements (TSRs). This approval authority also covers safety design basis documents prepared using DOE-STD-1189-2008 in cases where a project is following this version.
 - b. Safety Basis. SBAA for safety basis documents for HC-2 and 3 nuclear facilities required by 10 CFR 830 Subpart B—*Safety Basis Requirements*. This includes DSAs, TSRs, and unreviewed safety question (USQ) procedures, as well as documents that result from positive USQ determinations and revisions to these documents.
 - c. Packaging & Transportation (P&T). Certifying Official 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, *Hazardous Materials Packaging and Transportation Safety*, and DOE O 461.1C, *Packaging and Transportation for Offsite Shipment of Materials of National Security Interest*.
 - d. Startup and Restart. Startup Authorization Authority for startup of HC-3 nuclear facilities, activities, and operations and restart of HC-2 and 3 nuclear facilities, activities, and operations required by DOE O 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*.

DOE policy designates the Cognizant Secretarial Officer (CSO) for Safety as the SBAA 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 the Delegation of Authority Order, documenting delegation authority for SBAA.

2. REQUESTS FOR NUCLEAR SAFETY DELEGATION.

The request for delegation of nuclear safety authorities must address the following (use [NNSA Delegation Nomination](#)):

- a. Delegate Name/Position/Organization. Provide the full name of the individual to receive the delegation of a nuclear safety authority, the title of individual, and the organization. Delegations must only be made to individuals who possess the necessary qualifications, experience, and expertise.

Note: Provide the latest approved organizational chart with a sufficient level of detail, based on approved staffing allocations.

- b. Delegations Proposed. Identify the specific delegation of nuclear safety authorities being requested with 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). Indicate if Central Technical Authority (CTA) concurrence is required.
- c. Delegates' Education and Experience/Expertise. List technical or other degrees, professional licenses, and relevant certifications. Include a summary of the years of relevant experience/expertise. Include a supporting biography.
- d. Qualification. Provide relevant qualifications and training, current certificates or proof of required qualification and training. The delegate must meet the minimum requirements listed in Table 1 below to be delegated nuclear safety authorities.

Table 1. Minimum Individual Qualification and Training

Delegation	Minimum Requirements ⁴⁵
Safety Design Basis, Safety Basis	Qualified as a Senior Technical Safety Manager (STSM) ⁶ Successfully completed Nuclear Executive Leadership Training (NELT)
P&T	Qualified as STSM Successfully completed NELT
Startup and Restart	Qualified as a STSM

⁴ DOE Implementation Plan to Improve Oversight of Nuclear Operations (Revision 1, June 2005) in response to the Board's Recommendation 2004-1, Oversight of Complex, High-Hazard Nuclear Operations; Commitment 12: DOE will provide structured training (such as the Nuclear Executive Leadership Training) for safety professionals, senior managers, and decision-makers responsible for nuclear safety, including those responsible for nuclear safety oversight. (Commitment 12 includes STSM qualification, notification of completion provided 10/03/2006).

⁵ DOE O 426.1B (§4.d.(2)(a)1) states, "At a minimum, the following positions must be STSM qualified: b Field Element Manager or Deputy Field Element Manager with oversight responsibilities of defense nuclear facilities. ..."

⁶ DOE-STD-1175-2019, Senior Technical Safety Manager Functional Area Qualification Standard

- e. Compensatory Measures/Corrective Actions.
- (1) Compensatory measures will be required under the following conditions:
 - (a) If delegate does not have a technical background, concurrence must be provided by individuals who are able to serve as the compensatory measure.
 - (b) For Safety Design Basis, Safety Basis, and Certifying Official, if the delegate has completed only one of the two minimum requirements and the second requirement will be completed within three to six months from issuance of delegation.
 - (2) Corrective action must be provided when the capability/capacity supporting the delegated authority is found lacking (e.g., vacant key functional area), indicating that organization does have access to sufficient staff.
 - (3) Identify any necessary compensatory measure(s), must address the following, where applicable:
 - (a) Individuals who serve as the compensatory measure must meet the same qualification and training requirements as individuals who are delegated nuclear safety authorities.
 - (b) Specify how the compensatory measures will be implemented.
 - (c) When disagreement on a specific approval exists between the delegate and individual providing concurrence as a compensatory measure, the matter will be raised to the CSO for Safety for resolution.
 - (d) Document the compensatory measures exercised each time the delegated authority is executed.
- f. Organization's Capability/Capacity. Provide supporting documentation on the adequacy (grade) of the organizational capability/capacity, see Table 2 below.

Table 2. Documentation for Organizational Capability/Capacity

Authority	Grade	Supporting Documentation
Safety Design Basis, Safety Basis, P&T, Startup and Restart	Exceeds Expectations	A thorough summary affirmed (evidence) from the Chief of Defense Nuclear Safety (CDNS) Biennial Review (BR), self-assessment (SA), or independent assessment(s) that the site capabilities/capacities exceed expectations.
	Meets Expectations	A short narrative affirmed (evidence) from the CDNS BR, SA, or independent assessment(s) that the site capabilities/capacities meet expectations.
	Needs Improvement	Citation(s) from the CDNS BR, SA, or independent assessment(s) providing basis for needs improvement. Include planned improvements to meet expectations.
	Does Not Meet Expectations	Citation(s) from the CDNS BR, SA, or independent assessment(s) providing basis for does not meet expectations. Include planned improvements to meet expectations.

Note: Provide the following:

- (1) Status of Technical Qualifications Program (TQP) qualifications and latest eTQP data for key functional area(s) supporting the delegated authority.
 - (2) Status of corrective actions for latest CDNS BR, SA, or independent assessment(s).
 - g. Other Conditions to Justify Delegation. Provide the status of corrective actions associated with key functional areas (e.g., safety basis, radiation protection, conduct of operations, criticality, fire protection) for supporting documentation for adequacy of the organizational capability/capacity.
3. EVALUATING AND PROCESSING DELEGATION REQUESTS.
- a. Upon receipt of the delegation request, a thorough evaluation of the delegation request shall be performed to ensure that the appropriate criteria are met, using the [NNSA Delegation Evaluation](#)).
 - b. For delegations requiring CTA concurrence, the concurrence will be captured in the Delegation of Authority Order via the CTA signature.
 - c. When evaluation results indicate that key functional area(s) supporting the delegated authority are lacking, compensatory measure may be determined on a case-by-case basis.
 - d. The judgment (independently evaluation/concurrence) of at least two senior managers will be captured by signing the NNSA Delegation Evaluation. form. Division Directors and Excepted Service Level 4 or above (or equivalent) staff

who are STSM qualified are considered senior managers for this purpose.

- e. Based on the results of the evaluation and judgement by the senior managers, a recommendation is made for approval of the delegation request or denial of request to the CSO for Safety.
 - f. Once a delegation is approved, delegations remain in effect as long as: (1) the delegate maintains the position (exception to this is in §5. 5. *Conditions Affecting the Status of Delegations*, item a. of this Supplemental Directive, below) and qualifications, and (2) the organization's capacities and capabilities remain adequate to support the delegate in the execution of the safety authorities.
4. DELEGATION OF AUTHORITY ORDER. The following must be covered in the delegation of authority (Use [NNSA Delegation of Authority Order](#).)
- a. Delegation. This section must identify the delegate with the specific nuclear safety authorities being granted based on the results of the evaluation and/or final decision by the CSO for Safety (delegating official) for the specific delegated authorities.
 - b. Rescission. This section must identify any existing delegation to the delegate, indicating the date issued and whether remains in effect, is revised, or rescinded.
 - c. Limitations. This section must contain the following limitations:
 - (1) This Delegation of Authority Order covers only NNSA nuclear safety-related matters.
 - (2) In exercising the authority delegated herein, the delegate shall be governed by the rules and regulations of DOE, NNSA, and the policies and procedures prescribed by the Secretary and NNSA Administrator.
 - (3) The CSO for Safety retains responsibility for the approval of safety basis documents where no viable control strategy exists to prevent or mitigate the offsite dose consequence of one or more of the accident scenarios from exceeding the Evaluation Guideline of 25 rem.
 - (4) Nothing in this Delegation of Authority Order precludes the NNSA CSO for Safety from exercising any of the above delegated authorities.
 - (5) Nothing in this Delegation of Authority Order shall be construed to supersede or otherwise interfere with the NNSA CSO for Safety authorities.
 - (6) Any amendments to this Delegation of Authority Order shall be made in consultation with the NNSA CSO for Safety.

- d. Conditions. This section must contain the following conditions:
- (1) [Site (e.g., Nevada Field Office)] must conduct a SA within 2-years from receipt of this Delegation of Authority Order and at a minimum biennially thereafter; assess impacts to delegated authorities, at a minimum validate:
 - (a) Delegate continues to function in the position under which the delegation was issued.
 - (b) Delegate is maintaining STSM qualification.
 - (c) Supporting organizational capabilities/capacities are adequate.
 - (2) Notify the CSO for Safety of any SA results affecting the delegated authorities.
 - (3) The Delegation of Authority Order will expire when the delegate transfers, retires, or leaves the position under which the delegation was issued.
 - (4) The Delegation of Authority Order may be modified or rescinded under the following conditions:
 - (a) The delegate fails to maintain STSM qualification.
 - (b) The organization's capability/capacity is inadequate and unable to support the delegated nuclear safety authorities.
 - (c) Any nuclear safety event/condition that adversely affects or has the potential to adversely affect safety or mission execution, as determined by the CSO for Safety.
- e. Compensatory Measures. This section must address any compensatory measures, if necessary, as specified in in the NNSA Delegation Nomination or as deemed necessary based on the results of the evaluation.
- f. Restriction to Re-Delegate. This section must contain the following conditions:
- (1) These authorities shall not be further delegated or re-delegated below the [Site (e.g., Nevada Field Office)] Manager without requesting the delegation from the NNSA CSO for Safety.
 - (2) Further delegation below the [Site (e.g., Nevada Field Office)] Deputy Manager will require concurrence from the NNSA CTA.
 - (3) Individuals in an acting capacity for the delegate may not execute nuclear safety authorities, unless said individual has delegated relevant authority.

Note: NNSA Certifying Official authorities may be delegated to the Division Director of the Packaging and Transportation Division, but no further.

g. Effective. This section must contain the following:

- (1) All actions pursuant to any authority delegated prior to this Delegation of Authority Order or any authority delegated pursuant to previous delegations, taken prior to and in effect on the date of this Delegation of Authority Order, are ratified and remain in force as if taken under this Delegation of Authority Order, unless or until rescinded, amended, or superseded.
- (2) A copy of this Delegation of Authority Order shall be provided to the NNSA Office of Policy and Strategic Planning, NNSA Directives Team.
- (3) This Delegation of Authority Order is effective on the date of signature, below.

5. CONDITIONS AFFECTING THE STATUS OF DELEGATIONS.

- a. Delegations expire when the delegate transfers, retires, or otherwise leaves the position for which the delegated nuclear safety authorities is issued. However, when the change in position is a Deputy Manager, who is the delegate, becoming the Manager or is the Acting Manager at the same office, then the original delegation remains in effect.
- b. Delegations will be modified or rescinded under the following conditions:
 - (1) The delegate fails to maintain required STSM qualification. In this case, the organizational head notifies the CSO for Safety.
 - (2) The organization's capability or capacity is determined by the organization's SA or CDNS BR to be inadequate (based on Table 2 above, Grade is determined to be "Does Not Meet Expectations"), unable to support the delegated nuclear safety authorities.
 - (3) For any nuclear safety event/condition that adversely affects or has the potential to adversely affect safety or mission execution, as determined by the CSO for Safety.
- c. 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 authorities, the delegated nuclear safety authorities revert to the CSO for Safety.

6. MAINTENANCE OF DELEGATION RECORDS.

The following are considered records associated with the delegation of nuclear safety authorities and must be maintained in accordance with the records management process:

- a. The request for delegation and any supporting information provided by the requestor.
- b. The completed NNSA Delegation Evaluation and any supporting information.
- c. The signed Delegation of Authority Order (original delegation and revision) signed by the CSO for Safety with CTA concurrence, if applicable.
- d. The signed memorandum transmitting the signed Delegation of Authority Order.
- e. The signed memorandum rescinding a delegation.
- f. Documented results of the CDNS independent review of the SA performed by the Heads of NNSA Field Elements.
- g. Documented results of biennially review of the implemented nuclear safety delegation process.

APPENDIX B: REFERENCES

1. Title 10, Code of Federal Regulations, Part 830 (10 CFR 830), Subpart B, *Safety Basis Requirements*, effective November 18, 2020.
2. DOE O 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*, Chg 2 (MinChg): 10-04-2019, or successor document.
3. DOE O 450.2, *Integrated Safety Management*, Chg 1 (MinChg): 1-17-2017, or successor document.
4. DOE O 460.1D, *Hazardous Materials Packaging and Transportation Safety*, Chg 1 (LtdChg): 6-10-2022, or successor document.
5. DOE O 461.1C, *Packaging and Transportation for Offsite Shipment of Materials of National Security Interest*, Chg 1 (MinChg): 10-4-2019, or successor document.
6. NNSA SD 226.1B, *Headquarters Biennial Review of Nuclear Safety Performance*, Approved 10-26-20, or successor document.
7. DOE-STD-1104-2016, *Review and Approval of Nuclear Facility Safety Basis and Safety Design Basis Documents*, December 2016, or successor document.
8. DOE-STD-1175-2019, *Senior Technical Safety Manager Functional Area Qualification Standard*, June 2019, or successor document.
9. DOE-STD-1189-2016, *Integration of Safety into the Design Process*, December 2016, or successor document.