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Specific Administrative Controls Criteria and Review Approach Document		
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1.0 PURPOSE

The mission of the U.S. Department of Energy (DOE) Office of Environment, Safety and Health Assessments (EA-30) is to assess the effectiveness of safety and emergency management systems and practices used by line and contractor organizations and to provide clear, concise, rigorous, and independent evaluation reports of performance in protecting workers, the public, and the environment from the hazards associated with DOE activities.

In addition to the general independent oversight requirements and responsibilities specified in DOE Order 227.1A, *Independent Oversight Program,* this criteria and review approach document (CRAD), in part, fulfills the responsibility assigned to EA in DOE Order 226.1B, *Implementation of Department of Energy Oversight* Policy to conduct independent oversight and appraisals of high consequence activities. This CRAD is developed to independently evaluate the designation, formulation, and implementation of Specific Administrative Controls (SACs) that serve as nuclear safety hazard controls at Hazard Category 1, 2, or 3 DOE nuclear facilities required by 10 CFR 830.202.(b)(5) and DOE Order 420.1C, chapter I *Nuclear Safety Design Criteria,* §3.a.(2)(c).

The CRADs are available to DOE line and contractor assessment personnel to aid them in developing effective DOE oversight, contractor self-assessment, and corrective action processes. The current revision of EA's CRADs are available at http://www.energy.gov/ea/criteria-and-review-approach-documents.

2.0 APPLICABILITY

The following CRAD is approved for use by the EA Office of Nuclear Engineering and Safety Basis Assessments.

3.0 FEEDBACK

Comments and suggestions for improvements on this CRAD can be directed to the Director, Office of Nuclear Engineering and Safety Basis Assessments, at (301) 903-1210.

4.0 CRITERIA AND REVIEW APPROACH

This CRAD focuses on the adequacy of the derivation and implementation of SACs at DOE nuclear facilities as provided in requirements of DOE-STD-3009 (1994 & 2014), *Preparation of Nonreactor Nuclear Facility Documented Safety Analysis* and methodology of DOE-STD-1186-(2004 & 2016), *Specific Administrative Controls*. In addition, other DOE Orders (i.e., DOE Order 422.1, *Conduct of Operations*; DOE Order 426.2 Chg. 1, *Personnel Selection, Training, Qualification and Certification Requirements for DOE Nuclear Facilities*; DOE Order 420.1C, *Facility Safety*; DOE Order 414.1D, *Quality Assurance*; provide relevant requirements and/or guidance for SAC implementation.

A SAC is an administrative control that is identified to prevent or mitigate a hazard or an accident scenario and provides a safety function that would be safety significant (SS) or safety class (SC) if the function were provided by a structure, system, or component (SSC). The importance of SACs is equivalent to engineered safety controls. The increased focus on SAC formulation and implementation is intended to improve the reliability of these controls and to ensure their availability to perform specific safety functions when needed.

When a SAC is selected over an available SSC, DOE-STD-3009-2014 §3.3, requires that the documented safety analyses (DSA) "*shall provide a technical basis that supports the controls selected*". DOE-STD-3009-94 §4.5.x.2, requires "*If a SAC is utilized in lieu of the identification of safety SSCs, clearly identify and discuss the rationale for this decision*." DOE-STD-1186-(2004 & 2016), *Specific Administrative Controls,* clarifies requirements and guidance for the development and implementation of SACs.

The following criteria and lines of inquiry are independent sections to be used in any combination based on the need of the specific assessment. Where DOE-STD-3009-2014 or DOE-STD-1186-2016 guidance are used, they are explicitly identified.

OBJECTIVES

SAC.1: SACs are appropriately developed and functionally classified to prevent or mitigate a hazard or accident scenario and are supported by adequate justification in the safety basis. (DOE-STD-3009-94, DOE-STD-3009-2014, DOE-STD-1186-2004, DOE-STD-1186-2016)

Criteria:

1. An administrative control is designated as a SAC if (1) it is identified in the DSA to prevent or mitigate an accident scenario, and (2) it has a safety function that would be safety significant or safety class if

provided by an SSC. (DOE-STD-3009, definitions; DOE-STD-1186-2004, §2.1; DOE-STD-1186-2016, definitions)

2. Administrative Controls (ACs) that are major contributors to defense in depth (DiD) are designated as SACs that are required for safety because they are the basis for validity of the hazard or accident analyses, or they provide the main mechanisms for hazard control. (DOE-STD-3009-94, p.8; DOE-STD-3009-2014, §3.3.2)
3. Safety analyses shall establish the identification and functions of SACs and the significances to safety of the functions of the SAC. (DOE-STD-3009-94, pg. 9; DOE-STD-3009-2014, §3.3; DOE-STD-1186-2004, §1.61)
4. Descriptions for each SAC must be complete enough to indicate suitability of safety analysis inputs and assumptions. (DOE-STD-3009-94, §4.5; DOE-STD-3009-2014, §4.5)
5. SACs that provide a SC safety function need a more comprehensive discussion in the DSA compared to SACs that provide a SS safety function because of their importance to public safety. (DOE-STD-1186-2016, §2.2)*
6. When the hierarchy of controls is not used for situations requiring SC/SS controls (e.g., a SAC is selected over an available SSC), the DSA shall provide a technical basis that supports the controls selected. (DOE-STD-3009-94, §4.5.x.2; DOE-STD-3009-2014, §3.3)
7. SSCs whose failure would result in losing the ability to complete an action required by a SAC shall be identified. These SSCs shall be designated as SC or SS based on the SAC safety function, or justification provided if not so designated. (DOE-STD-3009-94, §4.5.x.2; DOE-STD-3009-2014, §3.3)
8. Some controls rely on the ability of the operator to distinguish color differences, to perform strenuous tasks, or gain access to relatively inaccessible areas. These specific factors shall be addressed explicitly in the formulation, implementation, and maintenance of SACs. (DOE-STD-1186-2004, §3.4.2; DOE-STD-1186-2016, §3.3.1)
9. The description of each such SAC will contain sufficient detail for an understanding of its safety function and its relationship to the facility safety analysis. (DOE-STD-3009-94, §4.5.x.1; DOE-STD-3009-2014, §4.5)
10. If a SAC requires operator action, an evaluation that addresses the following human factors shall be completed, on a graded approach: Adequacy and clarity of required SAC action description, level of difficulty of SAC actions, ergonomic design of equipment needed by operators, time available to do the task and error recovery, stress caused by environmental factors, and potentially hazardous conditions that could exist in an area requiring SAC action. (DOE-STD-3009-94 & 2014, §4.5.x.4; DOE-STD-1186-2016, §2.2)
11. It is not appropriate for a key element to be identified in lieu of a SAC. The basis for selection as a key element is specified, including detail on how the program element: (1) manages or controls a hazard or hazardous condition evaluated in the hazard evaluation; (2) affects or interrupts accident progression as analyzed in the accident analysis; and (3) provides a broad-based capability affecting multiple scenarios. (DOE-STD-3009-2014, §7.x.3)
12. When SACs are identified, they shall be controlled through the TSR. Two formats may be used to meet this requirement: (1) Limiting Conditions of Operation (LCO) format or (2) Directive Action format. (DOE-STD-3009-94 & 2014, §4.5.x.5; DOE-STD-1186-2004 & 2016, §4.2)
13. SACs are established to protect assumptions and initial conditions of the hazards and accident analysis, as appropriate. (DOE-STD-3009-94 & 2014, App A) [Including Conditions of Approval (COA)s & Authorization Agreements (AAs)]
14. SAC is formulated so that it is verifiable through appropriate and ongoing testing, examination, and assessment activities. (DOE-STD-1186-2004 & 2016, §2.2)

Lines of Inquiry:

- Do the descriptions of the SACs contain sufficient detail to understand their safety functions, basic principles by which it performs a safety function and the relationship to the safety analysis? (DOE-STD-1186-2016 §2.1, pg. 6)*
- Are the SACs identified and described consistent with the logic presented in the hazard and accident analyses?
- Are safety functions for SACs defined with clarity and consistent with the bases derived in the hazard and accident analyses? (DOE-STD-1186-2016 §1.5, pg. 3)*
- Are SAC functional requirements described based on the specific accident(s) or general rationales for which the SAC is needed? (DOE-STD-1186-2016 §2.1, pg. 7)*
- Does the functional requirement description fully address all aspects important for ensuring the SAC can be accomplished?
- Do the SAC functional requirements specifically address the pertinent response parameters or non-ambient environmental stresses related to an accident for which the safety function is relied on? (DOE-STD-1186-2016 §2.1, pg. 7)* (DOE-STD-3009-2014 §4.5.X.3)**
- Does the SAC evaluation provide performance criteria that meet functional requirements(s) and thereby satisfy its safety function?
- Do the SAC performance criteria characterize the specific operational responses and capabilities necessary to meet functional requirements?
- If a SAC is safety class, does the control address the principles of redundant, independent, and diverse? (DOE-STD-1186-2016 §2.2, pg. 8)*
- Are there safety management programs (SMP) key elements used for specific high consequence hazard event risk reduction that has a safety function that would be safety significant or safety class if provided by an SSC? [Note – DOE-STD-3009-94 does not define key elements] (DOE-STD-1186-2016 §2.1, pg. 7)* (DOE-STD-3009-2014 §4.5.X.3)**
- Is there adequate justification for the decision to not designate the SMP key element as a SAC?
- Are there programmatic administrative controls (PAC) used for specific high consequence hazard event risk reduction that has a safety function that would be safety significant or safety class if provided by an SSC? (DOE-STD-1186-2016 §1.8, pg. 6)*
- Is there adequate justification for the decision to not designate the PAC as a SAC?
- Are there candidate or DiD SSCs available in specific high consequence hazard events where SACs are the primary credited control?
- Are the safety functions of these non-credited SSCs similar to the SAC safety function?
- Is there adequate justification for the control decision in crediting SACs in lieu of available SSCs? (DOE-STD-1186-2016 §2.1, pg. 7)* (DOE-STD-3009-2014 §4.5.X.3)**
- If a SAC is utilized in lieu of safety SSCs, does the DSA clearly identify and discuss the rationale for this decision? Is the discussion regarding why SSCs are not plausible or practical for accomplishing the safety function adequate? (DOE-STD-1186-2016 §1.6, pgs. 4 and 7)*
- Are there any SACs that replaced safety SSCs, in which the SSC was subsequently downgraded from safety class or safety significant?
- Does the DSA provide the bases for how the SAC meets the safety function formerly provided by the safety SSC or design feature?
- Does the DSA describe the rationale for designating an AC as a SAC, state whether the SAC performs an SC or SS function, and identify its preventive or mitigative safety function?
- Are the SAC safety function top level statements that express the objective of the SAC in a given accident scenario provided?
- Does the SAC description provide its boundaries and interface points with any SSCs relevant to the safety function? (DOE-STD-1186-2016 §2.1, pg. 7)*

- Does the DSA identify SSCs whose failure would result in losing the ability to complete the action required by the SAC? (DOE-STD-1186-2016 §2.1, pg. 7)* (DOE-STD-3009-2014 §4.5.X.3)**
- Does the DSA identify functional requirements of the SSC that are specifically needed to fulfill the SAC safety function? [Note – functional requirements are specified for both the SAC and any needed support SSCs] (DOE-STD-1186-2016 (§2.1, pg. 7)*
- Where SACs rely on supporting SSCs to perform their intended safety function, have these SSCs been properly identified, classified with respect to safety, and controlled so that they can meet performance requirements consistent with their safety importance? (DOE-STD-1186-2016 §2.1, pg. 7)* (DOE-STD-3009-2014 §4.5.x.3)**
- Where SACs rely on supporting SSCs, are the functional requirements and performance evaluation of the supporting SSCs included in either the SSC or SAC sections of Chapter 4? (DOE-STD-3009-2014 §4.5.x.3)**
- Does the SAC evaluation include a process to validate that plant operators can perform the task(s) called for within the timeframes assumed in the safety analysis? (DOE-STD-3009-2014 §4.5.x.4)**
- Are SACs identified in the Technical Safety Requirements (TSR) document as either a Directive Action SAC or an LCO?
- If SACs require operator action, does the DSA provide a human factors evaluation, including the attributes of DOE-STD-1186-2016 § 2.1 and 2.2?*
- Are consequences of incorrect implementation of the SAC evaluated and are measures to prevent control failure factored into the SAC evaluation? (DOE-STD-1186-2016 §2.1)* (DOE-STD-3009-2014 §4.5.X.3)**
- Has the SAC been formulated so that it is verifiable through appropriate and ongoing testing, examination, and assessment activities? (DOE-STD-1186-2016 §2.2)*
- Has SAC been verified by a subject matter expert (SME) who was not part of the formulation of the control to assure an unbiased assessment of the SAC effectiveness? (DOE-STD-1186-2016 §2.2)*
- Does DSA Chapter 5 provide a summary description of SAC safety functions and required attributes and references to the supporting information in hazards and control selection portions of the DSA? (DOE-STD-1186-2016 §2.2)*
- Are the SAC safety functions, description, performance criteria and evaluation, specified in the safety basis documents, translated into appropriate TSRs?
- Do TSR SACs provide specific actions or conditions related to individual accident scenarios (e.g., material at risk (MAR) limits, combustible loading)?
- Does the TSR description of the SAC appropriately prescribe either the LCO format or the Directive Action format? (DOE-STD-1186-2016 §4.2)*
- Is the SAC's use of an LCO format adequately justified and sufficiently addresses safety function, functional requirements, performance criteria and the associated hazard(s)?
- Do the TSR bases for selected SACs appropriately reflect assumptions of facility configuration, human performance of the necessary safety functions, operational parameters, and key programmatic aspects?
- Do facility operating processes, protocols, and procedures prohibit the facility from operating in a mode or under a condition where a SAC is required but has not been confirmed to be operable?
- Are SACs established to protect assumptions and initial conditions of the hazards and accident analysis, as appropriate? [Including COAs & AAs]
- Is the SAC formulated so that it is verifiable through appropriate and ongoing testing, examination, and assessment activities?

SAC.2: Contractor implementation verification and federal oversight activities are sufficient to verify that SACs are implemented such that they adequately meet the DSA functional requirements and TSR.

Criteria:

1. SACs identified in TSRs shall be initially (prior to operation) and periodically verified to be capable of performing their intended safety function. (DOE-STD-1186-2004, §2.2; DOE-STD-1186-2016, §2.3)
2. SACs are implemented to control facility operations using formally controlled procedures. (DOE-STD-1186-2016 §2.3; DOE Order 414.1D, Attachment 2, Criterion 5[a])
3. Effective implementation of SACs includes training and periodic re-training of operators on SACs and associated implementing procedures. (DOE-STD-1186-2004, §3.4; DOE-STD-1186-2016, §3.3; DOE Order 426.2, Att. 1, §5 and §7)
4. The operator must establish and implement operations practices for developing and maintaining accurate, understandable written technical procedures that ensure safe and effective facility and equipment operation. (DOE Order 422.1, Attachment 2, §2.p, *Conduct of Operations*)
5. Facility personnel are trained and knowledgeable in the SAC implementing procedures. (DOE Order 426.2 Chg. 1, *Personnel Selection, Training, Qualification and Certification Requirements for DOE Nuclear Facilities* – Relevant Training Implementation Matrix)
6. Personnel are trained on the purpose and use of the controls and are qualified to discharge their responsibilities satisfactorily. (DOE Order 426.2, Att. 1, §5 and §7)
7. Federal oversight programs include higher priority and greater emphasis are given to oversight of activities with potentially high consequences. (DOE Policy 226.2, *Policy for Federal Oversight and Contractor Assurance Systems*)
8. Engineering calculations and analyses supporting SACs are developed and implemented in a manner that meets quality assurance requirements. (DOE-STD-1186-2004, §1.6.1, Element 6; DOE-STD-1186-2016, §3.4; DOE Order 414.1D, Attach. 2, Criterion 6)
9. Engineering design documents and analyses supporting the SAC are technically adequate and consistent with the requirements of the documented safety analysis. (DOE Order 414.1D, Attach. 2, Criterion 6)
10. The adequacy of design products and analyses supporting SACs are verified or validated by individuals or groups other than those who performed the work. (DOE Order 414.1D, Attach. 2, Criterion 6)
11. Technical baseline documents, including design basis and supporting documents for SSCs that support SACs, are identified, developed, and kept current to support facility safety basis development and implementation. (DOE Order 420.1C Chapter 5, 3.c[2])

Lines of Inquiry:

- Have the SAC implementing procedures been prepared, reviewed, and approved to implement the DSA functional requirements and TSR? (DOE-STD-1186-2016 §2.3)*
- Is there clear linkage from the SAC implementing procedure(s) to the TSR and its safety function?
- Can the SAC implementing procedure(s) be executed as written within the time frames and under the analyzed conditions in the safety basis?
- Does the SAC implementing procedure(s) demonstrate that the SAC is capable of accomplishing its safety functions and continues to meet applicable SAC requirements and performance criteria?
- Does the review (observed, if possible,) conducted by the contractor or site office personnel address the SAC sufficiently to verify its ability to meet the intended safety function as described in the safety basis?

- Are the SAC procedures prepared, reviewed, approved, and controlled using an approved document control process?
- Are limits, precautions, system and test prerequisite conditions, data required, acceptance criteria and independent verification elements included in surveillance procedures for SACs?
- Are appropriate data recording provisions included or referenced and used to record surveillance results?
- Does the SAC implementing procedure task(s) adequately implement the safety basis functional requirements (giving consideration to the level of difficulty, operator training, available indication, equipment design, facility conditions, and required timeliness)?
- Do SAC implementing procedures make appropriate use of human factors principles such as independent verification, positive feedback, lockouts, etc.?
- Do SAC procedures include specifications for use of administrative locks/tags for equipment positions needed to support the safety basis?
- Do SAC procedures include appropriate independent verification for system lineups?
- Are the training, qualification and re-training requirements for personnel executing the SAC procedure specified?
- Do administrative procedures ensure that the document preparation and revision processes adequately incorporate controls such as verification and validation, document control, and unreviewed safety question (USQ) review?
- Does the USQ determination for proposed changes to SAC implementing procedures provide adequate evaluation?
- Does the document revision process incorporate reviews to determine the need for training and/or required reading for document changes?
- If measuring and test equipment and supplies are necessary to implement the SAC procedures, are periodic tests and inspections conducted to ensure the equipment and supplies are maintained, available, operable, and calibrated?
- Do the SAC procedures include provisions for listing discrepancies?
- Do the SAC procedures require timely notification to facility management about any discrepancy that could impact performance of the SAC and/or facility operability?
- Does the validation and verification documentation demonstrate that the new or revised SAC procedure will meet the functional requirements identified in the new or revised safety basis?
- Have assessments of SAC development processes and their implementation been performed by the contractor and Federal oversight? Have appropriate corrective actions been implemented?
- Are engineering calculations and analyses supporting SACs developed and implemented in a manner that meets quality assurance requirements?
- Are engineering design documents and analyses supporting the SAC technically adequate and consistent with the requirements of the documented safety analysis?
- Is the adequacy of design products and analyses supporting SACs verified or validated by individuals or groups other than those who performed the work?
- Are technical baseline documents, including design basis and supporting documents for SSCs that support SACs, identified, developed, and kept current to support facility safety basis development and implementation?*

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*STD-1186-2016 requirements are not applicable to existing approved SACs (see 1186-2016 §1.3)
** LOI specific to DOE-STD-3009-2014 requirements

SAC.3: Contractor operatis activities are sufficient to demonstrate that SACs are implemented such that they adequately meet safety basis requirements.

Criteria:

1. Operating personnel provide prompt notification to other operating personnel and supervisors of changes in the facility status, abnormalities, or difficulties encountered in performing assigned tasks. (DOE Order 422.1, *Conduct of Operations*, Attachment 2, Appendix A, § 2.b.(1))
2. Operating personnel maintain awareness through inspection, conducting checks, and tours of equipment and work areas. (DOE Order 422.1, Attachment 2, Appendix A, § 2.b.(3))
3. Operating personnel promptly respond to instrument indications, including the use of multiple indications to obtain parameters. (DOE Order 422.1, Attachment 2, Appendix A, § 2.b.(6))
4. Operating personnel follow formal processes for authorization for, and awareness of, equipment and system status changes. (DOE Order 422.1, Attachment 2, Appendix A, § 2.h.(1))
5. Operating personnel follow formal processes for initial system alignment, maintaining control of equipment and system status through startup, operation, and shutdown, and documentation of status. (DOE Order 422.1, Attachment 2, Appendix A, § 2.h.(2))
6. Operations personnel use administrative locks or tags for control of equipment. (DOE Order 422.1, Attachment 2, Appendix A, § 2.h.(3); DOE-STD-1186-2004 & 2016, §3.2.2)
7. Operations personnel use established methods for performing and documenting independent verification. (DOE Order 422.1, Attachment 2, Appendix A, §2.j.(2), Attachment 2, Appendix A, §2.j.(3); DOE-STD-1186-2004, §2.3 & §3.2.1; DOE-STD-1186-2016, §3.2.1)
8. Operations personnel use timely instructions/orders in appropriate circumstances. (DOE Order 422.1, Attachment 2, Appendix A, §2.o.(1))
9. Operations personnel use approved procedures to perform operations. (DOE Order 422.1, Attachment 2, Appendix A, §2, pg. 1)
10. Operations personnel use current revisions of procedures to perform operations. (DOE Order 422.1, Attachment 2, Appendix A, §2, pg. 8)
11. Components utilized by operators are labeled. (DOE Order 422.1, Attachment 2, Appendix A, §2.r.(1))

Lines of Inquiry:

- Do supervisors and operators keep each other and affected organizations informed of facility status changes, abnormalities or difficulties?
- Do operators keep supervisors informed of unexpected situations?
- Do operators inspect equipment status and condition during tours for proper operation, for operability of standby equipment, and any work planned or in progress?
- Do operators recognize, document, and report abnormal conditions and take action to correct the conditions?
- Do operators believe their indications unless proven otherwise?
- Do operators check other indicators, when possible, to confirm unexpected readings?
- Do operators take prompt action to investigate and correct abnormal conditions?
- Do operators identify inaccurate or malfunctioning instruments and inform appropriate supervisors and repair organizations?
- Is the operations supervisor responsible for maintaining proper configuration and authorizing status changes for major equipment?
- Are status changes resulting from operations or work reported to cognizant supervisors?

- Are checklists used to guide initial alignments and rechecks, and include equipment identification matching installed labels, required component position, data entry space for actual position and any deviations, and documentation of alignment or recheck?
- Does restoration of safety-related systems following maintenance include functional testing of their capability?
- Are deviations from the reference alignment, including lockouts and tagouts, tracked and controlled by a status board or other effective system?
- Do supervisors approve administrative locks and tags in their facility and remain aware of status changes that result?
- Are personnel trained in their responsibilities concerning changing system or equipment status and operation of administratively locked or tagged components?
- Do operators utilize independent verification techniques appropriate to the facility equipment?
- Are operators up to date and familiar with applicable timely instructions/orders (e.g., standing orders)?
- Do operators use written procedures for operations, perform them as written, and stop work and notify management when procedures cannot be executed as written?
- Are only the current approved versions of SAC procedures used?
- Do operators verify working copies of procedures against controlled copies for use during evolutions to prevent use of outdated procedures?
- Does the procedure performance, tabletop walkthrough or walk-down indicate the SAC can be executed using the procedure(s) as written?
- Does the procedure performance, tabletop walkthrough or walk-down provide evidence that required supporting equipment is available, as necessary, to execute the SAC procedure?
- Does the procedure performance, tabletop walkthrough or walk-down indicate that facility operators are familiar with and capable of procedure implementation?
- Are components such as valves, major equipment, instruments, and named SSCs clearly and consistently labeled?
- Does component labeling or posting support the accurate, timely execution of the SAC procedures?

REVIEW APPROACH

Record Review (examples):

- Approved Documented Safety Analysis (DSA) and previous revisions as appropriate
- Technical Safety Requirements (TSRs)
- Process Hazard Analysis Report
- Justification for Continued Operations
- Safety Evaluation Report (SER)
- TSR implementation matrix
- Human reliability analysis for select SACs
- Operations, surveillance and testing procedures that implement TSR SACs
- Maintenance Program Procedures that implement TSR SACs
- Design Change (system/equipment modification) procedure(s)
- Configuration management/control program and operating procedures
- System design descriptions and design media for SAC-supporting SSCs
- USQ Determinations for SAC implementing procedures
- SAC Implementation Verification Reviews (initial and reverification)
- Operator training records for SAC-implementing personnel

- Index of current operations standing orders and periodic management assessments to determine current applicability and technical accuracy for SACs
- Federal and contractor oversight reports for SAC implementation

Interviews (examples):
- Nuclear Safety Manager
- Safety Basis Manager
- Nuclear Safety Engineers
- Human Factors and Reliability SMEs
- Design Engineering Managers and SMEs
- Maintenance and Operations Managers
- Facility Operators
- Configuration Management System Supervisors and SMEs
- Document Control Manager
- Technical Procedure Process Managers
- Engineering Manager
- Cognizant System Engineers
- Training Manager
- Operations personnel
- Facility Manager
- DOE Facility Representative
- DOE System Safety Oversight Engineer
- DOE Nuclear Safety Specialist

Observations:
- SAC Implementing Activities