

The following document is a tool to assist System Engineers (Design Authority Engineers) in gaining practical knowledge to perform assigned engineering responsibilities. The information is maintained consistent with site procedures (E7, 2S, 1Y, etc.) by the Engineering Standards organization. Attachment I contains a checklist for performing level of knowledge walkdowns.

What a System Engineer Should Know...

<div style="background-color: #ffffcc; text-align: center; padding: 2px;">Facility</div> <ul style="list-style-type: none"> ✓ Mission ✓ Safety Posture ✓ Security Awareness ✓ Historical Significance ✓ Configuration Management Plan ✓ Business Unit or Facility Procedures 	 	<div style="background-color: #ffffcc; text-align: center; padding: 2px;">Modifications</div> <ul style="list-style-type: none"> ✓ Graded Approach ✓ Change Control ✓ Project Management ✓ Technical Agency Identification ✓ Safety Basis Strategy ✓ Procurement ✓ Temporary Modifications ✓ Technical Reviews ✓ Facility Impacts
<div style="background-color: #ffffcc; text-align: center; padding: 2px;">System</div> <ul style="list-style-type: none"> ✓ Design Authority Responsibilities ✓ Functional Classification ✓ Technical Baseline ✓ System P&IDs & SLDs ✓ Design Basis ✓ Procedures ✓ Master Equipment List ✓ Component identification & Labeling ✓ Status ✓ Quality Assurance ✓ Feedback 	<div style="background-color: #ffffcc; text-align: center; padding: 2px;">Contacts</div> <ul style="list-style-type: none"> ✓ Facility and Site Safety ✓ Maintenance/Work Control ✓ Operations ✓ Construction ✓ Startup ✓ FOSC ✓ New Information ✓ NCSRC ✓ Regulatory ✓ AB Steering Comm Rep ✓ WSMS ✓ Conduct of Eng Comm Rep ✓ Design Agency/DMM ✓ Technical Agency Contacts ✓ Configuration Management ✓ Self-Assessment Coordinator ✓ System Health ✓ Quality Assurance ✓ Procurement ✓ STRs/TORs ✓ LSIT ✓ RCO ✓ IH ✓ Fire Protection ✓ Welding ✓ Hoisting and Rigging ✓ SERB ✓ ESB Technical Committees 	<div style="background-color: #ffffcc; text-align: center; padding: 2px;">Safety Basis</div> <ul style="list-style-type: none"> ✓ 11Q Manual Responsibilities ✓ Safety Basis and Implementation ✓ Safety Basis Commitments ✓ Linking Documents and Safety Basis Lists ✓ Technical Safety Requirements (TSRs) ✓ USQ process
<div style="background-color: #ffffcc; text-align: center; padding: 2px;">Operations</div> <ul style="list-style-type: none"> ✓ 2S Manual Responsibilities ✓ Procedures ✓ Equipment Status Control ✓ Operations Acceptance ✓ Process for reporting occurrences, significant operating events, and improper configurations 	<div style="background-color: #ffffcc; text-align: center; padding: 2px;">Maintenance</div> <ul style="list-style-type: none"> ✓ 1Y Manual Responsibilities ✓ Work Control ✓ Maintenance History ✓ Preventive Maintenance ✓ Predictive Maintenance ✓ Degradation ✓ Troubleshooting 	<div style="background-color: #ffffcc; text-align: center; padding: 2px;">System Health</div> <ul style="list-style-type: none"> ✓ System Health Schedule ✓ Selection of SSCs and Parameters to Monitor ✓ System Performance Data Collection ✓ Trending methods ✓ Interactions with other SSCs
<div style="background-color: #ffffcc; text-align: center; padding: 2px;">Tools</div> <ul style="list-style-type: none"> ✓ AIM, Passport, DCRNotes ✓ Conduct of Engineering Resources ✓ Standards Program ✓ Career Development and Training ✓ Self-Assessment Program ✓ Suspect/Counterfeit Items ✓ Planning for Quality 		

Facility	What to Know...
Mission	<ul style="list-style-type: none"> ✓ Expected/Remaining Lifetime ✓ Hazard Category – S/RID FA00, Nuclear and Radiological Facilities List - http://bnet4.srs.gov/srid/pdf/files/fac-030805.pdf ✓ How your facility supports/impacts other organizations/facilities and how they support/impact you
Safety Posture	<ul style="list-style-type: none"> ✓ Integrated Safety Management (ISM) – WSRC 1-01, MP 1.22 ✓ Safety Basis ✓ Facility/Project AHA Champion – 8Q, 120 ✓ AHA Web Page - http://shrine.srs.gov/info/aha/index.htm
Security Awareness	<ul style="list-style-type: none"> ✓ Facility Entry requirements - http://shrine.srs.gov/html/site_training/FacilityTrnReqs/facility.htm ✓ Facility Security Plan
Historical Significance	<ul style="list-style-type: none"> ✓ National Historic Preservation Act Eligibility – Refer to the NHPA Screen on the Conduct of Engineering web page under Technical Agency Contacts.
Configuration Management Plan	<ul style="list-style-type: none"> ✓ Configuration controlled SSCs verses non-configuration controlled SSCs ✓ Change Control processes to be used for configuration controlled SSCs ✓ Component identification, labeling, and master equipment list requirements ✓ Compensatory Actions ✓ Technical Baseline Reconstruction (TBR) status ✓ Engineering and configuration management waivers and deviations
Business Unit or Facility Procedures	<ul style="list-style-type: none"> ✓ Official location of lower tier procedures that provide facility specific implementation details for site procedures ✓ Business Unit/Facility Level Procedure Contacts ✓ Facility Engineering web page location and contents ✓ Facility specific Standing Orders and Memorandums of Understanding

System	What to Know...
Design Authority Responsibilities	✓ E7, 1.10, Engineering Program R2A2
Functional Classification	<ul style="list-style-type: none"> ✓ Where the system's functional classification is officially documented (Functional Classification document, AIM, ?) ✓ Component level functional classification process ✓ Process for changing a functional classification (E7, 2.25, AIM Functional Class Tutorial) ✓ Safety function of assigned system/components
Technical Baseline	<ul style="list-style-type: none"> ✓ Where the official Facility Technical Baseline List is documented (hard copy document, controlled database, AIM, DCR Notes, ?) ✓ How to use DCR Notes ✓ Facility Configuration Management POC ✓ Facility Configuration Management Implementation Plan (CMIP) ✓ How to assign Technical Baseline Document Categories (Essential, Support, General) – DCR Notes and E7-1.05 ✓ Process for extending Essential document incorporations ✓ Codes and Standards applicable to assigned systems ✓ Technical Baseline Reconstruction status for assigned systems ✓ How to maintain consistency between Technical Baseline documents and the physical configuration using informal periodic walkdowns (E7-1.05)
Design Basis	<ul style="list-style-type: none"> ✓ Where the design basis for assigned systems are officially documented? (Facility and System Design Descriptions? AIM Design Attributes?) ✓ Interfaces and interactions with other SSCs – How does your system support/impact other SSCs and how do they support/impact you?
Procedures	<ul style="list-style-type: none"> ✓ ARPs, AOPs, and EOPs applicable to assigned systems: <ul style="list-style-type: none"> ✓ Which procedures contain Safety Basis inputs and assumptions ✓ How to access facility procedures ✓ How to request changes to facility procedures ✓ How to keep facility procedures consistent with Technical Baseline documents and physical equipment ✓ What are the operating/abnormal operating philosophies ✓ What is the basis for procedure rounds
Master Equipment List	<ul style="list-style-type: none"> ✓ Minimum field requirements for the MEL (E7-1.31) ✓ How to access the MEL through Passport ✓ How to make changes to the MEL for assigned systems ✓ Facility Passport POCs
Component Identification and Labeling	<ul style="list-style-type: none"> ✓ How to determine which SSCs require component numbers (E7-1.30) ✓ How to assign a new component number (E7-1.30, AIM Tutorial) ✓ How to make changes to component attributes in AIM (E7-1.30, AIM Tutorial) ✓ How to format and color code labels (E7, 1.32)
Status	<ul style="list-style-type: none"> ✓ Operations "System Status Control" programs ✓ Approved waivers, deviations, and compensatory actions applicable to system ✓ Non-conformances ✓ Lines of Responsibilities with Multiple System Owners ✓ System Notebooks ✓ Maintenance Requirements ✓ Status of planned and in-progress Permanent and Temporary Mods ✓ "What work orders were generated on my system last night?"
Quality Assurance	<ul style="list-style-type: none"> ✓ Quality Requirements (1Q, E7-2.25-Att. 8.6) ✓ Planning for Quality Tools – E7, 1.02, Shrine Quality Web Page ✓ Stop Work – 1Q, QAP 1-2 ✓ Design Control – 1Q, QAP 3-1

	<ul style="list-style-type: none"> ✓ Procurement Document Control – 1Q, QAP 4-1 ✓ Control of Purchased Items and Services – 1Q, QAP 7-2 ✓ Commercial Grade Item Dedication – 1Q, QAP 7-3 ✓ Inspections – 1Q, QAP 10-1 ✓ Non-Conformances – 1Q, QAP 15-1 ✓ Corrective Action Program – 1Q, QAP 16-3, 1-01 MRP 5.35 ✓ Software Quality Assurance – 1Q, QAP 20-1
Feedback	<ul style="list-style-type: none"> ✓ Related ORPS/SIRIMs ✓ FEB and Self-Assessment Corrective Actions ✓ System Health (E7, 3.04) ✓ Structural Integrity (E7, 3.48) ✓ STAR - http://bnet4.srs.gov/star/index.asp

Operations	What to Know...
2S Manual Responsibilities	<ul style="list-style-type: none"> ✓ Knowledge of facility operating logistics (2S): <ul style="list-style-type: none"> ✓ Round sheets (basis for frequencies and limits) ✓ Standing orders ✓ Control room entry processes ✓ Lockouts (Safety Basis impacts) ✓ Notification of off-shift personnel ✓ Operator work arounds ✓ Layup activities ✓ Status of Log Books ✓ Process for outages ✓ Operational Aid Postings ✓ Operations Tags ✓ Alarm Statuses ✓ Notification of equipment deficiencies ✓ Surveillance Program responsibilities ✓ Facility Monitoring Program requirements (2S-5.13)
Procedures	<ul style="list-style-type: none"> ✓ Types of Procedures used in facility ✓ Procedures associated with assigned system(s) ✓ Engineering review and approval requirements
Equipment Status Control	<ul style="list-style-type: none"> ✓ Process for evaluating process flow changes for downstream impacts ✓ In-service inspection and test data requirements ✓ Instrument calibrations ✓ Leakage monitoring results ✓ Operational limits compliance ✓ Component and System Alignments ✓ Setpoints - basis, uncertainties, applicability to TSRs/calibration/PM frequency/procedures
Operations Acceptance	<ul style="list-style-type: none"> ✓ Facility Acceptance processes <ul style="list-style-type: none"> ✓ 8Q, 51 ✓ DADs
Process for reporting occurrences, significant operating events, and improper configurations	<ul style="list-style-type: none"> ✓ Non-conformances ✓ ORPs/SIRIMs ✓ Supervisor Personnel

Modifications	What to Know...
Graded Approach	<ul style="list-style-type: none"> ✓ E7 Modification Navigator ✓ Graded Approach factors should be considered when determining the level of change control to apply to modifications and include (E7-1.02): <ul style="list-style-type: none"> ✓ Commercial versus Nuclear ✓ Risk and Complexity ✓ Functional Classification ✓ Lifecycle Phase ✓ Modification Type ✓ SSC Type ✓ Chief Engineer (or designated Design Authority Manager) agrees to the level of control applied to the modification (design reviews, Safety Basis strategy, E11 controls, technical risk, Technical Agency involvement, etc.) – Reference Section II of the MT.
Change Control	<ul style="list-style-type: none"> ✓ E7 Manual Design Authority Responsibilities ✓ Which change control document is required based on graded approach – E7-1.02 ✓ Risk Screening process – E7-2.05 (OSR 19-338)
Project Management	<ul style="list-style-type: none"> ✓ E11 Manual Responsibilities ✓ Project Navigator Tool - http://bnet.srs.gov/projnav/
Technical Agency Identification	<ul style="list-style-type: none"> ✓ A list of site Technical Agencies is available on the E7-Conduct of Engineering web page to assist the Design Authority in determining level of Technical Agency involvement needed: <ul style="list-style-type: none"> ✓ Technical Agency Contact Names ✓ Technical Agency screens ✓ The TAIC form (OSR 19-329) is used as a tool to identify Technical Agency inputs needed for larger modifications (e.g., projects). ✓ The Design Authority is responsible for ensuring the Technical Agency inputs are integrated into the design.
Safety Basis Strategy	<ul style="list-style-type: none"> ✓ 11Q-1.10 and E7-2.05 SBS Responsibilities ✓ The Chief Engineer (or designated Design Authority Manager) is responsible for evaluating the project risk screens to determine SBS needs. ✓ The SBS evaluation includes: <ul style="list-style-type: none"> ✓ What are the hazards and the hazard category? ✓ Is it a major modification? ✓ Will CHAP be used? ✓ What safe harbor documents/techniques will be used? ✓ That types/pedigrees of controls will be used to protect which receptors? ✓ What safety standards will be required and how will they be imposed? ✓ What analysis types, techniques, and assumptions will be used?
Procurement	<ul style="list-style-type: none"> ✓ 3E Manual Responsibilities: <ul style="list-style-type: none"> ✓ Identify functional, performance, technical, quality requirements of items ✓ Prepare procurement documents including inspection and acceptance criteria ✓ Review and approve supplier engineering documents ✓ Evaluate and disposition supplier deviation requests
Temporary Modifications	<ul style="list-style-type: none"> ✓ Temporary modifications include: (E7-2.06) <ul style="list-style-type: none"> ✓ modifications that are generally expected to be installed for 6 months or less ✓ modifications where the configuration of the impacted SSC(s) is restorable to its original configuration when the temporary modification is removed ✓ TMs are typically cost funded (i.e., not capital) and the administrative and installation costs are expected to be less than installing a permanent modification.
Technical Review Processes	<ul style="list-style-type: none"> ✓ Technical Review Requirements – E7-2.60: <ul style="list-style-type: none"> ✓ Design Checking is performed for GS/PS design. ✓ Design Verification is performed for SS/SC design. ✓ Design Authority Technical Reviews are conducted dependent upon change document review/approval requirements. ✓ Formal Design Reviews are conducted as determined by criteria in E7-2.05. ✓ Technology Reviews are conducted as determined by Project technology development plans. ✓ How to perform a Design Authority Technical Review – E7-2.60: <ul style="list-style-type: none"> ✓ How to evaluate facility impacts ✓ How to evaluate impacts to Technical Agents (Fire Protection, S&S, etc.)

	<ul style="list-style-type: none"> ✓ How to evaluate impacts to the Safety Basis ✓ How to evaluate acceptability and compatibility of the mod within the facility ✓ How to evaluate interfaces ✓ How to document Technical Reviews
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Safety Basis	What to Know...
11Q Manual Responsibilities	<ul style="list-style-type: none"> ✓ Safety Basis for assigned systems: <ul style="list-style-type: none"> ✓ Document Safety Analysis (DSA) ✓ Technical Safety Requirements (TSRs) ✓ Linking Documents ✓ Accident Scenarios ✓ Justification for Continued Operations (JCOs) ✓ Systems/Programs credited for prevention/mitigation ✓ Uncertainty Calculations and how they are implemented ✓ Operations and support organizations (e.g., WSMS, Technical Agencies) needed to establish safe facility operations
Safety Basis and Implementation	<ul style="list-style-type: none"> ✓ 11Q, 1.01, Safety Basis Documents ✓ Where the system's official version of Safety Basis Documents is maintained ✓ Potential accidents, credited responses, and credited SSC functions and features
Safety Basis Commitments	<ul style="list-style-type: none"> ✓ Safety Basis commitments can include inputs and assumptions, LCOs, ACs, design features, DCA defenses, elements of incredibility, hazard controls ✓ Where the Safety Basis commitments are protected: <ul style="list-style-type: none"> ✓ TSRs ✓ Procedures ✓ Linking Documents ✓ How the Safety Basis commitments are periodically revalidated: <ul style="list-style-type: none"> ✓ TSR surveillance ✓ System performance monitoring ✓ DSA/TSR annual reviews
Linking Documents and Safety Basis Lists	<ul style="list-style-type: none"> ✓ 11Q, 1.06 ✓ Location of Facility Linking Documents ✓ How to keep Linking Documents up to date when Safety Basis documents, procedures, and Technical Baselines change ✓ How to periodically review Linking Documents to ensure continued compliance with SB commitments, especially following SB annual review updates.
Technical Safety Requirements (TSRs)	<ul style="list-style-type: none"> ✓ TSRs support SC SSCs and controls needed to prevent challenging offsite evaluation guidelines, SS SSCs and controls for public protection and for worker safety, and Safety Management programs ✓ Surveillance Tracking System ✓ How to report TSR violations
USQ Process	<ul style="list-style-type: none"> ✓ 11Q, 1.05 ✓ USQ Screens are performed for any proposed activity to preserve the Safety Basis ✓ The USQ process is applicable to any HC 1,2, or 3 nuclear facility having a Documented Safety Analysis. ✓ The USQ screening determines the need for a full USQ evaluation. ✓ USQ reviews may only be completed by USQ qualified personnel ✓ USQ process can initiate a change to the Safety Basis (11Q, 1.05) or identify potential inadequacies (11Q, 1.04).

Maintenance	What to Know...
1Y Manual Responsibilities	<ul style="list-style-type: none"> ✓ The process for obtaining spare parts ✓ Passport ✓ Types of maintenance (1Y-5.01) ✓ IPI/RME requirements ✓ B31.3 Piping System Requirements (1Y-8.04)
Work Control	<ul style="list-style-type: none"> ✓ How to generate work requests (1Y-8.20) ✓ How to assist planners in the development of work instructions ✓ How to specify test and inspection requirements ✓ Which work packages require engineering review/approval ✓ Commercial Grade Dedication practices ✓ Inspection determination/philosophies/tools
Maintenance History	<ul style="list-style-type: none"> ✓ Maintenance failures associated with assigned systems ✓ Deferred or delayed maintenance associated with assigned systems ✓ Passport history functions that can provide valuable performance data
Preventive Maintenance	<ul style="list-style-type: none"> ✓ How to identify SSCs that require PM ✓ The basis for the PMs? ✓ How to identify in-storage PM requirements for projects ✓ The process for approving PM frequencies ✓ How to assign PMs in AIM – See AIM Tutorial on Conduct of Engineering web page.
Predictive Maintenance	<ul style="list-style-type: none"> ✓ How to determine SSCs to apply Predictive Maintenance ✓ Predictive Maintenance methods used within the facility ✓ Predictive Maintenance data collection, evaluation and trending methods ✓ Process for making predictive maintenance recommendations
Degradation	<ul style="list-style-type: none"> ✓ System Health responsibilities (E7-3.04) ✓ Structural Integrity and Material Condition and Aging responsibilities (E7-3.48)
Troubleshooting	<ul style="list-style-type: none"> ✓ How to determine TSR/OSR/LCO and inspection/peer verification requirements to support troubleshooting activities

System Health	What to Know.....
System Health Schedule	<ul style="list-style-type: none"> ✓ System Performance Monitoring is required for SC and SS SSCs - E7, 3.04, Section 5.1 ✓ System Performance Monitoring Reporting Requirements are flexible and facility specific ✓ There is a System Health WinInstall Tool available sitewide (SRSApps, SHR, Users Guide)
Selection of SSCs and Parameters to Monitor	<ul style="list-style-type: none"> ✓ Consider the following when selecting SSCs and parameters to monitor: (E7, 3.04, Attachment 8.2) <ul style="list-style-type: none"> ✓ System Health Performance indicators ✓ Vital Safety Systems ✓ SSCs vital to the mission, campaign ✓ SSCs where past problems, reduced performance, or partial/complete failures cause facility impacts ✓ SSCs with multiple interactions with other SSCs ✓ SSCs costly to repair ✓ SSCs having long lead time to purchase or replace ✓ Parameters linked to Safety Basis commitments ✓ Parameters that support reliability, maintainability, and availability of the system
System Performance Data Collection	<ul style="list-style-type: none"> ✓ Consider the following when determining sources of data: (E7, 3.04, Attachment 8.4) – The System Health Report application has over 30 links to relevant data sources. <ul style="list-style-type: none"> ✓ Maintenance history and trending results ✓ Predictive, Preventive, and Post Maintenance test results ✓ In-service inspection results ✓ Logs ✓ Surveillance Test results ✓ Leakage monitoring results ✓ Vendor information/bulletins ✓ PRT Application - http://shrine.srs.gov/html/maintenance_information/PRT/main.htm
Trending Methods	<ul style="list-style-type: none"> ✓ Consider the following trending methods: <ul style="list-style-type: none"> ✓ PRT Metrics and Equipment ✓ System Digital Control System ✓ System Health Index ✓ PM/TM Ratio Reports ✓ System Health Notebook ✓ SHR Application Notebook File Attachments
Interactions with other SSCs	<ul style="list-style-type: none"> ✓ Consider the following sources for determining SSC interfaces: <ul style="list-style-type: none"> ✓ System Boundary document ✓ P&IDs ✓ Flow Diagrams ✓ System Design Description Documents

CONTACTS	
Facility/Site Safety	
Facility Custodian	
Maintenance/Work Control	
Operations	
Construction	
Startup	
FOSC	
New Information	
NCSRC	
Regulatory/SB Authority	
AB Steering Committee Representative	
WSMS Representative	
Conduct of Engineering Committee Representative	
Design Agency/DMM	
Technical Agency Contacts	
Configuration Management	
Self-Assessment Coordinator	
System Health	
Quality Assurance	
Procurement	
STRs/TORs	
RCO	
Industrial Hygiene	
Fire Protection	
Local Safety Improvement Team	
Welding	
Hoisting & Rigging	
SERB	

Attachment I. System Engineer Walkdown Checklist

The following checklist is available to Engineering Managers to use while assessing engineer's knowledge level for performing assigned System Engineer responsibilities. These questions may be used, in whole or in part, during execution of the Management Observation program. Resulting follow-up activities (e.g., additional training required, etc.) are managed by the facility. A global review of walkdown results is completed periodically by the Site Engineering Strategic Council (SESC) as part of the Engineering Performance Analysis process. Programmatic corrective actions (E7, CORE Training, etc.) are identified and managed at the site level by the SESC. (Reference E7, 1.10.)

FACILITY			
	Question	Response	Follow-up Activities
1.	What is the hazard category and mission/expected life for your facility?		
2.	Are you familiar with the AHA system? What is the purpose of the AHA system? What procedure drives this process? Who are the AHA contacts in your organization?		
3.	What are the entry requirements for your facility?		
4.	Is your building listed as a historical building in accordance with the National Historic Preservation Act at SRS? Where is this documented?		
5.	What facility specific Standing Orders, Memorandums, compensatory actions are in effect within the facility?		
6.	Does your facility have a Configuration Management Implementation Plan? Are your assigned system(s) identified in the CMIP as being configuration controlled?		
7.	What engineering weaknesses did the last facility FEB report identify?		

8.	What engineering self-assessments are being conducted in your facility this fiscal year? Where is your schedule documented? Did you participate in this process? Who is your self-assessment coordinator?		
SYSTEM			
	Question	Response	Follow-up Activities
1.	What is the overall function of your assigned system(s)? What are the boundaries of your system(s)?		
2.	What is the functional classification for your assigned system(s)? Where is this officially documented? What procedure describes the process for designating and updating functional classification?		
3.	Where is the Technical Baseline for your assigned system(s) officially defined? Do you have any Essential documents? What are they? When are Essential documents required to be updated?		
4.	Where do you go to determine the Document Category for a drawing? How do you change a Document Category for a drawing?		
5.	Who is your Configuration Management point of contact?		
6.	What codes and standards are applicable to your assigned system(s)? Where do you access SRS codes and standards?		
7.	How often do you walk down your system to observe operations, identify unauthorized modifications, etc.? What specific components do you look at to assess your system's status?		

8.	How often do you verify the physical configuration of your system against the Technical Baseline documents? How do you identify and track discrepancies?		
9.	Where is the design bases for your assigned system(s) documented?		
10.	What interfaces are important within your assigned system(s) and how are they managed? How does your system support/impact other SSCs and how do they support/impact you?		
11.	Who is your Facility Passport point of contact?		
12.	What site level procedure defines the process for assigning component location identifiers? Labeling? Master Equipment List?		
13.	What waivers and deviations are in place that affect your assigned system(s)?		
14.	Do you know what work orders were generated on your system last night? How do you identify these? How does that impact your day? What major problems are occurring with your system(s)? What's the path forward on these items?		
15.	Are there any Temporary Modifications that impact your assigned system(s)? Where are these documented? What site level procedure controls this process?		
16.	What division managed modifications are currently in-process for your assigned system(s)? Are there any large projects ongoing that impact your system? What are they? Are you involved in the project plan reviews?		

17.	What quality requirements impact your assigned system(s)?		
18.	Are there any related ORPS/SIRIMs associated with your system? Are you involved with the review and corrective actions of these?		
19.	State which components within your assigned system(s) that if they failed, would prevent your system(s) from performing their intended function(s).		
20.	Briefly describe the process for revising a record drawing.		

OPERATIONS

	Question	Response	Follow-up Activities
1.	Describe how your system(s) are utilized by Operations?		
2.	What procedures (ARPs, AOPs, EOPs) are applicable to your assigned system(s)? How do you request changes to these procedures? How do you keep procedures consistent with the Technical Baseline drawings/documents? Do you review the procedures associated with your system(s)?		
3.	Which of those procedures contain Safety Basis inputs and assumptions?		
4.	What are your surveillance program responsibilities?		
5.	How do you interface with Operations with respect to round sheets, lockouts, work arounds, outages, instrument calibrations, component and system alignments, etc.?		

6.	Are you in the review cycle when process flow changes affecting your system are made? How?		
7.	Do you attend Plan of the Day meetings? What information comes out of those meetings that impact your day?		
MODIFICATIONS			
	Question	Response	Follow-up Activities
1.	What graded approach factors are considered when determining the right level of control to apply to modifications on your assigned system(s)? What site level procedure describes the graded approach factors? What site engineering web tools are available to assist in determining these factors?		
2.	List responsibilities of a Design Authority Engineer. What site procedure identifies these responsibilities?		
3.	What is the Technical Agency Identification Checklist and when/how is it used? Whose responsibility is it to ensure appropriate Technical Agency input into the design?		
4.	How do you procure replacement parts for your assigned system(s)? Who prepares the procurement specifications? What involvement do you have? What site level procedures define your responsibilities?		
5.	What are the five types of Technical Reviews? What site level procedure describes these?		
6.	What types of impacts are evaluated when performing a Design Authority Technical Review on a modification?		
7.	What is the FOSC and how does the FOSC interface with modifications?		

SAFETY BASIS			
	Question	Response	Follow-up Activities
1.	How is your system(s) described in the facility Safety Basis? Where are the SB documents officially documented?		
2.	Describe your responsibilities in protecting the facility safety envelope?		
3.	What Technical Safety Requirements (TSRs) are associated with your assigned system(s)? How/where are they protected? How are they periodically revalidated?		
4.	Does your facility have a Linking Document? Where is it officially documented? What is the purpose of a linking document? What site level procedure defines the requirements for linking documents?		
5.	Why is it important to have a Safety Basis Strategy? What does a Safety Basis evaluation include? Who is responsible for reviewing the modification risk to determine if a Safety Basis Strategy evaluation is needed?		
6.	What accident scenarios are associated with your assigned system(s)? What environmental permit requirements? What are the credited responses and credited SSC functions and features?		
7.	What are uncertainty calculations and how are they implemented?		
8.	Who is the WSMS contact for your organization?		
9.	Why are USQs performed? What site level procedure describes the USQ process? Are you USQ qualified?		
10.	Who is your facility Safety Basis regulatory authority?		

MAINTENANCE			
	Question	Response	Follow-up Activities
1.	Describe the process for generating work requests. What site level procedure describes this process?		
2.	What types of work packages require engineering review and approval?		
3.	How do you identify the SSCs that require preventive maintenance? How are PM frequencies approved?		
4.	Do you use the Commercial Grade Dedication process? How? What site level procedure defines this process?		
5.	What types of maintenance failures are associated with your assigned system(s)? Deferred or delayed maintenance? Where do you find out this information?		
6.	How do you determine SSCs to apply predictive maintenance?		
7.	Do you have a structural integrity program for your assigned system(s)?		
SYSTEM HEALTH			
	Question	Response	Follow-up Activities
1.	Is your assigned system(s) required to have formal system performance monitoring? Why is your system included/not included in the program? What site level procedure identifies the requirements for performance monitoring?		

2.	Where is your facility system health schedule maintained?		
3.	Are you familiar with the WinINSTALL System Health program? Do you use this program?		
4.	What types of parameters are typically monitored? What parameters do you monitor? What is the purpose of monitoring these attributes?		
5.	What data sources are used to collect performance monitoring data?		
6.	Describe the process for preparation of a System Health Report.		
7.	Describe the overall health of your assigned system(s).		
8.	Who benefits from monitoring results? How are they used?		
9.	What improvements have you made to your assigned system(s) as a result of system health/monitoring activities?		

GENERAL			
	Question	Response	Follow-up Activities
1.	Who is the Fire Protection contact within the facility?		
2.	Briefly describe the process for accessing DCR.		
3.	Briefly describe the process for waiving an E7 requirement? An SRS engineering standard?		
4.	Who is your Chief Engineer?		
5.	Who is the Site Chief Engineer?		

Design Authority Engineer Name: _____

Date(s): _____

Interviewer: _____

Summary of responses and follow-up activities: _____
