

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

Office of the Technical Director

FISCAL YEAR 2018 WORK PLAN

September 2017

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Introduction. The Office of the Technical Director (OTD) developed the Fiscal Year (FY) 2018 OTD Work Plan based on the Defense Nuclear Facilities Safety Board’s (Board) nuclear safety oversight mission. The work plan is organized consistent with the Board’s Strategic Plan, Performance Goals, and OTD organizational structure as follows: Nuclear Weapon Programs (NWP); Nuclear Materials Processing and Stabilization (NMPS); Nuclear Programs and Analysis (NPA); Nuclear Facility Design and Infrastructure (NFDI); and Engineering Performance (EP). The FY 2018 OTD Work Plan discusses the oversight approach and high priority work within each of these organizational areas.

Summary. OTD conducted comprehensive and strategic oversight planning for FY 2018 resulting in 38 oversight plans. The plans define the strategies for conducting nuclear safety oversight of Department of Energy (DOE) sites, projects, and safety management programs. The plans also include internal OTD initiatives to improve the execution of the Board’s mission. Based on the oversight plans, the technical staff identified approximately 280 work activities for FY 2018 requiring approximately 31 Full Time Equivalents (FTE)¹. The OTD leadership team reviewed and adjusted the work plan until the work focus was consistent with the Board’s priorities and the resource loads were appropriate for the available technical staff. The FY 2018 work plan loading provides flexibility to address emergent work activities, including Board initiatives, operational safety issues, and changes in DOE defense nuclear activities.

Work Plan Improvements. Each year, OTD has improved the planning tools and processes to help drive the best oversight strategies and execution of the Board’s highest priority work. For FY 2018, OTD implemented improvements in the following areas: prioritization; review plan development; and cross-cutting issue identification². For staff resources, OTD revised the planning system to allow tailoring individual staff members’ loading for reviews. The other work plan improvements are discussed below.

Prioritization. OTD issued a standing order in June 2017 that included new guidance on work priorities for the FY 2018 work plan. The standing order defines the following work activities as non-discretionary:

- **Actions directed by the Board**
 - Approved Requests for Board Action
 - Board commitments based on response to Inspector General reports

- **Board activities**
 - Site visits
 - Public hearings
 - Reports to Congress (e.g., Annual Report)

¹ An FTE is equal to one OTD staff member’s work for one year (i.e., 52 weeks * 40 hours/week = 2080 hours). The work plan does not account for all staff activities (e.g., leave and training). Therefore, the OTD staff work loading goal is 0.5 +/- 0.1 FTE during a year.

² FY 2018 improvements include lessons learned from the technical staff scorecard project.

- **Activities consistent with Board policy and procedures**
 - Design and construction reviews
 - Directives reviews
 - Review of Implementation Plan deliverables
 - Annual correspondence on open Recommendations

- **Actions needed to meet Board performance goals**

The technical staff prioritizes other OTD work based on the type of activity (i.e., safety basis review, safety management program review, or directives review) and a safeguards score. The safeguards score includes criteria associated with people, facility and equipment, operations and design, and safety basis. The process results in a priority score of 1 to 6. The technical staff may adjust the priority when warranted (e.g., in response to an operational event or based on the Board's interest).

Constraints. OTD constrained the work plan for FY 2018 as follows:

- **Technical Staff Resources**—based on the total number and capabilities of the technical staff. Resident inspector and supervisory work is not included in the work plan.

- **DOE Plans**—based on current DOE plans for work activities in FY 2018.

Uncertainties. Uncertainties associated with the scope of work in the OTD FY 2018 work plan are largely tied to potential schedule changes on the part of DOE and the National Nuclear Security Administration (NNSA). Historically, such changes tend to result in delays, which may delay oversight activities throughout the year. Some review activities are dependent on DOE and NNSA producing specific documents and achieving key milestones prior to review. Emergent DOE and NNSA activities also can drive the need to perform additional oversight activities that impact the work plan. OTD will adjust schedules and tasks to reflect the Board's priorities and maintain the quality of each review.

Internal and external assessments of work processes and activities, including Inspector General's audits, could affect the OTD FY 2018 work plan. OTD resources are needed to support these assessments and develop corrective actions. Staff attrition and new staff hires also impact the technical staff's capability and capacity. New staff members typically do not have the same level of technical and DOE oversight experience as the staff members that depart. New hires also require training that limits their work and impacts staff members involved in their training. Additionally, OTD development and leadership training for succession planning may impact resources available for work planning activities.

Review Plan Development and Cross-Cutting Issues. OTD conducted a series of oversight planning meetings in key review areas (e.g., fire protection, electrical systems, ventilation, quality assurance, criticality, seismic/geotechnical). These meetings provided a forum to discuss potential reviews across the defense nuclear complex, the key aspects of each review, and potential cross-cutting areas. The meetings also encouraged cognizant engineers to discuss the priority of each review with staff experts and helped ensure consistent

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prioritization in disciplines where technical staff resources are limited. During the meetings and subsequent discussions with the OTD leadership team, the technical staff identified the following areas where cross-cutting reviews will be completed in FY 2018: safety control implementation; readiness review process; and maintenance/aging infrastructure management.

Design and Construction Oversight. In July 2017, the Board approved Policy Statement-6, *Policy Statement on Oversight of Design and Construction of Defense Nuclear Facilities*. OTD adjusted the work plan consistent with the policy to include appropriate design and construction reviews at specified and logical points in the process. The work plan includes technical staff work to support formal reports to the Board for the following design and construction phases: conceptual design, final design, construction, and commissioning.

FY 2017 Metrics. OTD personnel evaluated metrics from the FY 2017 work plan to improve the work planning process and results. The primary conclusions from this review are noted below.

- All staff assigned to a review were loaded equally in the FY 2017 work plan due to a limitation in the work planning tools. This issue inflated review loads and the individual staff loading.
- The technical staff identified potential reviews in FY 2017 without constraints on staff capability and capacity. This approach resulted in significantly more potential work activities than resources.
- OTD added approximately 25percent of the activities in the FY 2017 work plan as a response to emergent information during the year.
- OTD generally underestimated the durations of review activities for site reviews (NWP, NMPS, and NFDI), and generally overestimated the duration of reviews for programmatic and internal activities (NPA and Performance Assurance).

These results were factored into the improvements in the FY 2018 work plan.

Results. The proposed FY 2018 OTD Work Plan identifies 69 non-discretionary activities (9.0 FTE), seven priority 1 reviews (0.8 FTE), and 33 priority 2 reviews (5.2 FTE)¹. Figures 1 through 4 show the proposed resource allocations by focus area, review priority, project, and versus previous years. Appendix A provides a complete list of projects referenced in Figure 3. Appendix C shows the schedule for non-discretionary, priority 1, and priority 2 reviews. The next 5 sections provide a summary of activities within each of the OTD focus areas (NWP, NMPS, NPA, NFDI, and EP).

In addition to the non-discretionary and high priority work specifically identified in this report, OTD plans to perform lower priority reviews at defense nuclear facilities. These reviews are an important part of the Board's oversight mission to evaluate nuclear safety at

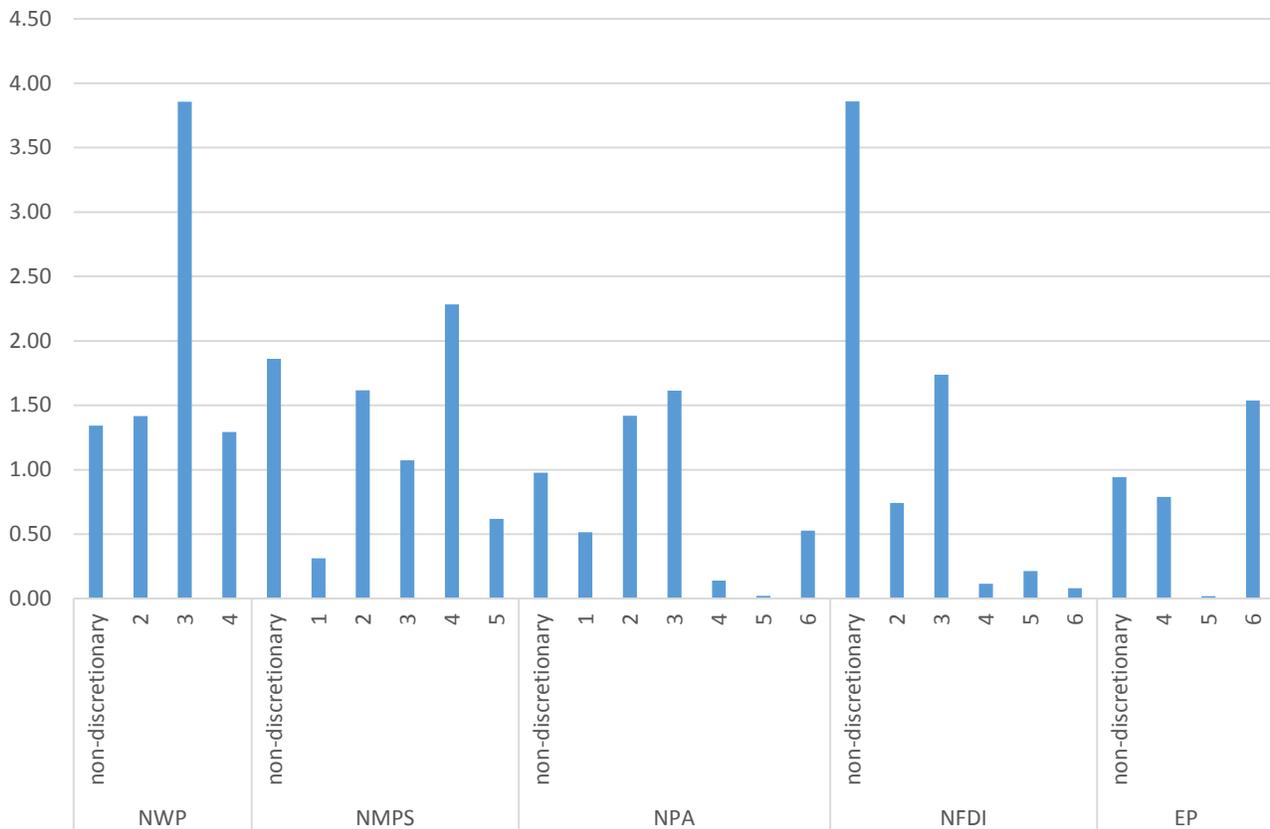
¹ Tables 1-5 include all non-discretionary, priority 1, and priority 2 activities; however, one table line item may represent multiple staff activities (e.g. Board Visit Support in Table 1 includes seven activities).

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facilities and in focus areas that are reviewed less often. During these reviews, OTD collects important data to analyze trends and identify emerging issues.

While this plan represents the best estimate for work in FY 2018, the actual work performed will depend upon DOE’s activities, staff resources, and the Board’s evolving priorities. On a routine basis, OTD reviews and adjusts the work schedule in light of nuclear safety issues, Board direction, completed staff work activities, new information, and available staff resources. OTD will update the Board periodically on the status of these high priority reviews.

Figure 1 - FTE by Focus Area and Priority



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Figure 2 - FTE by Priority

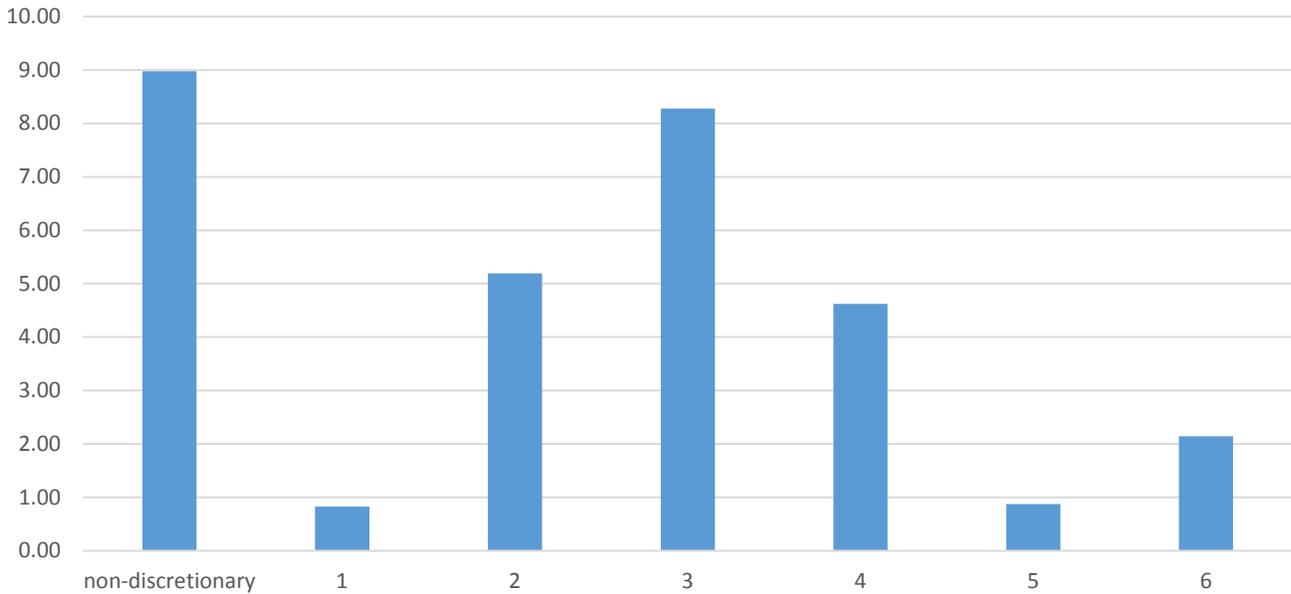
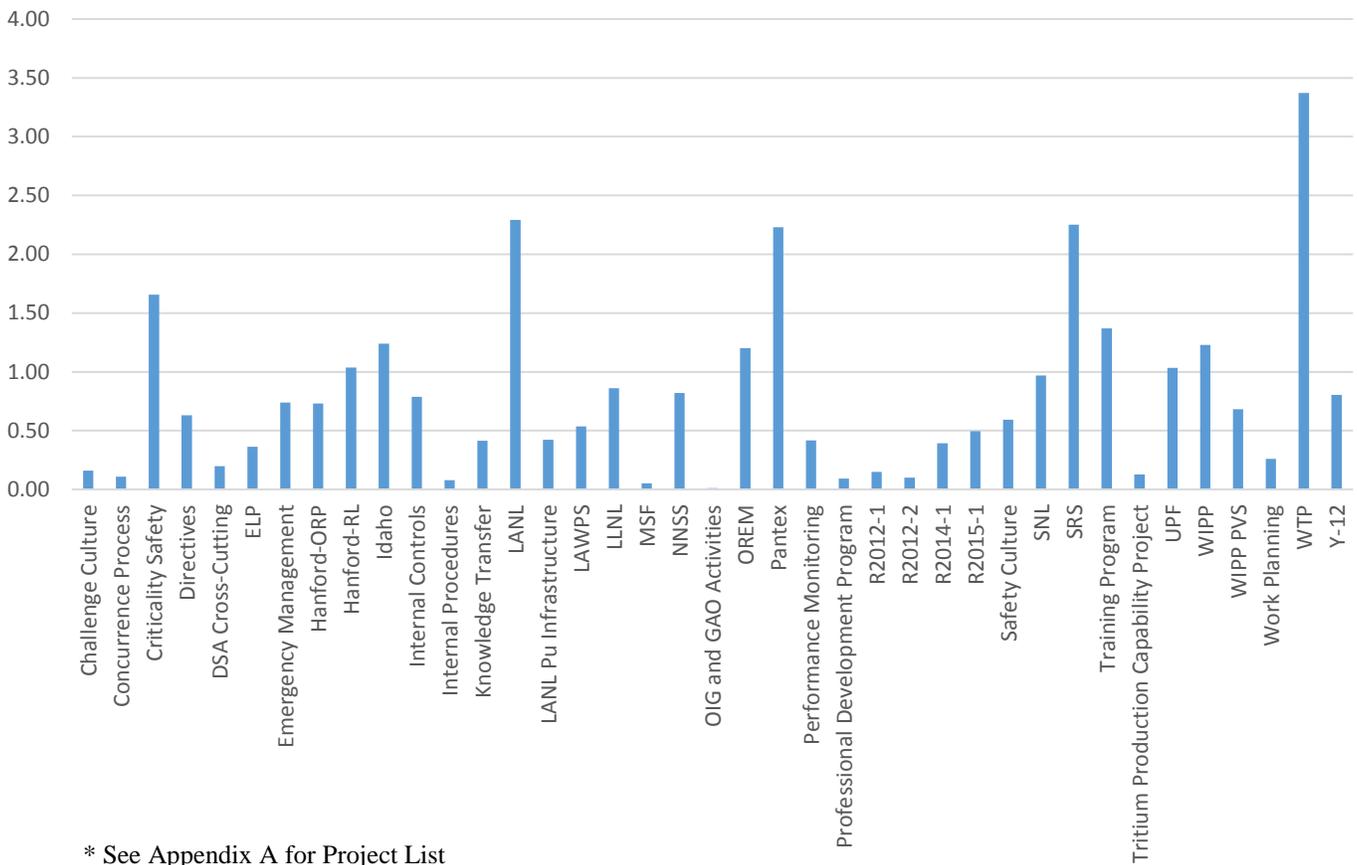
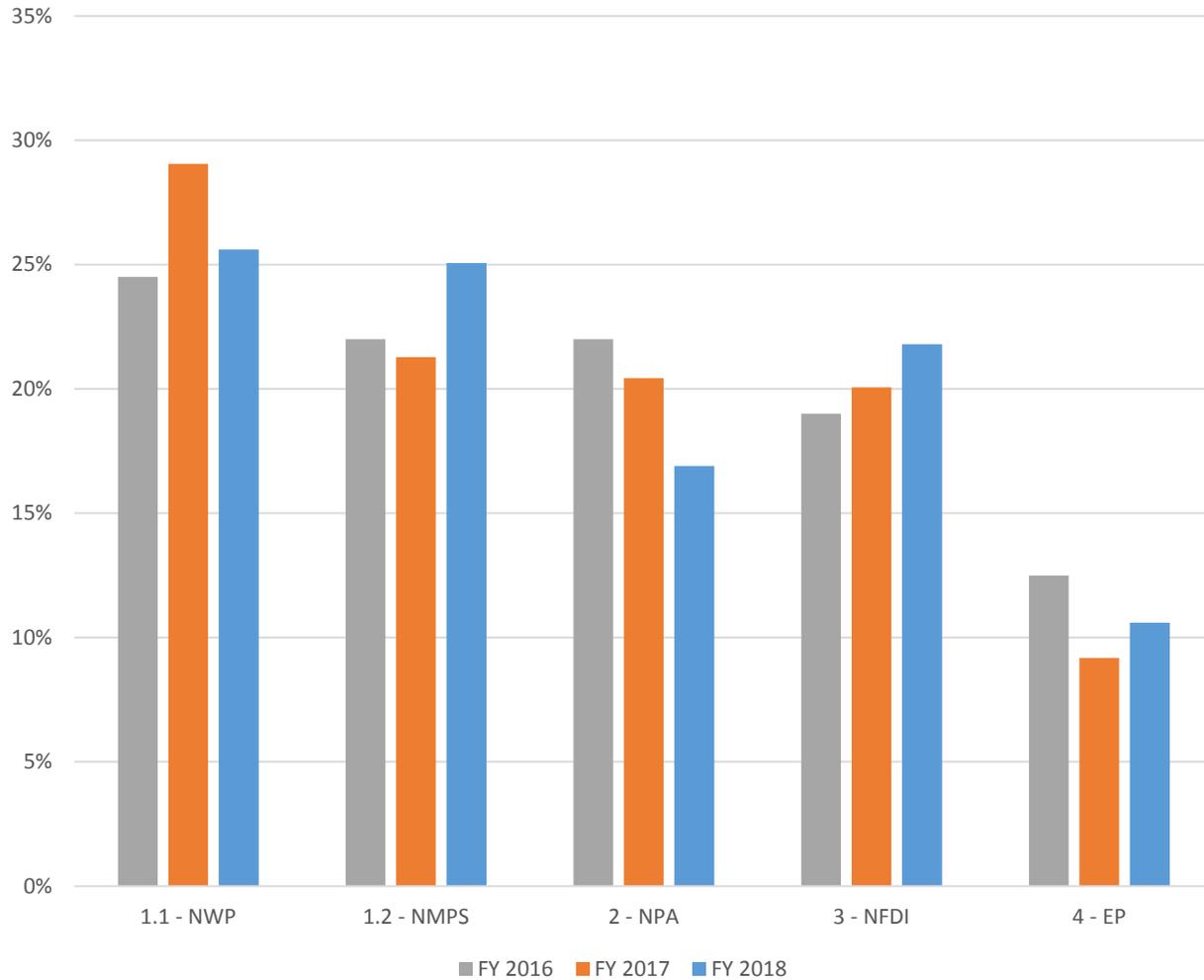


Figure 3—FTE by Project*



* See Appendix A for Project List

Figure 4 - OTD Work by Group



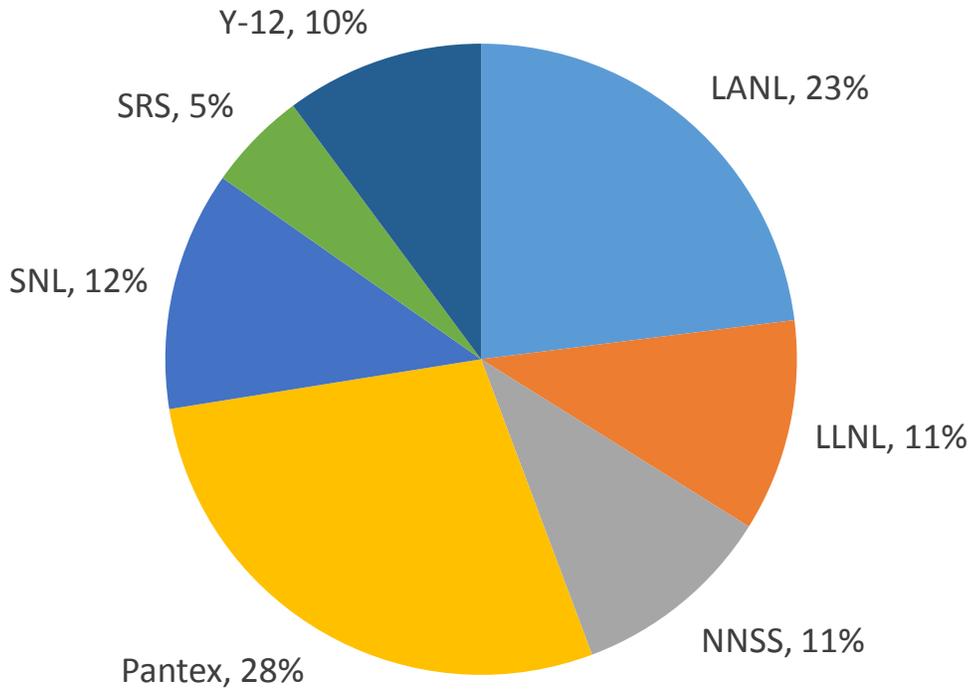
Safety of Operations—Nuclear Weapon Programs.

Overview—OTD’s NWP group performs independent and timely oversight of the safety of operations involving maintenance of the nuclear weapons stockpile, and in weapons-related research, development, and testing.

In FY 2018, NWP will conduct effective safety oversight through formal, well-planned reviews at NNSA defense nuclear facilities. In the course of these activities, NWP will assist the Board in notifying NNSA of potential safety issues at NNSA defense nuclear facilities and in nuclear explosive operations, while maintaining a near-continuous oversight presence at Los Alamos National Laboratory (LANL), the Y-12 National Security Complex (Y-12), and the Pantex Plant. For LANL activities, OTD developed a single, integrated oversight plan that includes both NNSA and DOE Environmental Management (EM) activities.

The NWP FY 2018 work plan represents approximately 26 percent of the resources available across the technical staff. This scope is intended to cover the entire range of facilities at the seven sites where NNSA conducts defense nuclear activities. Figure 5 shows the distribution of work by major project area in the NWP work plan.

Figure 5 - NWP Projects



Priority Activities—NWP non-discretionary and priority 2 work activities are listed below. The NWP group did not identify any priority 1 work. Appendix C, Figure C-1 shows a Gantt chart of these activities, with the exception of Board Visit Support and Site Cognizance.

Table 1: NWP Non-Discretionary and Priority 2 Work Activities.

Non-Discretionary
Board Visit Support. Support Board site visits at multiple sites.
Site Cognizance. Conduct cognizant engineer duties (e.g., site cognizance visits).
Priority 2
Pantex - B61 Collaborative Authorization for the Safety-basis Total Lifecycle Environment (CASTLE) and Assembly NES Study. Staff review team will evaluate the proposed B61 operations with the NES study, including observation of demonstrations and deliberations.
Pantex - W88 NES Study. Staff team will evaluate the proposed W88 operations with the NES study, including observation of demonstrations and deliberations.
LANL – Chief of Defense Nuclear Safety (CDNS) Biennial NNSA Los Alamos Site Office (NA-LA) Review Assessment. Staff team will review the CDNS assessment report corrective actions at NA-LA.
LANL - Fire Suppression System Equipment Qualification (Seismic) and Upgrade Review Follow Up. Staff team will review actions associated with the Board letter dated May 12, 2016, and the Potential Inadequacy in the Safety Analysis (PISA) associated with this issue.
LANL - PF-4 Documented Safety Analysis (DSA) Review Continuation. Staff team will complete the review of the PF-4 safety basis (i.e., the DSA, Technical Safety Requirements, and any active Evaluations of the Safety of the Situation / Justifications for Continued Operations and Addenda).
Pantex - Fire Protection Program Review. Staff team will evaluate the adequacy of the Pantex fire protection program.
Pantex - In-Progress Review. Staff team will evaluate the adequacy of controls and safety of nuclear explosive operations associated with a specific weapon program (e.g., W76 or W88).
Pantex – Quality Assurance Follow-up Review. Staff team will follow-up on Pantex’s quality assurance program and implementation.
Pantex – Weapon Complex Falling Man Committee (WCFMC) Model Implementation Review. Staff team will evaluate the progress of the WCFMC and review the WCFMC falling man model, when developed. In addition, the staff team will assess Pantex’s implementation of needed changes to the falling man analysis to support hazard analysis reports for nuclear explosive operations.
Savannah River Site (SRS) - Tritium Facilities/Tritium Extraction Facility (TEF) Combined DSA Review. Staff team will evaluate the Tritium Facilities and TEF safety basis documents. Notably, SRS has updated the dispersion parameters, which will impact accident analysis calculations (e.g., offsite dose consequences).
Y-12 - Aging Asset Management Program. Staff team will review the revision to the aging management program for adequacy and consistency with DOE requirements and guidance.

Safety of Operations—Nuclear Materials Processing and Stabilization.

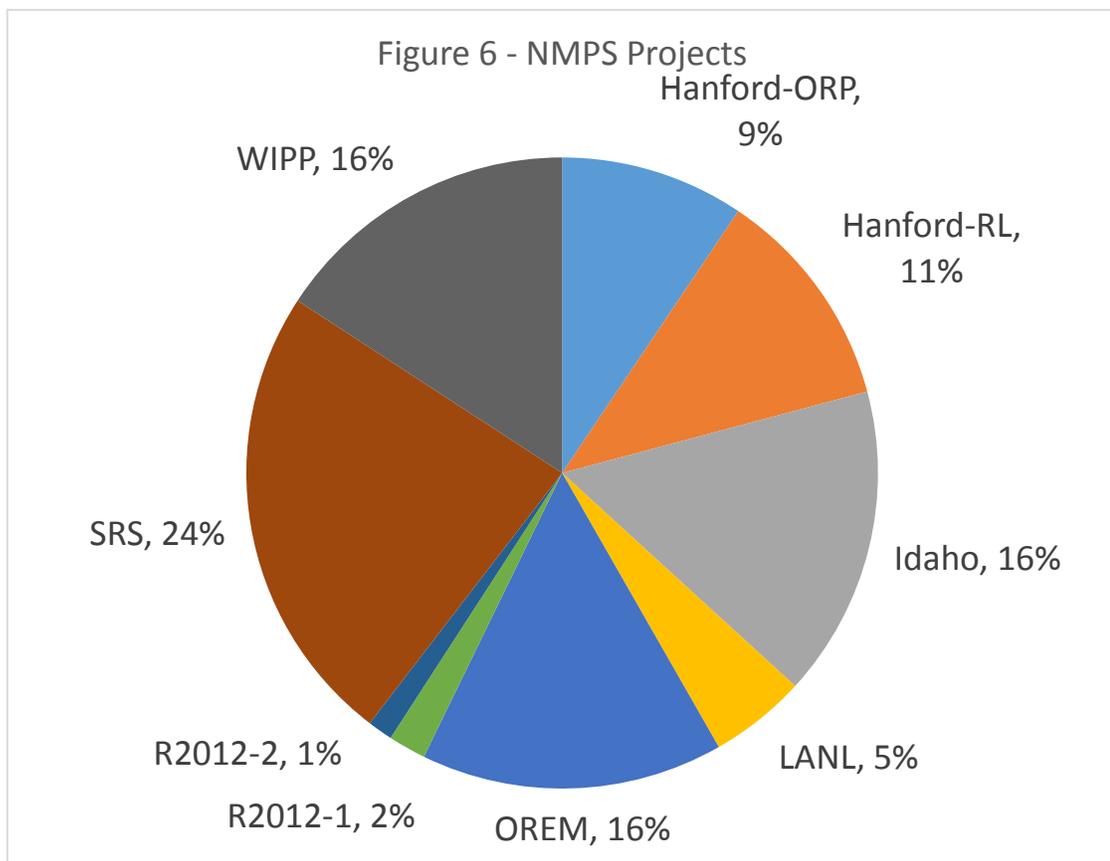
Overview—The Board’s Nuclear Materials Processing and Stabilization Group performs independent and timely oversight of the safety of operations in cleanup of legacy defense nuclear wastes and facilities.

NMPS will conduct effective safety oversight through formal, well-planned safety reviews at DOE defense nuclear facilities. NMPS safety oversight activities will focus on

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ensuring that the health and safety of the public are adequately protected as DOE disposes of excess radioactive materials, cleans up surplus defense nuclear facilities, and begins operation of new EM facilities. In the course of these activities, NMPS will assist the Board in notifying DOE of potential safety issues at DOE defense nuclear facilities, while maintaining a near-continuous oversight presence at SRS and the Hanford Site.

The NMPS FY 2018 work plan represents approximately 25 percent of the resources available across the technical staff. The NMPS portfolio of facilities consists of more than 70 nuclear facilities located at five EM sites. The work plan is focused on facility operations, in particular safety basis adequacy and implementation, operations safety, and processes and programs relied upon for safety. Figure 6 shows the distribution of effort in the NMPS work plan.



Priority Activities—Review of the adequacy and implementation of DSAs for EM facilities continues to be one of NMPS’s key priorities. This is a critical first step in implementing a systematic approach to EM facility safety. Selection criteria for reviews include: potential dose consequence to workers and the public, time since the previous DSA review, and a balanced approach across the various EM sites.

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NMPS non-discretionary, priority 1, and priority 2 work activities are below. Note that NMPS personnel identified two priority 1 work activities at SRS. Appendix C, Figure C-2, shows a Gantt chart of NMPS’s non-discretionary, priority 1, and priority 2 work activities, with the exception of Board Visit Support and Site Cognizance

Table 2: NMPS Non-Discretionary and Priorities 1 and 2 Activities

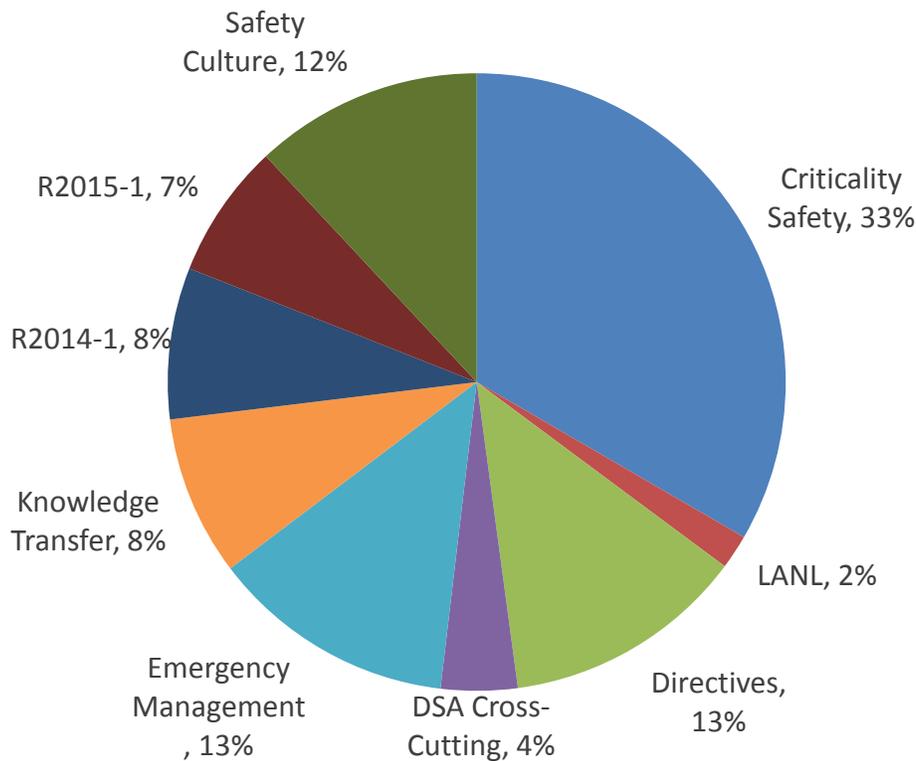
Non-Discretionary
Board Visit Support. Support Board site visits at multiple sites.
Site Cognizance. Conduct cognizant engineer duties (e.g., site cognizance visits).
Oak Ridge Environmental Management (OREM) - Building 2026 Preliminary DSA Review. Staff team will review the Conceptual Design Report, transition plan to the Office of Environmental Management, and safety basis updates for Building 2026.
Hanford Office of River Protection (ORP) - Review Recommendation 2012-2 FY18 Deliverables. Staff team will review deliverable 3-1 (upgrade annulus level detectors to safety-significant) and deliverables 2-2, 2-3, and 2-4 (installation of safety-significant flow monitors).
Priority 1
SRS - H-Canyon Exhaust Tunnel Integrity. Staff team will evaluate the adequacy of DOE actions taken to address the safety issues identified in the Board's January 16, 2015, letter concerning the integrity of the safety-class H-Canyon exhaust tunnel.
SRS - Fire Protection Program Review. Staff team will review the fire hazard analyses, fire protection program requirements, and fire protection system upgrades at Savannah River National Laboratory and Tritium Facilities (233-H).
R2012-1 Progress Review. Staff team will evaluate DOE actions on the Recommendation.
R2012-2 Progress Review. Staff team will evaluate DOE actions on the Recommendation.
Priority 2
SRS – Defense Waste Processing Facility (DWPF) Final Safety Analysis Report Revision (Glycolic Acid). Staff team will review the safety basis changes to incorporate an alternate reductant into the DWPF flowsheet, resolve PISA on organic contribution to hydrogen generation, and resolve previously identified issues communicated to DOE in a Board letter.
SRS - PISA/Unreviewed Safety Question (USQ) Review. Staff team will evaluate SRS’s site-wide USQ process, including a focus on the PISA entry condition.
SRS - Safety System Evaluation. Staff team will evaluate the design and performance of select SRS safety systems, identify performance trends indicating signs of degradation and/or inadequate maintenance or operations; and identify areas of safety system design and performance that warrant more in-depth staff review.
Hanford Richland Operations Office (RL) – Sludge Treatment Project Operational Readiness Review. Staff team will review the procedures, radiological control, maintenance, and emergency response.
SRS - Solid Waste Management Facility DSA Review - Part 2. Staff team will complete a safety basis review started in FY 2017.
OREM – Transuranic Waste Processing Center Solid Waste Storage Area 5 Phase 1 Processing (Oxidation). Staff team will review the equipment, hazard controls, safety basis, and readiness for process operations.

Safety Standards—Nuclear Programs and Analysis.

Overview—The Nuclear Programs and Analysis Group performs independent and timely oversight of the development, implementation, and maintenance of DOE regulations, requirements, and guidance for providing adequate protection of public health and safety at defense nuclear facilities, and the establishment and implementation of safety programs at defense nuclear facilities. NPA represents about 16 percent of the resource allocation in this work plan.

The NPA group’s efforts to support these objectives at individual defense nuclear facilities are primarily encompassed in the oversight plans developed by NWP and NMPS. However, NPA is responsible for programmatic review efforts addressing topics such as nuclear criticality safety, quality assurance, and emergency management across the DOE defense nuclear complex. These review efforts address the Board’s overarching mandate to ensure adequate protection of public health and safety. In FY 2018, NPA plans to evaluate two areas for potential cross-cutting issues: safety control implementation and readiness review process. These reviews are priority 3 activities and are not listed in Table 3. Figure 7 depicts the distribution of effort in the NPA work plan.

Figure 7 - NPA Projects



Priority Activities—NPA non-discretionary, priority 1, and priority 2 work activities are listed below. Appendix C, Figure C-3 shows a Gantt chart for these NPA work activities.

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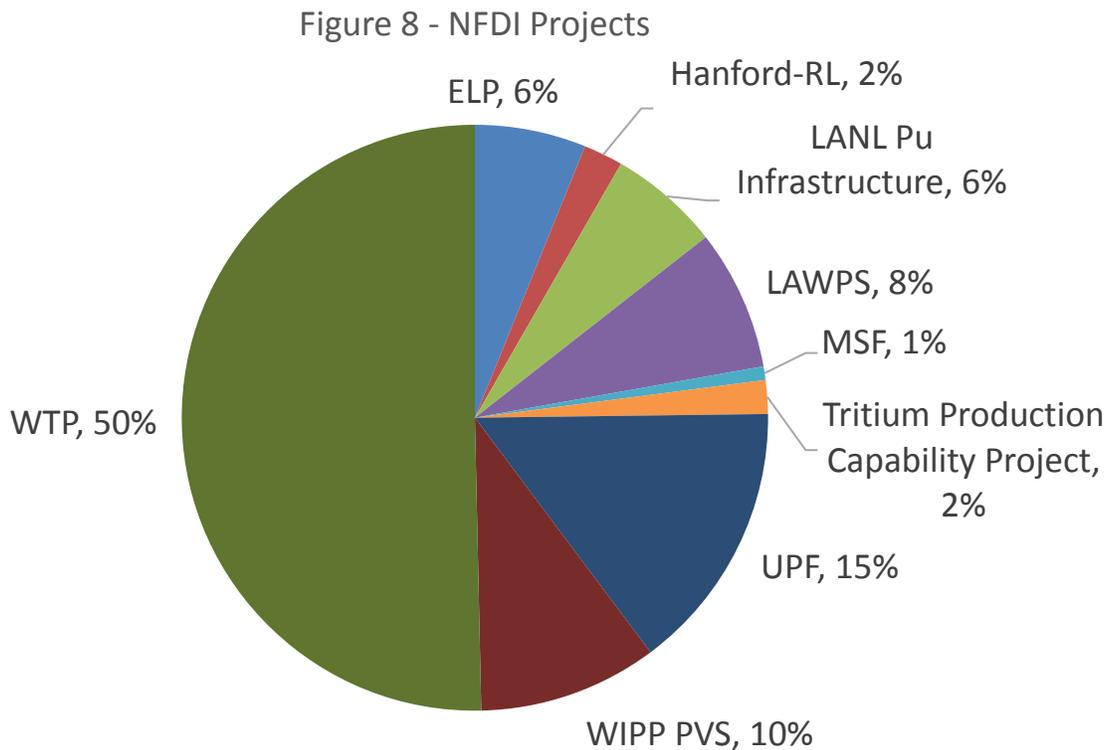
Table 3: NPA Non-Discretionary and Priorities 1 and 2 Activities

Non-Discretionary
R2011-1 Analysis. Staff team will review and analyze information and provide the Board a recommended path forward.
R2011-1 Proposed Board Correspondence. Staff team will develop and recommend correspondence, as appropriate.
R2014-1 Proposed Board Correspondence. Staff team will develop and recommend correspondence, as appropriate.
R2014-1 Annual update. Staff team will evaluate DOE actions.
R2014-1 Review. Staff team will review the Criteria and Review Approach Document.
R2015-1 Proposed Board Correspondence. Staff team will develop and recommend correspondence, as appropriate.
R2015-1 Verification and Validation. Staff team will review the effectiveness of actions taken to address the Recommendation.
Board Task. Details are controlled unclassified information.
Priority 1
R2011-1 Progress Review. Staff team will evaluate DOE actions on the Recommendation.
R2014-1 Progress Review. Staff team will evaluate DOE actions on the Recommendation.
R2015-1 Progress Review. Staff team will evaluate DOE actions on the Recommendation.
Priority 2
Criticality Safety - Annual Nuclear Criticality Safety Review of DOE Complex. Staff team will perform an analysis across the DOE complex to determine if any common concerns exist.
Criticality Safety – Nuclear Criticality Accident Alarm System Condition Assessment. Staff team will perform an alarm system condition assessment over the enduring DOE complex.
Criticality Safety - SRS Nuclear Criticality Safety Program Review. Staff team will review DOE oversight and implementation of the criticality safety program at SRS.
Criticality Safety - Y-12 Nuclear Criticality Safety Program Review and Walkdown. Staff team will evaluate the Y-12 Nuclear Criticality Safety Program including aging infrastructure, alarm system replacement, and improperly vetted inputs and assumptions in legacy criticality safety calculations.
Directives - Comment Resolution - DOE-HDBK-1224-YR, <i>Accident Analysis Handbook</i>. Staff team will review the adequacy of the draft document and provide appropriate comments to DOE.
Directives - Final REVCOM (RC) - DOE-STD-3007-YR, <i>Criticality Safety Evaluations</i>. Staff team will review the adequacy of the draft document and provide appropriate comments to DOE.
Directives - Initial RC - DOE G 424.1-1C, <i>Unreviewed Safety Question</i>. Staff team will review the adequacy of the draft document and provide appropriate comments to DOE.
Directives - DOE OE-1: 2015-1 Review. Staff team will review the facility screening and evaluation results in accordance with the Operating Experience-1 2015-1.
Directives - Pre RC - DOE-STD-5506, <i>Safety Basis Documents for Transuranic Waste Facilities</i>. Staff team will review and comment on the adequacy of the draft document.
Emergency Preparedness and Response Exercise at Y-12. Staff team will observe and evaluate DOE and contractor conduct of the annual exercise.
LANL - Transportation Safety Document Review. Staff team will review LANL's onsite transportation safety document and supporting documents including hazards and accident selection, accident analysis, controls selection and adequacy, and Technical Safety Requirements.

Safety in Design—Nuclear Facility Design and Infrastructure.

Overview—The Board’s Nuclear Facility Design and Infrastructure Group (NFDI) performs independent and timely nuclear safety oversight focused on the design and construction of defense nuclear facilities and major modifications to existing facilities. Work in this mission area represents approximately 22 percent of the resources in this work plan.

NFDI’s planned oversight activities support the Board’s Policy Statement 6, *Policy Statement on Oversight of Design and Construction of Defense Nuclear Facilities*. PS-6 requires staff to “execute independent oversight by performing reviews with defined scope and durations at specified and logical points in the process and document the review results in four formal reports to the Board.” Thus, the reviews that support these four formal reports are considered non-discretionary reviews for NFDI. Figure 8 depicts the distribution of effort in the NFDI work plan.



Priority Activities—NFDI non-discretionary and priority 2 work activities are listed below. NFDI personnel did not identify any priority 1 work. Appendix C, Figure C-4 shows a Gantt chart for these work activities, with the exception of Project Cognizance.

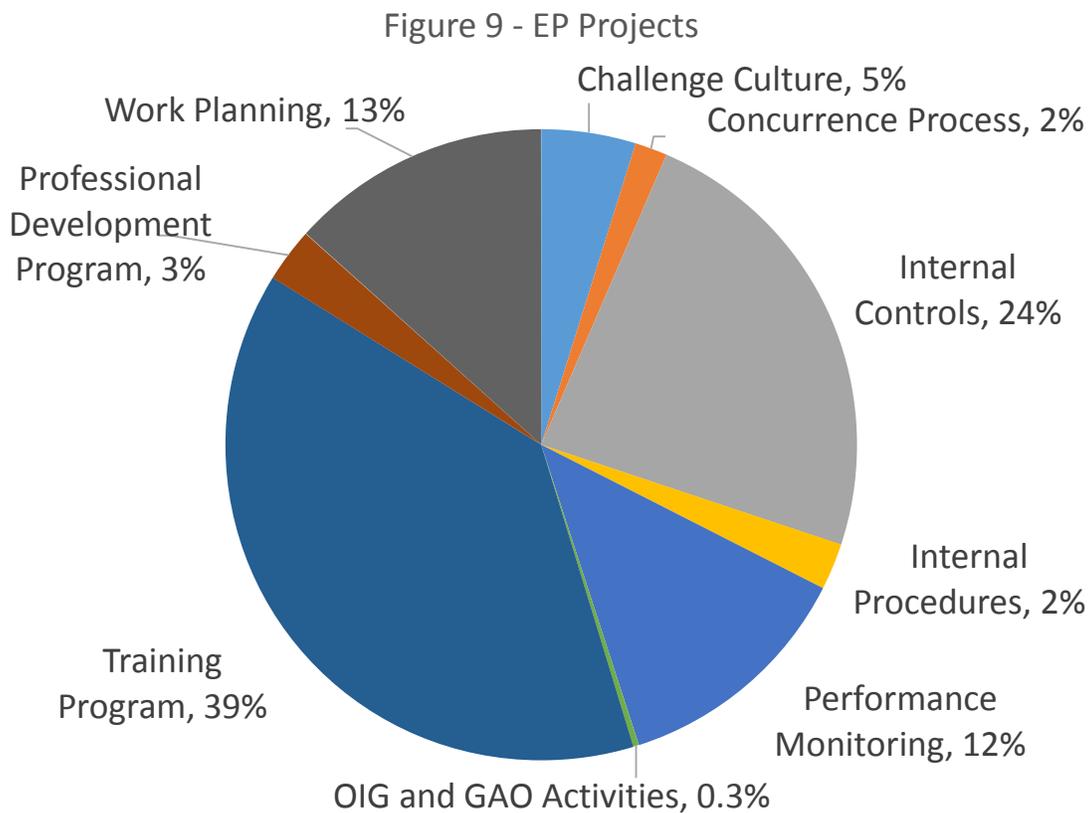
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Table 4: NFDI Non-Discretionary and Priorities 2 Activities

Non-Discretionary
Project Cognizance. Conduct cognizant engineer duties.
Extended Life Program (ELP) - Electrorefining Preliminary Documented Safety Analysis. Staff team will review project safety documents.
Hanford-RL – Waste Encapsulation and Storage Facility Capsule Storage System Conceptual Design. Staff team will review the Critical Decision-1 milestone safety and design documents.
Low Activity Waste Pretreatment System - Preliminary Documented Safety Analysis. Staff team will review project safety documents.
Tritium - Safety Design Strategy and Conceptual Safety Design Report. Staff team will review the project safety strategy and conceptual design.
Uranium Processing Facility (UPF) - Equipment Procurement. Staff will evaluate the procurement process for safety significant and defense-in-depth controls.
UPF - Preliminary Documented Safety Analysis. Staff team will evaluate the project’s initial development of the facility’s Documented Safety Analysis.
UPF - Construction Quality Assurance. Staff team will review construction related activities will include the review of procedures, document and implementation of defense in depth, and safety significant controls for the Uranium Processing Facility.
WIPP – Permanent Ventilation System (PVS) Quality Assurance Review. Staff team will review construction quality assurance.
WIPP - PVS Safety Significant Instrumentation. Staff team will evaluate the reliability of the air monitoring system and pressure interlocks to meet the safety functional requirements of the PVS system.
WTP - Erosion-Corrosion T5 Review Plan. Staff team will review the adequacy of DOE's resolution of Erosion/Corrosion Wear Allowances, Waste Treatment and Immobilization Plant, Board Letter and staff Issue Paper sent to DOE on January 20, 2012, as laid out in the T5 Erosion/Corrosion Design Completion effort.
WTP – High Level Waste (HLW) Preliminary DSA. Staff team will review the HLW Preliminary DSA update and supporting document such as the process hazard analysis.
WTP – Low Activity Waste Preliminary DSA. Staff team will review project safety documents.
Priority 2
ELP - Complex-Wide Aging Management Program Review. Staff team will compare the Y-12 Aging Asset Management Program and Extended Life Program with other sites’ similar programs.
PF-4 - Nonlinear Dynamic Analysis. Staff team will review the nonlinear analysis plans and implementation.
WTP - Ashfall – National Oceanic and Atmospheric Administration Ash Resuspension Modeling. Staff team will review the research team’s final report and findings.
WTP - Ashfall – United States Geological Survey Ash Transport Modeling. Staff team will review the research team’s final report and findings.
WTP - Quality Assurance: Storage of Safety systems Follow-up. Staff team will perform a follow-up review on storage conditions.

Excellence in Management and Communication with Stakeholders—Engineering Performance.

Overview—Work plan activities in the Engineering Performance (EP) mission area focus on elements of the Board’s fourth Strategic Goal, *Achieve Excellence in Management and Communication with Stakeholders*, associated with OTD. This includes the Board’s Strategic Objectives to improve management controls to achieve the Board’s mission efficiently and effectively, and to improve and sustain effective, transparent two-way communications between the Board and its stakeholders on safety issues in DOE’s defense nuclear complex and on the Board’s operations. Figure 9 shows the FY 2018 distribution of planned OTD work for this mission area. This mission area represents about 11 percent of the technical staff resource allocation.



Priority Activities—The EP non-discretionary work activities are listed below. EP personnel did not identify any priority 1 or priority 2 work. Appendix C, Figure C-5 shows a Gantt chart for these work activities.

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Table 5: EP Non-Discretionary Work Activities

Non-Discretionary
Challenge Culture Implementation and Quarterly Reviews. Staff team will pursue actions to implement a robust challenge culture for the technical staff including quarterly reviews.
Longstanding IACTS Review. Staff team will review Board safety issues that were identified more than two years ago.
Performance - Annual Performance Plan and Reports. Staff team will review and report on performance goals.
Support OIG Audit Implementation of Its Governing Legislation. Staff team will support OIG audits.
Training - Advanced Level Resident Inspector. Staff team will develop training for resident inspectors.
Training - Basic Level. Staff team will develop training for conducting nuclear safety oversight activities.
Training Guide – Nuclear Criticality Safety. Staff team will develop a training guide for nuclear criticality safety oversight.
Work Plan - Board Briefs. Staff team will update the Board on work plan progress.
Work Plan - FY 19 Planning and Metrics. Staff team will evaluate work plan results and metrics to identify potential improvements for FY 2019.
Work Plan - Update/Upgrades. Staff team will evaluate options to improve the work planning process and tools.

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Project	Full Name
Challenge Culture	Challenge Culture
Concurrence Process	Concurrence Process
Criticality Safety	Nuclear Criticality Safety
Directives	Directives
DSA Cross-Cutting	Documented Safety Analysis Cross-Cutting
ELP	Extended Life Program (Y-12)
Emergency Management	Emergency Management
Hanford-ORP	Hanford Site - Office of River Protection
Hanford-RL	Hanford Site - Richland Operations Office
Idaho	Idaho National Laboratory
Internal Controls	Internal Controls
Internal Procedures	Internal Procedures
Knowledge Transfer	Knowledge Transfer
LANL	Los Alamos National Laboratory
LANL Pu Infrastructure	LANL Plutonium Infrastructure
LAWPS	Low Activity Waste Pretreatment System (Hanford)
LLNL	Lawrence Livermore National Laboratory
MSF	Material Staging Facility (Pantex)
NNSS	Nevada National Security Site
OIG and GAO Activities	Office of Inspector General and Government Accountability Office Activities
OREM	Oak Ridge Environmental Management
Pantex	Pantex Plant
Performance Monitoring	Performance Monitoring
Professional Development Program	Professional Development Program
R2012-1	Board Recommendation 2012-1 (SRS)
R2012-2	Board Recommendation 2012-2 (Hanford)
R2014-1	Board Recommendation 2014-1
R2015-1	Board Recommendation 2015-1 (Pantex)
Safety Culture	Safety Culture
SNL	Sandia National Laboratories
SRS	Savannah River Site
Training Program	Training Program
Tritium Production Capability Project	Tritium Production Capability Project
UPF	Uranium Processing Facility (Y-12)
WIPP	Waste Isolation Pilot Plant
WIPP PVS	WIPP Permanent Ventilation System
Work Planning	Work Planning
WTP	Waste Treatment and Immobilization Plant (Hanford)
Y-12	Y-12 National Security Complex

Appendix B. Acronyms⁴

CASTLE	Collaborative Authorization for the Safety-basis Total Lifecycle Environment
CDNS	Chief of Defense Nuclear Safety
DOE	Department of Energy
DSA	Documented Safety Analysis
DWPF	Defense Waste Processing Facility
EP	Engineering Performance
ESS	Evaluation of the Safety of the Situation
FSAR	Final Safety Analysis Report
FSS	Fire Suppression System
FTE	Full Time Equivalent
FY	Fiscal Year
HLW	High Level Waste
JCO	Justification for Continued Operations
LAW	Low Activity Waste
NA-LA	Los Alamos Field Office
NES	Nuclear Explosive Safety
NESS	Nuclear Explosive Safety Study
NFDI	Nuclear Facility Design and Infrastructure
NMPS	Nuclear Materials Processing and Stabilization
NNSA	National Nuclear Security Administration
NOAA	National Oceanic and Atmospheric Administration
NPA	Nuclear Programs and Analysis
NWP	Nuclear Weapon Programs
OIG	Office of the Inspector General
OTD	Office of the Technical Director
PDSA	Preliminary Documented Safety Analysis
PF-4	Plutonium Facility (LANL)
PISA	Potential Inadequacy of the Safety Analysis
PS	Policy Statement
PVS	Permanent Ventilation System
QA	Quality Assurance
SRNL	Savannah River National Laboratory
STP	Sludge Treatment Project
SWSA	Solid Waste Storage Area
TEF	Tritium Extraction Facility
TSR	Technical Safety Requirement
TWPC	Transuranic Waste Processing Center

⁴ Does not include acronyms defined in the Appendix A Project List.

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USGS	United States Geological Survey
USQ	Unreviewed Safety Question
WCFMC	Weapon Complex Falling Man Committee
WESF	Waste Encapsulation and Storage Facility

Appendix C. Gantt Charts

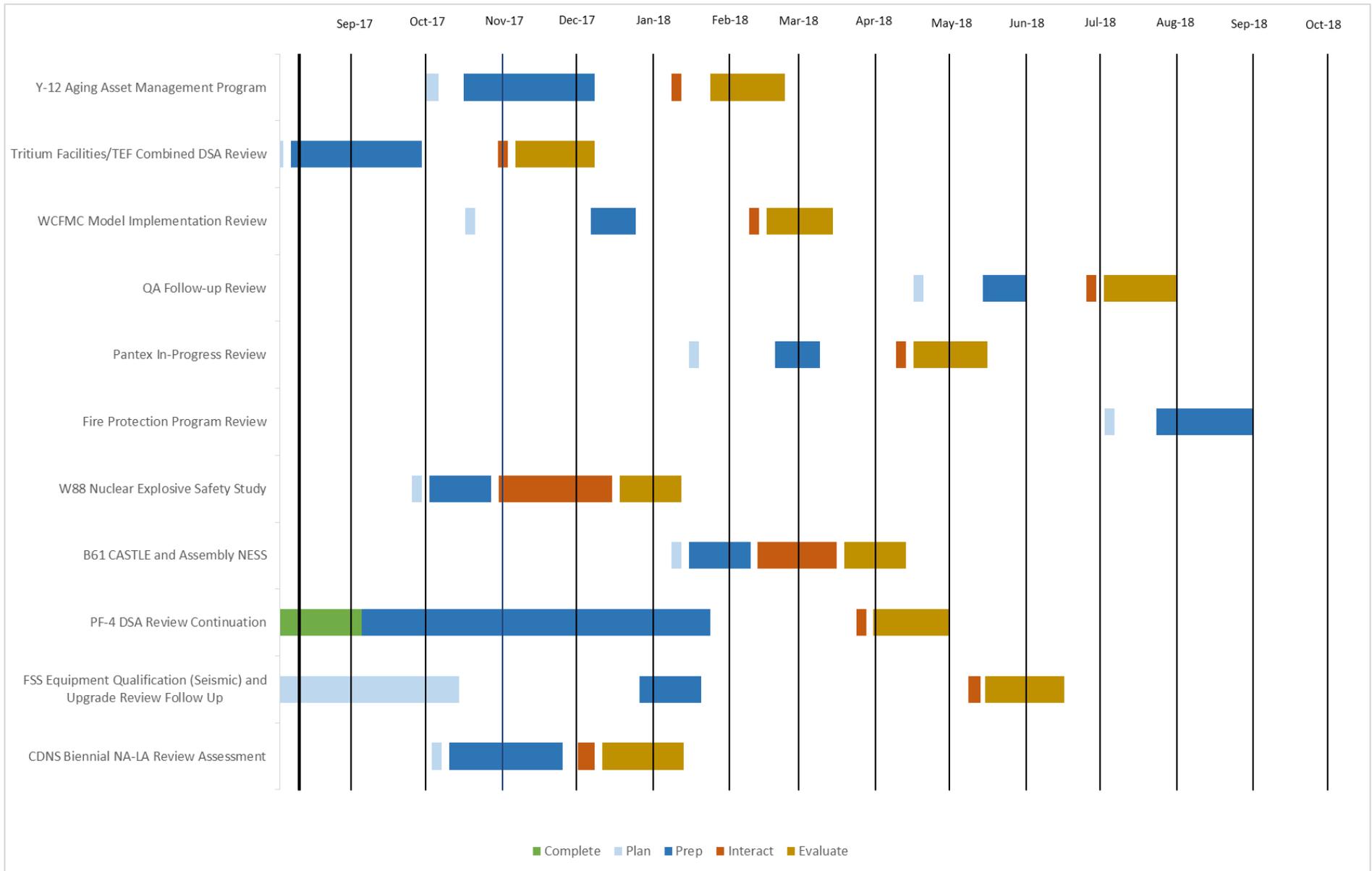


Figure C-1 – Nuclear Weapon Programs

YELLOW FOLDER: Doc#2017-300-115, FY 18 Annual Work Plan (OTD)
DRAFT—NOT REVIEWED FOR PUBLIC RELEASE

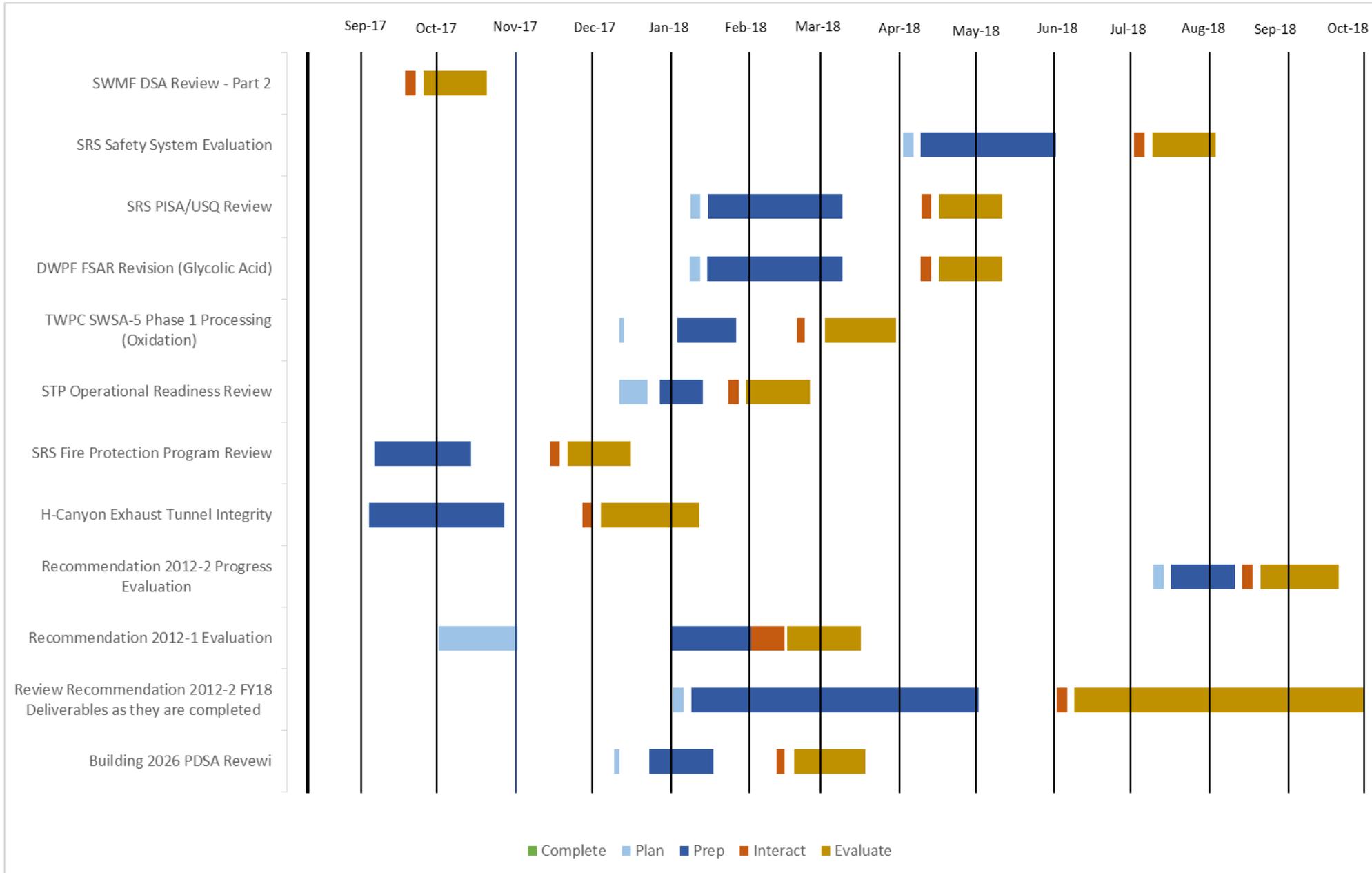


Figure C-2 – Nuclear Materials Processing and Stabilization

YELLOW FOLDER: Doc#2017-300-115, FY 18 Annual Work Plan (OTD)
DRAFT—NOT REVIEWED FOR PUBLIC RELEASE

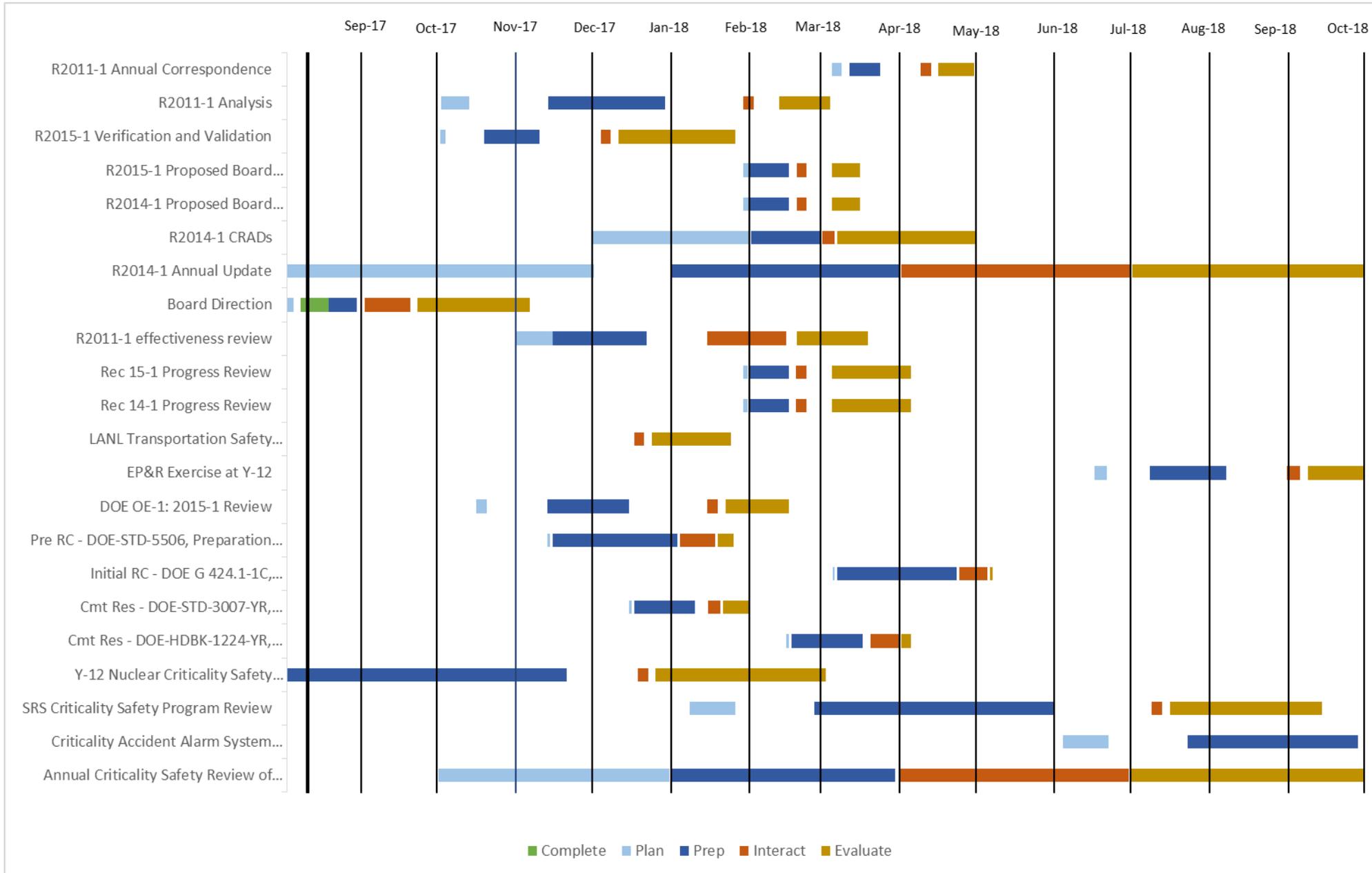


Figure C-3 – Nuclear Programs and Analysis

YELLOW FOLDER: Doc#2017-300-115, FY 18 Annual Work Plan (OTD)
DRAFT—NOT REVIEWED FOR PUBLIC RELEASE

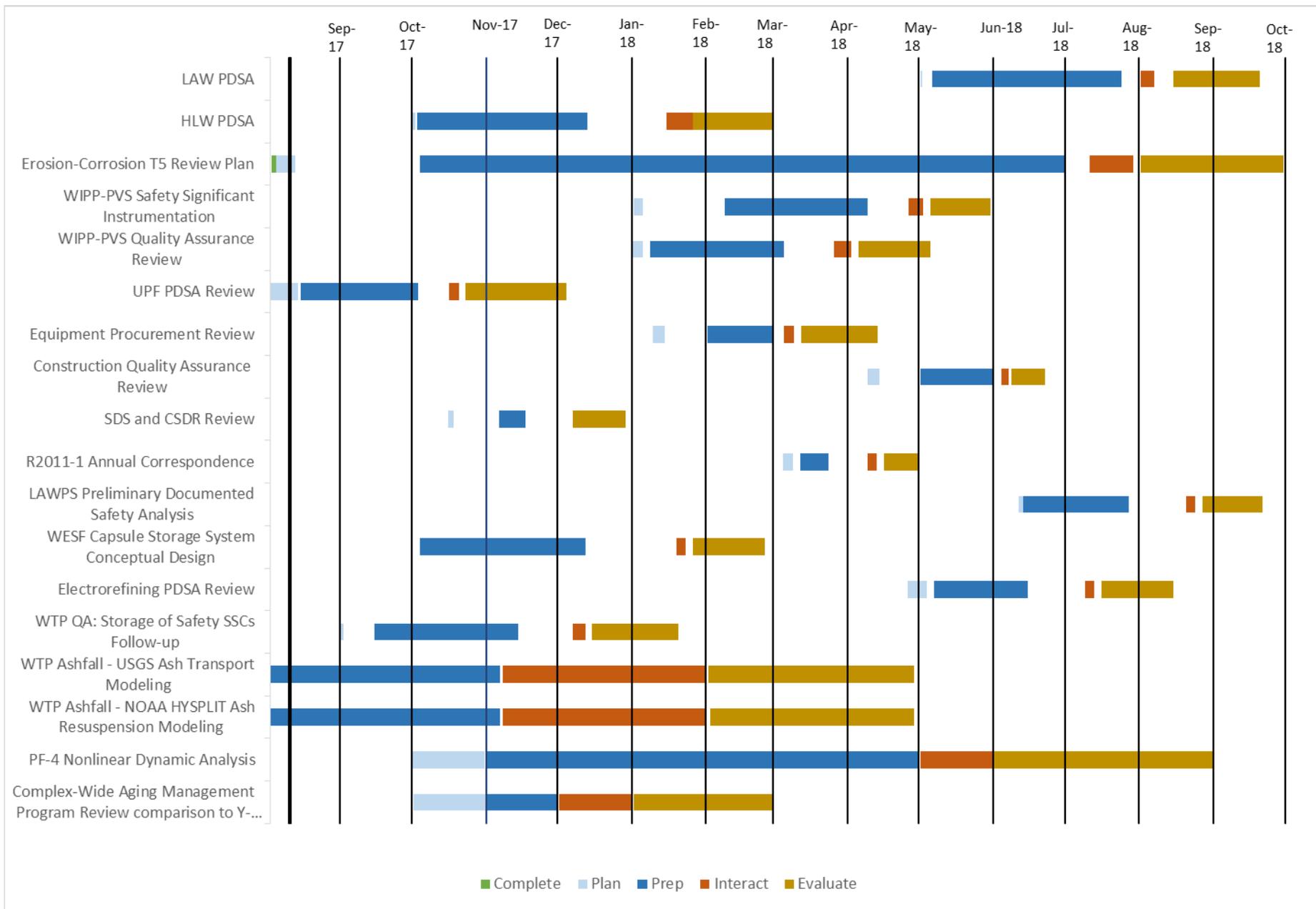


Figure C-4 – Nuclear Facility Design and Infrastructure
 C-4

YELLOW FOLDER: Doc#2017-300-115, FY 18 Annual Work Plan (OTD)
DRAFT—NOT REVIEWED FOR PUBLIC RELEASE

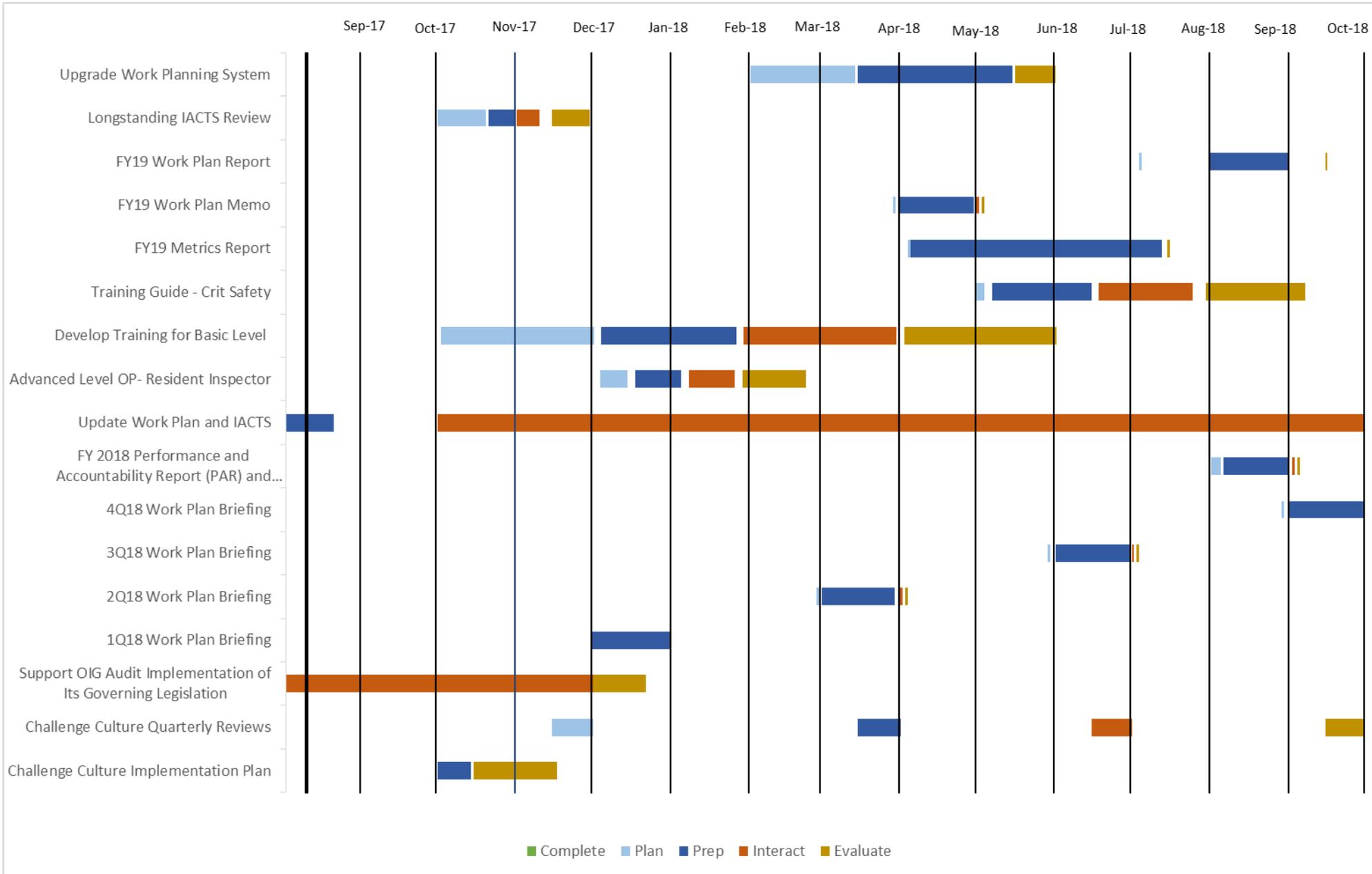


Figure C-5 – Engineering Performance