Ten-Year End State Strategic Task Order Plan, Revision 2a

Fiscal Year 2024
Idaho Cleanup Project

DOE IDAHO CLEANUP PROJECT
Collaborative Project Delivery

Table of Contents

Section **Page**

Table of Contents (continued)

Section **Page**

Table of Contents (concluded)

Section **Page**

Exhibits **Page**

Acronyms and Abbreviations

A1W	Aircraft Carrier 1st Generation Westinghouse
AMWTP	Advanced Mixed Waste Treatment Plant
ARP	Accelerated Retrieval Project
ATI	agreement to implement
ATO	authority to operate
BEA	Battelle Energy Alliance
Bldg.	building
CD	critical decision
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CH	contact-handled
CPAF	cost plus award fee
CPFF	cost plus fixed fee
CPIF	cost plus incentive fee
CSSF	Calcine Solids Storage Facility
D&D	deactivation and decommissioning
DCS	Distributed Control System
DOE	Department of Energy
DOE-EM	DOE Office of Environmental Management
DOT	Department of Transportation
EECA	Engineering Evaluation Cost Analysis
EM	environmental management
ESCM	End State Contracting Model
EV	electronic vehicle
FFP	Firm fixed price
FSV	Fort St. Vrain
FY	fiscal year
HLW	high-level waste
ICDF	Idaho CERCLA Disposal Facility
ICP	Idaho Cleanup Project
ICS	industrial control system
IDIQ	indefinite delivery/indefinite quantity
IEC	Idaho Environmental Coalition, LLC
IMC	integration and mission continuity
INL	Idaho National Laboratory
INTEC	Idaho Nuclear Technology and Engineering Center
ISA	Idaho Settlement Agreement
IWTU	Integrated Waste Treatment Unit

Acronyms and Abbreviations (concluded)

LLC	limited liability corporation
LLW	low-level waste
M	million
MIPP	Mission Information Protection Program
MLLW	Mixed Low-Level Waste
NDAA	National Defense Authorization Act
NLF	NRC-licensed facility
NNSS	Nevada National Security Site
NRC	Nuclear Regulatory Commission
NRF	Naval Reactors Facilities
OCVZ	organic contamination in vadose zone
OU	Operable Unit
PEMP	Performance Evaluation Measurement Plan
PBI	Performance-Based Incentives
PERT	Project Evaluation Review Technique
PEWE	Process Equipment Waste Evaporator
PMB	Performance Measurement Baseline
POP	Period of Performance
QA	quality assurance
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RH	remote-handled
RTP	Request for Task Order Proposal
RWDP	Remote Waste Disposition Project
RWMC	Radioactive Waste Management Complex
S1W	Submarine 1st Generation Westinghouse
S5G	Submarine 5th Generation General Electric
S&S	Safeguards and Security
SBW	sodium-bearing waste
SDA	Subsurface Disposal Area
SNF	spent nuclear fuel
STP	Site Treatment Plan
TBD	To Be Determined
TMI	Three Mile Island
TO	Task Order
TRU	Transuranic
TSA-RE	Transuranic Storage Area-Retrieval Enclosure
TYP	ten-year plan
WIPP	Waste Isolation Pilot Plant
WMF	Waste Management Facility

Executive Summary

This TYP provides details on the ICP accomplishments, TOs and enabling support Subtasks, and risks to completion (funding and others) that fully support DOE's ESCM vision to accomplish End States and reduce risk and liability. The greatest risk to accomplishment is dependable funding.

In 2018, the Department of Energy (DOE) set a clear preference for use of the End State Contracting Model (ESCM) on large dollar cleanup contracts within the DOE Office of Environmental Management (DOE-EM). DOE-EM's goal is to safely do the right work, at the right time, for the right cost, serving as responsible stewards of taxpayer money while maintaining high safety standards. In support of that goal, DOE-EM is using ESCM for the first-time at environmental management (EM) cleanup sites to reinvigorate the completion mindset. End state contracting focuses on accelerating cleanup, while reducing financial risk and environmental liability to the government, and fairly sharing risk between the government and contractor to achieve desired end states.

In 2022, the Idaho Cleanup Project (ICP) became the second ESCM contract awarded in the complex. Two years in, DOE ICP and the ICP Contractor, Idaho Environmental Coalition, LLC (IEC), have successfully collaborated to accomplish DOE-stated objectives for ESCM contracting. We have established and are accomplishing work scopes for five discrete End State task orders (TOs) that combine accelerated cleanup with significant reductions in near-term environmental risk and financial liability while simultaneously sharing risk between DOE and IEC (See Exhibit 3, "End State Contracting Model (ESCM) TO Accomplishments in FY23," of this Ten-Year Plan [TYP]).

The ESCM that DOE envisioned is working with regard to ICP scope – we are working collaboratively with contractors, regulators, and stakeholders; we completed ICP regulatory milestones for shipments of transuranic (TRU) waste to the Waste Isolation Pilot Plant (WIPP), completed processing of more than 64,000 gal of sodium-bearing waste (SBW), and transferred spent nuclear fuel (SNF) from wet to dry storage. We are accelerating cleanup and have negotiated and are implementing End State TOs and Subtasks that support significant End State accomplishments within the contract period, including closure of the Radioactive Waste Management Complex (RWMC), Tank Closure, Naval Reactors Facility (NRF) deactivation and decommissioning (D&D), and Excess Facilities Demolition – all in line with DOE objectives for reducing near-term environmental risks and financial liabilities, while acting as good stewards of taxpayer dollars and the communities and stakeholders we serve. Specific accomplishments are detailed in Exhibit 4, "FY23 Metrics Demonstrating Successful ESCM TO Performance of this TYP."

ESCM is working on ICP, but must be adequately funded to achieve End States and regulatory milestones in the near term and reduce long term risk and costs.

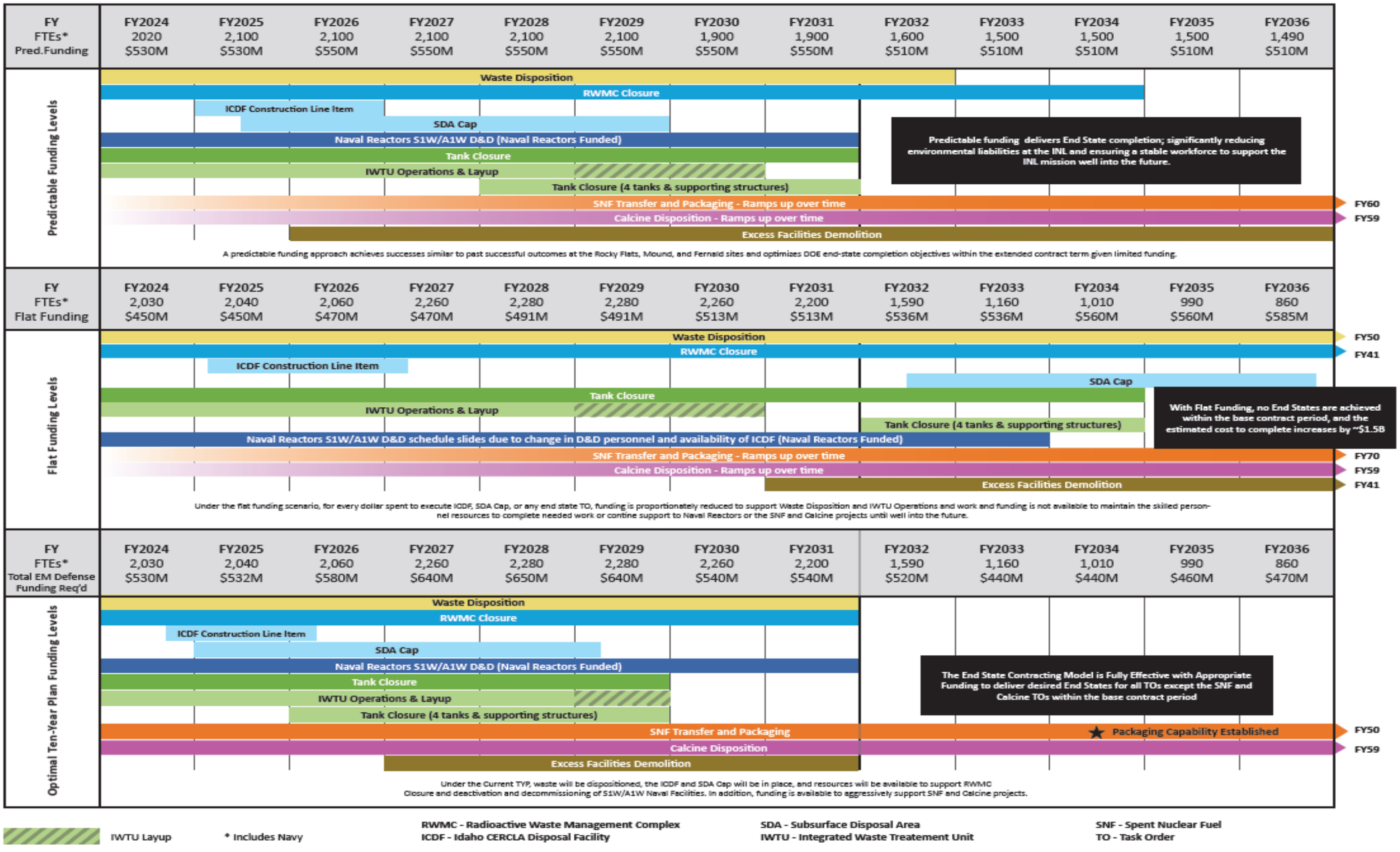
In the 2 years of operation, the ICP has been effectively flat funded at a level of ~$450 million (M) per year, and we've been able to successfully meet the objectives of the TYP. We have become more familiar with the objectives and risks to accomplish the desired End States. In the past 2 years, ICP has realized that for the ESCM to be fully effective, predictable funding is paramount. Consequently, we are at a crossroads in successful continued implementation of the ESCM. Exhibit 1, "Notional Funding Profiles for Predictable, Flat and Optimal Funding Scenarios," shows three funding scenarios for contract execution. Each scenario assumes at least one 5-year TO will be issued prior to the end of the 10-year contract ordering period. The first scenario (Flat Funding) reflects the scope to be accomplished, assuming funding at $450M/year escalated every 2 years. With the planned execution of line-item projects (Idaho CERCLA Disposal Facility [ICDF] and Subsurface Disposal Area [SDA] Cap) in FY24 and FY25, it will become increasingly difficult to implement this TYP under the flat funding model without incremental line-item funding above the ~$450M level. The second scenario (Predictable Funding) shows a stable funding scenario focused on workforce optimization that also supports significant End State accomplishments. The third scenario (Optimal TYP Funding) reflects

opportunities for accelerated scope completion, which requires an optimal funding profile as noted in Exhibit 1. The funding profile for the optimal funding approach in this plan is difficult to maintain in such a fiscally challenging environment. What is needed for success under the ESCM is an adequate and predictable funding level that provides incremental funding above the base operations level to support the execution of the line-item funded scope while stably funding base operations. This predictable funding scenario will allow for the execution of increasing line-item work in parallel with completing critical enabling tasks to accomplish TYP End States while maintaining the highly skilled and qualified workforce.

Similar success in the DOE complex was experienced with sites that were accomplished under Closure Contracts wherein funding was maintained at an adequate and predictable level allowing the department and contractors to manage funds across multiple projects. These contracts fell out of favor due to the level of unquantified risk to both parties that resulted in subsequent disagreement as to equitable risk sharing but were immensely successful in accomplishing desired scope at significantly reduced cost. The ESCM, with the use of the TO process, allows both parties to quantify, limit, and share in the risk to manageable task scopes, wherein each party agrees prior to execution of scope. The ICP has proven this viable and believes that a predictable funding scenario of $550M/year would allow for adequate funding with less impact to near term needs but would also allow for the majority of the completion states in the TYP to be accomplished.

This TYP reflects the optimal funding levels required to complete the majority of the ICP scope within the 10-year contract period.

Exhibit 1. Notional Funding Profiles for Predictable, Flat, and Optimal Funding Scenarios



Introduction

This Ten-Year Plan (TYP) focuses on the Department of Energy (DOE) Office of Environmental Management's (DOE-EM's) strategic imperatives for site cleanup activities that are being performed on the Idaho Cleanup Project (ICP) across Fiscal Years (FYs)22–31 and potentially through FY36. The work includes treating, storing, and dispositioning a variety of radioactive and hazardous wastes; removing and dispositioning targeted buried waste; removing or deactivating unneeded facilities; and preparing spent nuclear fuel (SNF) and high-level waste (HLW) for removal from Idaho. These activities are necessary to implement DOE-EM's strategic objectives, meet the milestones contained within the regulatory agreements, and achieve specific end states on the Idaho National Laboratory (INL) Site.

The Idaho Environmental Coalition, LLC (IEC) and DOE ICP work collaboratively to establish task orders (TOs) that drive the execution of this master indefinite delivery/indefinite quantity (IDIQ) contract (hereafter referred to as the ICP Contract). To date, the Transition TO (TO1), Implementation Period TO (TO2), and the Integration and Mission Continuity (IMC) Phase 1 TO (TO3.1) have been completed. The remaining TOs include two non-end-state support TOs and six End-State TOs.

ICP Support and End State Task Orders	
IMC Phase 2 TO (TO3.2)	Focused on maintaining continuity of operations, providing core programs across the ICP, providing programmatic support required over the life of the contract, and assuring variable and high-risk work scopes not resolved during IMC Phase 1 are continued until risks have been mitigated to ensure control between IEC and DOE ICP
Radioactive Waste Management Complex (RWMC) Closure End State TO (TO4)	Combination of activities to achieve RWMC Closure
Naval Reactors End State TO (TO5)	Removal and disposition of aging Naval facilities
Non-Defense Project TO (TO6)	Management of Fort Saint Vrain and on-site Nuclear Regulatory Commission (NRC) licensed facilities spent nuclear fuel (SNF)
Tank Closure End State TO (TO7)	Activities required to complete Tank Closure
Spent Nuclear Fuel (SNF) Transfer & Packaging End State TO	Activities required to prepare & ready HLW and SNF for shipment
Calcine Disposition End State TO	Activities to support retrieval/processing & disposition of calcine waste
Excess Facilities Demolition End State TO	Accelerated removal of excess facilities to reduce liability and costs

The first of the non-end-state TOs is the IMC Phase 2 TO (TO3.2), which is focused on maintaining continuity of operations and providing core programs that support reliable and safe delivery throughout the contract duration. The second is the Non-Defense Project TO (TO6), which includes non-end-state work scopes that assure safe and compliant management of non-defense SNF and facilities. The remaining TOs are end-state focused and will drive the development of specific TOs and subtasks aimed at facility closures and waste management and disposition and represent specific advances to achieving end states at the ICP. The joint strategy for achieving each end state has been developed to include specific objectives for successful project execution and metrics for measuring and demonstrating progress and risk reduction throughout the life of the Contract.

To provide clarity in the tables and figures throughout this plan, TOs have been color coded, as shown to the left. Note that TO numbers have only been assigned to active TOs. The order in which the remaining TOs will be prepared and negotiated will be driven by site priorities.

This plan is adaptive and focused on achieving DOE end-state objectives and identifying strategic imperatives that anticipate challenges and risks; proactively manage, mitigate, and control them; and bring proven solutions during all phases of TO development, implementation, and closeout to cost effectively complete end states within the contract period. This plan is a living document that will be managed and updated annually to address changes in DOE priorities or emerging imperatives.

Our Plan for achieving End States is predicated upon the assumption that funding levels presented herein are sufficient to support the Plan.

Contract Year 2 (FY23) in Review

This TYP has been revised to reflect the significant progress made on the ICP during FY23. DOE ICP and IEC have worked diligently to ensure alignment of goals and objectives for project implementation. Exhibit 2, "ESCM TO Accomplishments in FY23," shows the progress made with TO development, implementation, and completion over the last year. Details regarding the work accomplished in FY23 to support end states are provided in Exhibit 3, "FY23 Metrics Demonstrating Successful ESCM TO Performance."

Exhibit 2. ESCM TO Accomplishments in FY23

Task Order Development and Implementation	Discussion
Completed the IMC Phase 1 TO (TO 3.1)	Completed this Cost Plus Award Fee (CPAF) TO on 9-30-23. This TO focused on maintaining core support programs across the contract while addressing high-risk activities and risk mitigation to support clear definitization of stand-alone End State TOs.
Submitted proposal for, negotiated, and implemented IMC Phase 2 TO (TO 3.2)	This TO continues focus on maintaining core support programs across the contract while addressing high-risk activities and risk mitigation to support clear definitization of stand-alone End State TOs.
Submitted proposal for, negotiated, and implemented for Naval Reactors TO S1W demolition Subtask (TO 5.1)	This is a Cost Plus Incentive Fee (CPIF) TO funded by the Navy that supports Naval Reactors commitments for excess facility D&D. This TO definitizes completion of D&D of the Navy prototype reactor S1W (Submarine 1st Generation Westinghouse) and facilitates the acceleration and inclusion of the Navy prototype reactors A1W (Aircraft Carrier 1st Generation Westinghouse) and S5G (Submarine 5th Generation General Electric) into the End State TO.
Submitted proposal for, negotiated, and implemented the Non-Defense Project TO (TO 6.1)	This is a non-end state Cost Plus Fixed Fee (CPFF) TO that supports continued management of non-defense related SNF at Nuclear Regulatory Commission (NRC)-licensed facilities located at Fort St. Vrain and the ICP.
Submitted proposal for, negotiated, and implemented the Tank Closure TO Integrated Waste Treatment Unit (IWTU) Operations Subtask (TO 7.1)	This is a CPFF interim end state Subtask to the Tank Closure End-State TO (TO 7.1) that definitizes ongoing operations of the IWTU to process sodium bearing waste and support future tank closures.

Exhibit 3. FY23 Metrics Demonstrating Successful ESCM TO Performance (as of 9/30/23)

Activity	Metrics
IMC (TO3)	
Program Support Activities	• Completed property management audit and certification • Completed Project Evaluation Review Technique (PERT) audit for procurement system and obtained DOE approval • Completed annual Mission Information Protection Program (MIPP) and received one-year Authority to Operate (ATO) computer systems in compliance with DOE requirements • Finalized the Industrial Control System (ICS) System Security Plan • Completed Idaho Nuclear Technology and Engineering Center (INTEC) air system upgrades • Completed Distributed Control System (DCS) upgrades for CPP-666 • Installed 250 linear feet of bond strand to modernize the INTEC fire water feed supply system • Installed six electronic vehicle (EV) charging stations: three at INTEC and three at the Sawtelle Facility
Waste Programs	• Completed source term evaluation of 247 Mixed Low-Level Waste (MLLW) containers • Completed 313 shipments of Low-Level Waste (LLW) to ICDF – 1,732 metric tons disposed • Completed Nevada National Security Site (NNSS) LLW recertification audit with zero findings
TRU Programs	• Completed 100,000+ waste container movements to support TRU waste disposition • Certified 1,650m3 of Site Treatment Plan (STP) and Agreement to Implement (ATI) wastes for disposition • Completed 450+ shipments of TRU to WIPP over contract life with 348 shipments in FY23 • Exceeded the STP certification requirements with 75% of WIPP shipments made by Idaho • Completed WIPP recertification audit with no issues for IEC – audit team stated this was the best audit they've conducted • Developed innovative Department of Transportation (DOT) Type A certified bag for evaluation as a TRU overpack • Completed treatment of 10 backlogged containers of Remote-Handled (RH)-TRU on the Remote Waste Disposition Project (RWDP)
SNF Management	• Completed transfer of all spent fuel from wet to dry storage on 3/23, 9 months ahead of Idaho Settlement Agreement (ISA) commitment of 12/31/2023 • Completed 13 additional transfers of Peach Bottom fuel from Gen1 to Gen2 Vaults for a total of 20 of 40 total required transfers
RWMC Closure End State (TO4)	
Accelerated Retrieval Project (ARP) decommissioning and demolition	• Completed D&D of ARP III, IV and ARP V • Completed decommissioning and commenced demolition of ARP II • Completed processing and packaging of ARP sludge wastes in ARP VII (2,129 drums) • Commenced decommissioning of ARP VII, ARP VIII, and ARP IX • Commenced de-inventory of Waste Management Facility (WMF)-698 • Completed Resource Conservation and Recovery Act (RCRA) closure activities on ARP VII
SDA Cap	• Completed redesign of SDA Cap • Completed the Remedial Action Work Plan (RAWP)
ICDF Cell 3 Expansion	• Obtained Critical Decision (CD)-1 (Alternative Selection and Cost Range) and CD-3A (interim step to perform site preparation prior to construction) approval • Completed conceptual design and commenced site preparation of ICDF expansion cell • Completed preliminary design of ICDF expansion cell; final design completion expected 11/23 • Completed RAWP
Advanced Mixed Waste Treatment Plant (AMWTP) Closure	• Completed TRU Storage Area-Retrieval Enclosure (TSA-RE) RCRA closure of pads 1 and R • Completed fire water refurbishments for pad 2 to allow for continued waste storage

Exhibit 3. FY23 Metrics Demonstrating Successful ESCM TO Performance (as of 9/30/23) (continued)

Activity	Metrics
Naval Reactors (TO5)	
S1W Reactor	• Completed above-grade demolition and waste disposition of Naval Reactors Facility (NRF)-608 and NRF-625 • Completed Engineering Evaluation Cost Analysis (EECA) • Commenced decommissioning and disassembly of prototype reactor • Completed repairs, testing, and return to service of S1W overhead crane • Recycled ~146 tons of scrap metal
A1W Reactor	• Completed EECA • Commenced planning and implementation of A1W isolations with NRF • Commenced security and facilities segregation of A1W with NRF • Completed deactivation and demolition of retention basins • Completed facility turnover and personnel mobilization
S5G Reactor	• Commenced preliminary D&D planning • Began EECA development
Core Car	• Commenced mockup construction and tooling testing • Resolved design issues to support safe processing • Commenced incorporation of design changes into mockup construction and tooling evaluations
Non-Defense Project (T06)	
NRC Licensed Facilities	• Completed Quality Assurance (QA) Program Transfers • Completed Fort St. Vrain support facility upgrades • Completed Safeguards and Security (S&S) Audit with no findings • Completed ISO 14000 Audit with no findings
Tank Closure (TO7)	
IWTU Operations	• Completed pre-SBW processing outage and commenced IWTU startup operations • Commenced processing of SBW on 4/23 and filled first can to complete Idaho Settlement Agreement (ISA) milestone • Retrieved and treated 68,047 gallons of SBW from tanks WM-188 and WM-189, representing 8% toward meeting the ISA milestone • Completed system performance tests Part 1 and Part 2 and submitted report to the state • Began construction of second IWTU Product Storage Building II • Designed, manufactured, and installed modified electric nitrogen generation system

Exhibit 3. FY23 Metrics Demonstrating Successful ESCM TO Performance (as of 9/30/23) (concluded)

Activity	Metrics
SNF Transfer & Packaging	
SNF Management	• Completed concrete storage pad at CPP-603 and prepared and implemented revision to the Safety Analysis Report • Completed removal of obsolete ventilation and equipment from roof of CPP-603 and completed roof repairs to extend roof life, avoiding significant modifications planned for facility life extension • Completed transfer of NuPac 125B Casks from CPP-666 to CPP-603 and implemented security upgrades • Commenced integrated fuel packaging and storage systems analysis with BEA and NRF
Calcine Disposition	
Calcine Retrieval	• Completed Calcine Solids Storage Facility (CSSF) 1, Phase 1 retrieval installation equipment plan • Completed internal mapping of Vault 1, Bin Set 1 using innovative drone technology • Began mockup testing and analysis of retrieval system in CPP-691, including continuous transfer of simulant material to analyze erosion • Completed draft National Defense Authorization Act (NDAA) Section 3116 basis document to support stakeholder briefings, public comment, and NRC review • Commenced advanced analysis of calcine treatment alternatives using commercially available technologies and systems collaboratively with Battelle Energy Alliance (BEA) to encompass maximum capabilities for multiple waste streams

A. Background

The Idaho Cleanup Project (ICP) work encompasses ongoing and contemplated work scopes, to include:

- Continuing IMC Phase 2 work scopes to assure programmatic support and ongoing Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedial actions
- Completing treatment of the liquid sodium-bearing waste (SBW)
- Closing the Idaho Nuclear Technology and Engineering Center (INTEC) Tank Farm
- Operating and closing the Radioactive Waste Management Complex (RWMC)
- Retrieving targeted buried waste and closure of the Subsurface Disposal Area (SDA)
- Dispositioning TRU and mixed wastes
- Completing the SDA cap
- Deactivating and dispositioning the Advanced Mixed Waste Treatment Plant (AMWTP)
- Stabilizing and repackaging SNF and HLW to make it road ready
- Operating and maintaining the balance of plant at INTEC to support ongoing programs (Calcine Disposition Project, Spent Fuel Programs, Tank Closure)
- Supporting Naval Reactors for the disposition of aging facilities
- Managing fuels from Fort Saint Vrain (FSV) and on-site Nuclear Regulatory Commission (NRC)-licensed facilities (NLF)
- Completing deactivation and decommissioning (D&D) of excess facilities as funding allows.

The ICP Contract is an indefinite delivery/indefinite quantity (IDIQ) end state completion contract with an estimated contract ceiling of approximately $6.4 billion over a 10-year ordering period (FY22–FY31), with the option to award additional end state TOs prior to the last day of the 10-year ordering period for up to an additional 5 years (ending in FY36). The anticipated Department of Energy (DOE) ICP budget by fiscal year for the 10-year base contract period is estimated to be ~$450M per year. Additional funding may be provided for non-EM work such as Naval Reactors.

B. Regulatory Milestones, Life-Cycle Baseline, and DOE-EM Goals and Priorities

B.1 Regulatory Milestones

The ICP regulatory milestones are contained in “The 1995 Idaho Settlement Agreement” (ISA), “The 2019 Supplemental Agreement” (SA), “The 2008 Agreement to Implement” (ATI), “The Site Treatment Plan” (STP), “The Colorado Settlement Agreement”, and “The Notice of Noncompliance Consent Order.”

There are many milestones associated with these agreements and directives with targets within the ICP Contract ordering period. A complete listing can be found at the DOE Idaho Site Major Agreement Milestones website. Below are some examples of applicable milestones:

- Allocate to and make from the State of Idaho 55% of all TRU waste shipments received at Waste Isolation Pilot Plant (WIPP) for INL TRU waste (annually)
- Complete transfer of all spent fuel from wet storage to dry storage (12/31/2023) (complete)

- Issue ROD Amendment identifying selected calcine treatment technologies that provide a treatment method in accordance with LDR requirements (3/31/2028)
- SBW Treatment Facility (Integrated Waste Treatment Unit [IWTU]) commence operations and fill one canister (09/30/2022) (actual date 04/11/2023)
- SBW Treatment Facility (IWTU) complete 15% treatment (09/30/2024 and annually thereafter)
- Certify 1975 (m3) Original Volume TRU contaminated waste (09/30/2026)
- Complete SBW treatment (~12/31/2029, based on processing percentage) – Requires removal of ~900,000 gal of SBW from tanks and treatment of the SBW in IWTU facility
- Remove all spent fuel (including Navy and Three Mile Island [TMI] spent fuel) from Idaho (01/01/2035)
- Calcine Waste Road Ready (12/31/2035) – Requires the design and testing of calcine retrieval systems and the retrieval, processing, and packaging of calcine and carbonated waste to make them road ready
- Treat the entire Radioactive Waste Disposition Project (RWDP) Backlog (9/30/2045) (outside of the ICP contract ordering period).

B.2 Life-Cycle Baseline

The ICP Performance Measurement Baseline (PMB) was submitted and approved by DOE as part of the ICP IMC TO. Each TO released against the contract will include a stand-alone schedule that is initiated and managed in the PMB in accordance with the ICP End State Contract requirements found in Section C.9.2.01, “Program Management/Support/Administration.”

B.3 DOE-EM Goals and Priorities

The DOE-EM stated priorities are as follows:

- Activities to maintain a safe, secure, and compliant posture
- Radioactive tank waste stabilization, treatment, and disposal
- SNF storage, receipt, and disposition
- Nuclear material consolidation, stabilization, and disposition
- TRU and mixed low-level waste (MLLW) disposition
- Soil and groundwater remediation
- Excess facilities D&D.

IEC’s management approach for the execution of the ICP IDIQ Performance Work Statement (PWS) is in direct alignment with these priorities subject to the provision of adequate funding as discussed in the Executive Summary.

C. Task Order Discussions

C.1 Overall Strategy for Managing Task Orders

The ICP work scope will be performed using focused TOs to achieve desired end states deploying a TO management process that is forward-looking, adaptive, flexible, and integrates DOE priorities across the

ICP. TOs will be administered in a manner to maximize efficiency and integrative management opportunities across all tasks. The TOs to be executed during the contract period of performance are shown in Exhibit 4, "Notional End State Task Order Contract Strategy," which provides a synopsis of the partnering sessions and aligned strategic imperatives between DOE ICP and IEC. Note that Exhibit 4 contains total rough estimated costs for TO completion assuming the optimal TYP funding levels shown in the Executive Summary.

Each TO will be managed as a project with a beginning and clearly defined end date, concise interim milestones for performance measurement, and agreed-to end states. The contract type used for each TO will be determined based on the degree of variability and risk associated with each TO.

The following contract types will be used for ICP TOs, dependent upon the scope variables associated with each TO at the time of development:

- Cost plus award fee (CPAF)
- Cost plus incentive fee (CPIF)
- Cost plus fixed fee (CPFF)
- Firm fixed price (FFP).

Anticipated TOs for the 10-year contract period are discussed individually in Section C.2.

C.2 Anticipated Task Orders for the 10-Year Contract Period

The ICP Contract is structured under the End State Contracting Model (ESCM) to accelerate cleanup, safely achieve significant reduction of environmental risk and financial liability, and align with EM goals for environmental cleanup at the site. Execution of the ICP mission will be completed using the TOs described below.

C.2.a Integration and Mission Continuity (IMC) Task Order Phase 2 (TO3.2)

The IMC TO (TO3) has been implemented in two phases, Phase 1 and 2, to support a clear understanding of the work scopes and suitability for capture in future end state TOs. It is not an end state TO. Phase 1 activities were completed 09/30/23, at which time activities that were not completed or were ongoing at the completion of Phase 1 were transferred to Phase 2 of the IMC TO. TO3.2 includes a base period of 2 years from 10/01/2023 to 09/30/2025, with the ability to extend the period of performance for the duration of the IDIQ contract.

IMC Task Order Phase 2 (TO3.2)	
Rationale	Core Programs that support for contract duration and include continued evaluation of work scopes for potential conversion to independent Task Orders
Scope	Core contract support programs and TO definitization
Period of Performance	FY24 – FY31, subject to reviews, negotiations, and updates
Estimated Cost	$643.8 negotiated value for FY24 and FY25 Extend as appropriate
Contract Type	Cost Plus Award Fee (w/annual Performance Evaluation Measurement Plan (PEMP))
Completion Definition	Contract End

Exhibit 4. Notional End-state Task Order Contract Strategy

Task Order/Activity Scope	Rationale for Scope	Contemplated Contract Type	Incremental Milestones	Completion Definition	Task Order Potential Period of Performance	Rough Estimated Cost Negotiated Value
IMC Phase 2 Task Order (TO3.2)	**Core Contract Support Programs and Task Order Definitization**	**CPAF (w/PEMP)**	**Evaluate work scopes for potential conversion to independent task orders. Includes continuity of operations pending the transfer of scope to individual task orders identified below**	**End of Contract**	**FY24 – FY31 w biennial updates**	**$643.8M//2 yrs $1,845 balance**
RWMC Closure End State Task Order	**Combination of activities to achieve RWMC Closure**				**FY23 – FY31**	**$789M**
ARP/SDA Demolition and OCVZ Well Abandonment (TO4a, negotiated)		CPIF	ARP/SDA Demolition complete and completion of OCVZ Well Abandonment	Complete demo & closure ARP/SDA facilities and OCVZ Well Abandonment	FY23 – FY25Q1	$82.2M
ICDF Construction Line Item		CPIF	CD1, CD2, CD3 completion prior to construction start. Construction of ICDF new cell and evaporation pond and turnover to operations	Complete construction and operational turnover of ICDF	FY24Q3 – FY26Q1	$90M
SDA Cap Installation		CPIF	CD1, CD2, CD3 completion and completion of ARP demolition prior to construction start. Complete site preparation, backfill SDA, 1st load of dirt to SDA, 25, 50, 75% dirt hauled; cap complete; report submitted	Complete cap installation	FY25– FY29Q1	$190M
AMWTP Treatment Facility RCRA Closure & Demolition		CPIF	RCRA Closure and Demolition of AMWTP Treatment Facility	Complete demo & closure of AMWTP Treatment Facility	FY26 – FY30Q1	$250M
AMWTP Storage Facilities RCRA Closure & Demolition		CPIF	RCRA Closure and Demolition of 9 AMWTP Storage Facilities	Complete demolition and closure of AMWTP Storage Facilities	FY27 – FY31	$195M
Naval Reactors End State Task Order (TO5)*	**Removal & Disposition of Aging Naval Facilities**				**FY24 – FY31**	**$395**
Naval Reactors Planning		TBD	Includes continuity of operations for Naval Reactors work pending the transfer of scope to individual Naval Reactors task orders.	End of Contract	FY25-FY31 w biennial updates	$40M
S1W Facility D&D (TO5.1, negotiated)		CPIF	Documentation to demonstrate closure & demo complete of NR facilities	Complete demolition of specified NRF facilities	FY24 – FY26	$58.2M
A1W Facility D&D		CPIF	Documentation to demonstrate closure & demo complete of NR facilities	Complete demolition of specified NRF facilities	FY25 – FY28	$146M
S5G Facility D&D		CPIF	Documentation to demonstrate closure & demo complete of NR facilities	Complete demolition of specified NRF facilities	FY28 – FY31	$120M
Core Car		CPIF	TBD	Core Car disposition complete	FY26 – FY29	$30.6M
Non-Defense Project Task Order (TO6, negotiated)*	**Manage Fuels in NRC licensed facilities, including Ft. St. Vrain**	**CPFF**	**Includes continuity of operations for non-defense work**	**Manage fuels in NRC licensed facilities as directed**	**FY24 – FY31 w biennial updates**	$37.66M
Tank Closure End State Task Order (TO7)	**Activities required to complete Tank Closure**				**FY24 – FY29**	**$763M**
IWTU Operations (TO7.1, negotiated)		CPFF	Maintain hot operations/routine operations/milestones - 15% tank volume processed in FY24 and 30% in FY25 and empty tanks and operational outages	Complete tank waste processing	FY24 – FY29 w biennial updates	$228M/2 yrs, $470M balance
Tank Closure (4 tanks & supporting structures)		CPIF	Close, clean & grout all 4 tanks and associated systems, place interim cap over tanks (regulatory doc for closure)	Complete tank closure & placement of interim cap	FY26 – FY29	$65M
SNF Transfer & Packaging End State Task Order	**Activities required to prepare & ready HLW & SNF for shipment**				**FY26 – FY50**	**$450M**
Packaging Fuel Operations for Staging		CPIF	Initiate repackaging & 50th,100th repack, etc. complete	Complete SNF packaging for staging	FY30 – FY50	$250M
SNF Staging and Packaging Capability Line Item		CPIF	CD1, CD2, CD3 completion prior to construction start. Construct processing capability for staging SNF packages	Complete construction of SNF Staging and Packaging Capability	FY26-FY29	$200M
Calcine Disposition End State Task Order	**Activities to support retrieval/processing & disposition of calcine waste**				**FY28 – FY59**	**TBD**
Calcine Processing and Operations		CPIF	First canister produced, 50th, 100th, processing complete	Complete canister processing	FY34 – FY59	TBD
Calcine Project and Bin Set Closure Line Item		CPIF	CD1, CD2, CD3 completion prior to construction start. Construct calcine treatment and packaging facility.	Complete construction and operational turnover of Calcine Treatment Facility	FY28– TBD	TBD
Excess Facilities Demolition End State Task Order	**Accelerated Removal of Excess Facilities to Reduce Liability and Costs**	**FFP**	**Will be established during Subtask development as specific facilities are identified for demolition**	**Complete demolition of excess (primarily non-radiological) facilities as directed**	**FY26 – FY31 w biennial updates**	**TBD**

Key IMC P2 RWMC Navy Non-Defense Tanks SNF Calcine Excess Facilities *Funded by NRF or other source

With the conclusion of Phase 1 on 09/30/2023, the following support activities not tied to a specific End State but have overarching impacts during the life of the contract were transferred to Phase 2, including:

- Program management and support functions/indirects – Business services, core safety programs supporting all projects, CERCLA – Environmental Restoration
- Maintenance of facilities in safe and compliant conditions
- Facility and infrastructure upgrades – Specific facility and infrastructure upgrades will be addressed as identified during project execution
- Transfer of Peach Bottom fuel assemblies from Gen1 to Gen2 vaults
- Certification, packaging, and shipping of remote-handled (RH) TRU waste in shielded containers – As waste and the WIPP are available
- Retrieving/Processing and Shipping RH MLLW – As waste and transportation are available
- Idaho CERCLA Disposal Facility (ICDF) design and site preparation – ICDF must be expanded to receive waste from site-wide CERCLA D&D activities and large components from D&D of Naval Reactor facilities.

Additional activities included in IMC Phase 2 have a high degree of variability that must be mitigated to support the development of clearly defined scopes for end state TOs, including:

- D&D of DOE ICP excess facilities
- Legacy waste disposition (CH TRU and MLLW)
- Facility modifications and SNF packaging demonstration (CPP-603)
- Design/construction of SNF staging and packaging capability
- Calcine demonstration project (retrieval development/mockup)
- Design and construction of the calcine processing capability
- Initiation of D&D of additional Naval Reactor facilities.

It is expected that End State TO scopes will be refined and definitized during Phase 2 of the IMC TO (TO3.2) to support the development of future end state TOs. These activities directly impact the completion of the contemplated end state TOs and are described in Exhibit 5, “Risks to End States,” which identifies the specific risks to be addressed and mitigated to support development and implementation of discrete end state TOs. Each risk identified is tied to funding decisions that must be made to support future end state accomplishments, as discussed in Section G, “Risk and Liability.”

Rationale for TO Selection

TO3 is stipulated in the ICP End State Contract. Phase 2 of the IMC TO (TO3.2) recognizes there are programmatic support elements that will be required over the life of the contract. These were captured first in Phase 1 and now in Phase 2 until contract end.

Phase 2 of the IMC TO includes programmatic support activities for the life of the contract as well as any high-risk activities not resolved in Phase 1; specifically, longer-term activities for which uncertainties could not be adequately quantified during Phase 1. The performance evaluation measurement plan (PEMP) is developed annually for each fiscal year. This IMC Phase 2 TO (TO3.2) supports a safe, secure, and compliant posture across the contract in accordance with DOE ICP stated priorities. This approach also assures that all contemplated incentives and objectives for the IMC TO are managed under an individual PEMP, reducing the administrative burden.

Exhibit 5. Risk to End States

Activities	Risk	Associated End State Task Order
Legacy Waste Disposition (CH TRU and MLLW)	These wastes are destined for disposal off-site at WIPP, the Nevada National Security Site, or other appropriate off-site disposal facility. Wastes may be packaged and ready for final disposal but be held awaiting funding and approval to ship from the receiving facilities. These wastes reside in the RWMC and must be dispositioned before completing the RWMC Closure End State. The timing of removal of excess facilities at AMWTP under the D&D of Excess Facilities TO and the availability of ICDF Cell 3 could impact the schedule for RWMC Closure and result in impacts to critical resources for closure of AMWTP and NRF facilities. The RCRA closure of WMF-636 Pads 1 and R is complete, but closure of Pad 2 is delayed due to ongoing waste storage needs which has delayed removal of the facility. The new ICDF cell is subject to the DOE Order 413.3B Capital Asset Acquisition Process which is a risk to schedule. Another significant component of RWMC Closure is the SDA Cap Installation which can be impacted by inadequate funding and/or delay of ICDF Cell 3 construction. Lastly, at the completion of TO4a (12/24), if the ICDF Cell is not available and NRF A1W is not fully turned over for D&D, we would have a surplus of resources potentially requiring a reduction in force, which will significantly impact and delay NRF D&D activities.	**RWMC Closure**
D&D of Naval Reactor Facilities	Sequencing of NRF facilities D&D to support retention of critical resources can be significantly impacted if NRF is delayed or facilities are not available for D&D. Also, ICDF expansion will be required for the disposal of large components and will delay NRF End States if not available by 12/25. The new ICDF cell is subject to DOE Order 413.3B Program and Project Management for the Acquisition of Capital Assets which is a risk to schedule.	**Naval Reactors**
IWTU Startup Operations	Maintaining IWTU operational reliability to treat 900,000 gallons of SBW stored in underground storage tanks in the tank farms is key to completing the Tank Closure End State. Any perturbations to IWTU operations pose a risk to the schedule for Tank Closures.	**Tank Closure**
Facility Modification and SNF Packaging Capability	The cost and path forward for this activity are still in development. The Facility Modifications and the Packaging Project will be essential to assuring necessary infrastructure and processes are developed, tested, and proven to be effective to meet the ISA commitments. Delays in funding can significantly impact the availability of critical resources needed to accomplish this End State as resources are highly specialized, certified and difficult to obtain and qualify.	**SNF Transfer and Packaging**
Design and Construct SNF Staging and Packaging Capability	Subject to the DOE Order 413.3B Program and Project Management for the Acquisition of Capital Assets, which is a risk to schedule. Same risks associated with funding and critical resource retention discussed above. In addition, this TO could be impacted by any future changes in assumed NRC and security requirements for SNF packaging, staging, or disposal.	
Calcine Demonstration Project	The Calcine Demonstration project is in early phase development and demonstration for Bin Set retrievals. Until this demonstration is successfully completed this represents an uncertainty in completing the Calcine Disposition End State. The DOE is currently evaluating the identified path forward for Calcine treatment. This activity is also subject to the DOE Order 413.3B Program and Project Management for the Acquisition of Capital Assets which represents a risk to schedule. Lack of adequate funding also represents significant risk to meeting ISA commitments.	**Calcine Disposition**
Design and Obtain Calcine Processing Capability		
D&D of Excess Facilities	The removal of deactivated, unneeded administrative and support facilities is subject to the availability of funding.	**Excess Facilities Demolition**

Scope and Period of Performance

Phase 2 of the IMC TO will continue to house the core programs that maintain a comprehensive and effective continuity capability across ICP projects to support achievement of defined end states throughout the life of the contract. Phase 2 began 10/01/2023 and will run through contract duration (through FY31) to support core missions and continuity in the provision of programmatic support. Phase 2 of the IMC TO will be evaluated, extended, and modified to reflect changing conditions and priorities and to reflect the integration of specific activities into the end state TOs. The relationship between each of these IMC TO3 activities and the associated end state TOs is shown in Exhibit 6, "ICP Ten-Year End State Contract Flowchart."

Estimated Cost

The IMC Phase 2 TO (TO3.2) costs were developed utilizing appropriate cost estimating processes consistent with IEC-established estimating and accounting principles/procedures and Federal Acquisition Regulations (FAR) Part 31, "Contract Cost Principles and Procedures."

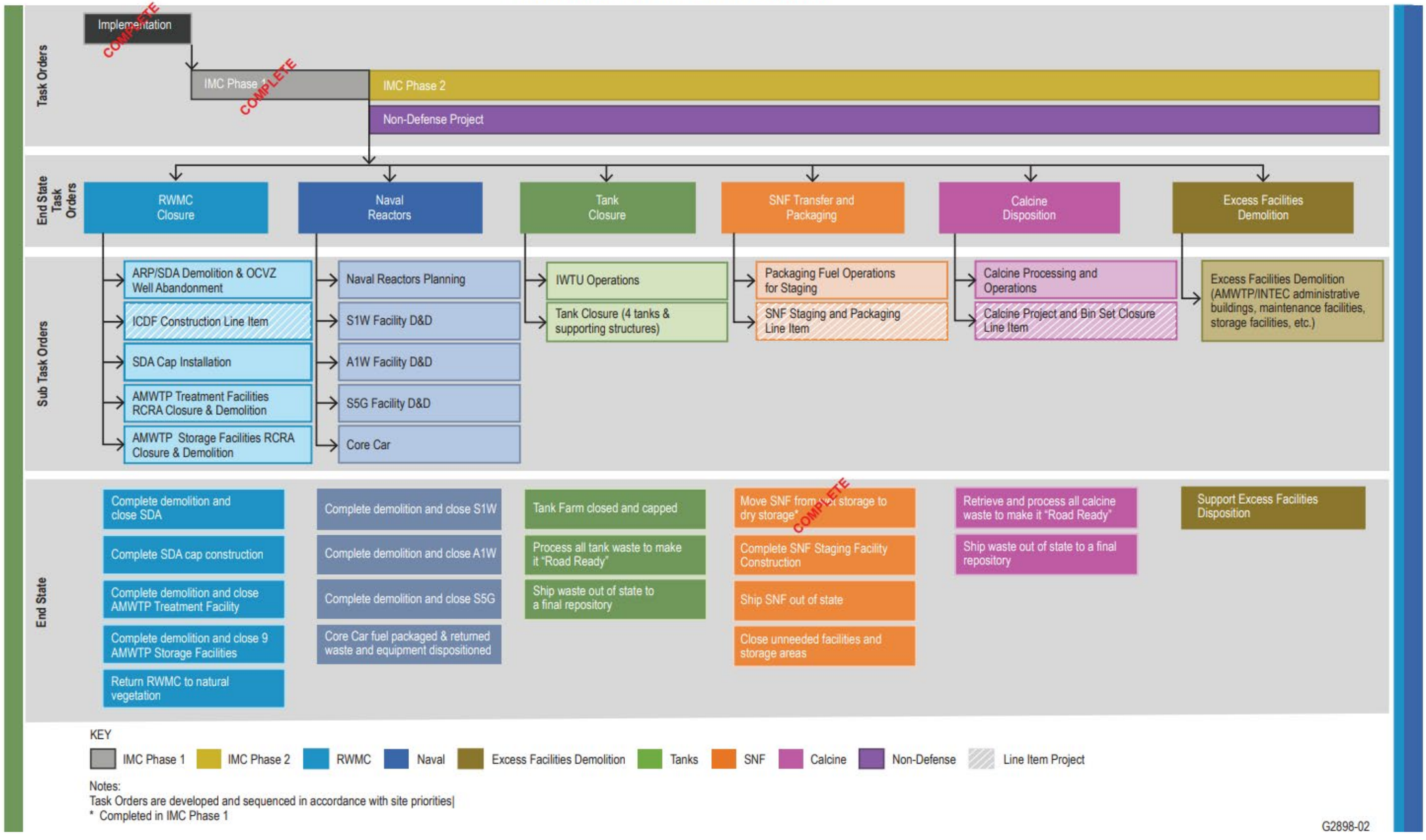
Contract Type

Phase 2 of the IMC TO will be managed as a CPAF TO with a PEMP, as stipulated in the ICP End State Contract. The PEMP, which includes performance-based incentives (PBIs) and subjective criteria, is updated annually to reflect targeted scopes and changing conditions.

Completion Definition

The IMC TO is not an end state TO.

Exhibit 6. ICP Ten-Year Contract Flowchart



C.2.b RWMC Closure End State Task Order (TO4)

Rationale for TO Selection

The end state desired is closure of the RWMC. This meets the ICP goal to complete the SDA Cap by 12/31/28. The rationale for the five sub-tasks acknowledges the required major aspects of closure, including requirements for demolition waste disposal at ICDF, but also allows for optimization and flexibility between the tasks and provides the opportunity to maximize multiple fronts of progress as situations develop or challenges are encountered in any one area such as legacy waste processing or delays in shipping.

Scope and Period of Performance

The RWMC Closure End State TO scope includes all activities associated with closing the RWMC, including RCRA closure, demolition, and capping of the SDA; organic contamination in vadose zone (OCVZ) well abandonment; closure and demolition of RWMC treatment and storage facilities, including AMWTP; and waste disposal at ICDF. Tied to this is completion of necessary waste treatment and processing in the Accelerated Retrieval Projects (ARPs) and AMWTP to the extent necessary to support deactivation and demolition of the facilities while assuring ongoing support to the INL Site.

RWMC Closure End State Task Order (TO4)	
Subtask 4a – ARP/SDA Demolition and OCVZ Well Abandonment (TO4a, negotiated)	
Subtask 4.1 – ICDF Construction Line Item	
Subtask 4.2 – SDA Cap Installation	
Subtask 4.3– AMWTP Treatment Facility RCRA Closure & Demolition	
Subtask 4.4 – AMWTP Storage Facilities RCRA Closure & Demolition (9 Facilities)	
Rationale	Combination of activities to achieve RWMC Closure
Scope	Complete waste operations, complete ICDF expansion/construction, close and demolish RWMC facilities, abandon OCVZ wells, construct evapotranspiration cap over the SDA, and revegetate RWMC
Period of Performance	Subtask 4a: FY23 – FY25Q1
	Subtask 4.1: FY24Q3 – FY26Q1
	Subtask 4.2: FY25 – FY29Q1
	Subtask 4.3: FY26 – FY30Q1
	Subtask 4.4: FY27 – FY31
Estimated Cost	$789M
Contract Type	Cost Plus Incentive Fee
Completion Definition	RWMC Closed

The entirety of this work will be accomplished under five subtasks:

- Subtask 4a, *ARP/SDA Demolition and OCVZ Well Abandonment* (TO4a)
- Subtask 4.1, *ICDF Construction Line Item* (TO development pending Critical Decisions [CDs]-1, -2, and -3 approval and Request for Task Order Proposal [RTP], expected in FY24)
- Subtask 4.2, *SDA Cap Construction*
- Subtask 4.3, *AMWTP Treatment Facility RCRA Closure & Demolition*
- Subtask 4.4, *AMWTP Storage Facilities RCRA Closure & Demolition* (nine facilities).

The Subtask 4a was awarded on 09/30/2022 as TO4a.

The expected period of performance for TO4, including all subtasks, is FY23 through FY31. The period of performance for each subtask is:

- Subtask 4a (TO4a) is currently in progress and is scheduled and on track for completion in the first quarter of FY25

- Subtask 4.1 is expected to begin in the third quarter of FY24 and end in the first quarter of FY26 (TO development pending RTP expected in the first quarter of FY24)
- Subtask 4.2 will run from FY25 through the first quarter of FY29 (TO development pending RTP expected in the last quarter of FY24 if funding is available to support)
- Subtask 4.3 will run from FY26 through the first quarter of FY30
- Subtask 4.4 will run from FY27 through FY31.

Estimated Cost

The estimated total cost for TO4, "RWMC Closure End State Task Order," is $789M, including a $82.2M negotiated value for completion of Subtask 4a (TO4a), which was implemented on 10/01/22 and is expected to be completed in the first quarter of FY24.

Historical experience was utilized to develop the TO4 cost estimate to reasonably represent the effort required to perform the TO-outlined scope. The main technique used was the actual costs of similar projects. The Project Team compared previous ARP D&D estimates to the size and complexity of the remaining ARPs to develop a defensible basis of estimate. Similar scope resources and quantities were then aligned to the TO WBS and activities. Similar methodologies will be used to develop the remaining TO4 subtask cost estimates during TO preparation.

Contract Type

TO4 will be completed as a CPIF TO. The CPIF TO structure for this TO is intended to balance the risk appropriately and motivate efficient and effective contract performance. It is intended for IEC to bear an equitable share of the risk but also be compensated for optimum contract performance and for assuming risk.

Completion Definition

TO4 will be considered complete when the SDA and AMWTP treatment and storage facilities have been demolished and closed, D&D waste dispositioned, the OCVZ wells have been abandoned, the cap has been installed over the SDA, and the RWMC has been returned to natural vegetation.

C.2.c Naval Reactors End State Task Order (TO5)

Naval Reactors End State Task Order (TO5)	
Subtask 5.0 – Naval Reactors Planning	
Subtask 5.1 – S1W Facility D&D (TO5.1, negotiated)	
Subtask 5.2 – A1W Facility D&D	
Subtask 5.3 – S5G Facility D&D	
Subtask 5.4 – Core Car	
Rationale	Removal and disposition of aging Naval facilities
Scope	Aging facilities and core car disposition
Period of Performance	Subtask 5.0: FY25 – FY31 - subject to reviews, negotiations, and updates
	Subtask 5.1: FY24 – FY26
	Subtask 5.2: FY25 – FY28
	Subtask 5.3: FY28 – FY31
	Subtask 5.4: FY26 – FY29
Estimated Cost	$395M
Contract Type	Subtask 5.0: TBD Balance of Subtasks: Cost Plus Incentive Fee
Completion Definition	Provide programmatic support to Naval D&D activities and complete S1W, A1W, and S5G facilities demolition and Core Car disposition

Rationale for TO Selection

The rationale for segregating the Naval Reactors End State Task Order (TO5) is to assure that the scope of work is clearly defined for each contemplated action that the Navy expects to have accomplished as part of its efforts to reduce risk to the Naval Reactors Facility (NRF) and the INL Site in general. Further, some work contemplated, such as the Core Car subtask, may require extensive use of existing or modified EM facilities sequenced with ICP scopes to complete the desired end state and is not necessarily interrelated to other NRF scopes.

An additional subtask, Naval Reactors IMC (Subtask 5.0), has been added to the scope of this TO. This subtask is intended to segregate Navy scope and expenditures for core contract support programs for work performed for the Naval Reactors Program in the same way that the IMC TO3 supports the ICP.

Scope and Period of Performance

The scope of this TO is to provide services and expertise to Naval Reactors in the disposition and removal of aging facilities. The contemplated scope at this time includes five scopes of work identified as:

- Subtask 5.0, *Naval Reactors Planning*
- Subtask 5.1, *S1W Facility D&D* (TO5.1)
- Subtask 5.2, *A1W Facility D&D*
- Subtask 5.3, *S5G Facility D&D*
- Subtask 5.4, *Core Car*.

Additional scope may be added at the discretion of the Navy. This is non-EM work and funding for these activities will be provided by an outside source.

The period of performance contemplated for TO5 is specific to the currently identified scopes but could expand and will be addressed as additions to the TO, as required. The current periods of performance for these subtasks are:

- Subtask 5.0 – FY25 through FY31 with updates as needed
- Subtask 5.1 – S1W Facility D&D, FY24 through FY26 (TO5.1)
- Subtask 5.3 – FY25 through FY28 (TO development pending RTP expected in FY24)

- Subtask 5.4 – FY28 through FY31
- Subtask 5.5 – FY26 through FY29.

Subtask 5.1 for the S1W (Submarine 1st Generation Westinghouse) D&D was awarded in September of 2023 as TO5.1.

Estimated Cost

The estimated total cost for TO5 is $395M, with $58.2M negotiated value for completion of Subtask 5.1 (TO5.1), which was implemented in September of 2023. Various estimating techniques were used to develop and cost the scope of work to provide the highest quality product possible. The main technique used was the actual costs of similar D&D projects.

Contract Type

A CPIF TO is contemplated for the subtasks under TO5 the Naval Reactors End State TO with the exception of Subtask 5.0 Naval Reactors Planning which is contemplated as a CPFF TO.

Completion Definition

This TO will be considered complete when the S1W, A1W (Aircraft Carrier 1st Generation Westinghouse), and S5G (Submarine 5th Generation General Electric) facilities are demolished and dispositioned and the Core Car is dispositioned.

C.2.d Non-Defense Project Task Order (TO6)

Non-Defense Project Task Order (TO 6.1, negotiated)	
Rationale	Manage Fuels in NRC licensed facilities, including Ft. St. Vrain
Scope	Manage fuels in NRC-Licensed facilities as directed and maintain aging fuel facilities as needed
Period of Performance	FY24 – FY31, subject to reviews, negotiations, and updates
Estimated Cost	$37.66M
Contract Type	Cost Plus Fixed Fee
Completion Definition	Manage fuels in NRC-licensed facilities as directed and manage/maintain aging facilities over the life of the contract

The Non-Defense Project TO is not an end state TO. It was awarded as TO6.1 in September of 2023 to capture the scope and costs of managing FSV fuels and on-site fuels from NLFs through the ICP period of performance.

Rationale for TO Selection

This TO recognizes the requirement to monitor and manage fuels from both FSV in Colorado and from on-site NLFs. Fuels at the FSV facility are scheduled for transfer to the Idaho Site by FY35 in accordance with the Colorado Settlement Agreement. Once at the Site, FSV fuels and fuels from on-site NLFs will be packaged for disposition at a yet-to-be-determined federal HLW repository.

Scope and Period of Performance

TO6.1 includes a base period of 2 years from 10/01/23 to 09/30/2025, with the ability to extend the period of performance for the duration of the IDIQ contract.

Estimated Cost

This TO is a separate funding source that costs ~$4.7M/year based on historical costs for this fuel management and facility maintenance activity.

Contract Type

This TO will be managed as a CPFF contract. CPFF was selected as the work scope is stable and well understood, considered a low risk to the government and contractor, and represents the best value contract type to the government.

Completion Definition

Manage and maintain the FSV fuels and fuels from on-site NLFs as directed and manage/maintain aging facilities over the life of the contract.

C.2.e Tank Closure End State Task Order (TO7)

Rationale for TO Selection

The end state desired is tank closure. This meets the regulatory milestone to complete SBW processing through IWTU by 12/31/2028. The rationale for the two subtasks acknowledges that the IWTU is the instrument required to complete processing of the SBW and that subsequent tank closures are the actual completion desired. Subsequently Subtask 7.1 (TO7.1) is an interim end state TO that will be used to reach the desired end state of tank closure. Additionally, the opportunity to optimize the tank closure process remains open with a segregated TO strategy such that accelerated closure plans can be explored and implemented as appropriate.

Tank Closure End State Task Order (TO 7)	
Subtask 7.1 – IWTU Operations (TO 7.1, negotiated)	
Subtask 7.2 – Tank Closure (4 tanks and supporting structures)	
Rationale	Activities required to complete tank closure and tank waste processing
Scope	Empty, close, clean and grout 4 tanks, treat SBW through IWTU, and place an interim cap over the tanks
Period of Performance	Subtask 7.1: FY24 – FY29 extended as needed
	Subtask 7.2: FY26 – FY29
Estimated Cost	$763M
Contract Type	Subtask 7.1: Cost Plus Fixed Fee Subtask 7.2: Cost Plus Incentive Fee
Completion Definition	Tanks are closed and capped with sodium-bearing waste packaged and “Road Ready” for final disposition

Scope and Period of Performance

This TO encompasses the activities associated with closing four tanks located at the INTEC Tank Farm. This activity includes:

- Removal and treatment through IWTU of 900,000 gal of SBW contained in the tanks
- RCRA closure and stabilization of the emptied tanks under DOE O 435.1, “Radioactive Waste Management”
- Placing an interim cap over the tanks.

This TO includes Subtask 7.1 (TO7.1) for maintaining the operational capability of the IWTU to treat the SBW and storage of treated SBW in the IWTU Product Storage Buildings to await final disposition in a repository. TO7.1 was awarded in September of 2023.

TO7 will include two Subtasks:

- Subtask 7.1, *IWTU Operations* (TO7.1)
- Subtask 7.2, *Tank Closure*.

The expected period of performance for the Tank Closure TO is FY24 through FY29. The periods of performance for the Subtasks are:

- Subtask 7.1 has been awarded as TO7.1 and includes a base period of 2 years from 10/01/2023 to 09/30/2025, with the ability to extend the period of performance for the duration of the IDIQ contract with the last year comprising shutdown and layup of the IWTU facility
- Subtask 7.2 is contemplated to begin in FY26 and end in FY29

Estimated Cost

The estimated cost of the Tank Closure End State TO is $763M. This includes $114M/year to operate and then layup the IWTU and an estimated $65M over a 3-year period for tank closures.

Contract Type

TO7.1 will be completed as a CPFF. The CPFF model represents the best value contract type to the government given the high-risk variability for schedule based on plant reliability.

Subtask 7.2 is considered to be completed as a CPIF contract. The CPIF structure is intended to balance the risk appropriately and motivate efficient and effective contract performance. It is intended for IEC to bear an equitable share of the risk but also be compensated for optimum contract performance and for assuming cost risk. Cost and performance incentives will be structured to include measurable targets with objective criteria to reward completion of the end state TO.

Completion Definition

This TO will be considered complete when the INTEC Tank Farm is closed and capped, and the SBW extracted from the tanks is treated, packaged, and placed in storage, awaiting final disposition.

C.2.f SNF Transfer and Packaging End State Task Order

Rationale for TO Selection

The chief objective for this TO is to reduce risk to ongoing fuel management to ultimately achieve road ready status by FY35 for fuels destined for the national HLW repository. While the risk for obtaining fuels repackaging capabilities cannot be ignored, the creation of the three tasks demonstrates commitment to meeting the regulatory milestone to the extent possible through both physical completion of fuel transfers, and tactically through planned implementation of the INL Site fuels packaging capability, operations, and subsequent staging.

The wet-to-dry transfers of SNF originally contemplated as a subtask to this TO were completed under TO 3.1 and the transfer of Peach Bottom fuel assemblies originally contemplated will be completed under TO3.2.

Scope and Period of Performance

This TO scope preparation and packaging of fuel for shipment in accordance with the ISA and closure of unneeded facilities and storage areas.

SNF Transfer and Packaging End State Task Order	
Subtask 1 – Packaging Fuel Operations for Staging	
Subtask 2 – SNF Staging and Packaging Capability Line Item	
Rationale	Activities required to prepare and ready SNF for shipment
Scope	Complete fuel transfers to dry storage and package and prepare fuel for shipment out of the state of Idaho
Period of Performance	Subtask 2: FY30 – FY50
	Subtask 3: FY26 – FY29
Estimated Cost	$450M
Contract Type	Cost Plus Incentive Fee
Completion Definition	SNF transferred from wet storage to dry storage (complete), retrieve and package all SNF from dry storge, store on-site awaiting shipment, ship SNF out of state, and close unneeded facilities and storage areas

To support accomplishment of this end state, the SNF Staging and Packaging Capability line item will be essential to assuring necessary infrastructure and processes are developed, tested, and proven to be effective.

To support this activity, IEC is developing an SNF packaging solution that will avoid extensive construction of new facilities. It involves an added station to the existing staging and packaging area. In combination with our Road Ready project, we are pursuing use of commercial processes involving a simpler cask transfer system that involves a below-grade handling cask transfer station that allows us to handle and transfer large multi-purpose canisters and various transfer casks at close to grade level. With the future of establishing and staging road ready casks, this practical transfer station allows us to load long-term storage casks that will be staged on the CPP-2707 pad initially and then, on our future extension, to the pad that will add 210 cask storage positions. When an interim or geological repository is established, the transfer station will be used to transfer MPCs into transport casks for eventual rail transfer to the repository. IEC chose its selected subcontractor Oakridge Technologies as they are the premier SNF packaging system solution and fabrication company worldwide. This strategic partnership allows us to capitalize on proven industry technologies and approaches to handling SNF in a cost-effective manner.

We anticipate that this work will be accomplished under two subtasks:

- Subtask 1, *Packaging Fuel Operations for Staging*
- Subtask 2, *SNF Staging and Packaging Capability Line Item*.

The period of performance for this TO is FY26 through FY50, including Subtask 1, which will begin in FY30 and end in FY50, and Subtask 2, which will begin in FY26 and end in FY29.

A portion of this scope is outside of IEC's contract ordering period. The desired status at the end of the 10-year contract period is:

- Facility modification and SNF packaging demonstration (CPP-603) complete
- SNF interim staging and packaging capability design complete
- SNF Staging and Packaging Capability Line Item complete

Estimated Cost

Estimated costs for this TO during the contract period are $450M. A final cost estimate will be developed in the SNF Transfer and Packaging End State TO Proposal.

Contract Type

A CPIF TO is contemplated for the SNF Transfer and Packaging End State TO to balance the risk appropriately and motivate efficient and effective contract performance. It is intended for IEC to bear an equitable share of the risk but also be compensated for optimum contract performance and for assuming cost risk. Cost and performance incentives will be structured to include measurable targets with objective criteria to reward completion of this End State TO.

Completion Definition

This TO will be complete when all SNF has been moved to dry storage, retrieved from dry storage, packaged, and shipped out of state, and the unneeded SNF facilities and storage areas have been closed.

C.2.g Calcine Disposition End State Task Order

Rationale for TO Selection

A critical component to achieving the desired end state to make calcine road ready by 12/31/35 is assuring the demonstration project contemplated is completed under the IMC TO (TO3). However, it is also imperative that several variable issues beyond the demonstration must be resolved collaboratively to assure the end state remains achievable, including final determination and development of treatment processes, and corrective actions determined, further tested, and proven from the bin set retrieval pilot demonstration.

The contemplated subtasks and their development and agreement are necessary to assure that all parties understand the need for clear and concise resolution of the variable issues as quickly as possible. This will better assure that the final enabling processes, resources, and capabilities are established to support

Calcine Disposition End State Task Order	
Subtask 1 – Calcine Processing and Operations	
Subtask 2 – Calcine Project and Bin Set Closure Line Item	
Rationale	Activities to support retrieval, processing, and disposition of Calcine waste
Scope	Calcine processing and operations and Bin Set Closure
Period of Performance	Subtask 1: FY34 – FY59
	Subtask 2: FY28 – TBD
Estimated Cost	TBD
Contract Type	Cost Plus Incentive Fee
Completion Definition	Complete canister processing of calcine waste and complete bin set closure, grouting, and interim cap placement

the end state TO. Further, segregation of the TO allows for continued examination and evaluation of optimized approaches that better allow for acceleration of processing, packaging, and closure as these processes are defined and implemented.

Scope and Period of Performance

Once the bin retrieval system and processing systems are successfully demonstrated and the final alternative selection is complete for waste processing, two subtasks will be developed to achieve the Calcine Disposition End State:

- Subtask 1, *Calcine Processing and Operations*
- Subtask 2, *Calcine Project and Bin Set Closure Line Item*.

The subtasks for this end state will encompass all work needed to complete emptying of the Calcine bin sets, process the retrieved waste, and package the waste to make calcine Road Ready.

Upon completion of bin set retrieval, the scope will also include necessary actions to complete RCRA and DOE O 435.1, "Radioactive Waste Management," HLW closure of the bin sets.

While a large portion of this scope is outside of the IEC contract ordering period, the period of performance for these subtasks is anticipated to be FY28 through FY59 for Subtask 1 and FY28 to a yet-to-be-determined date for Subtask 2.

The desired status at the end of the 10-year contract period is:

- Complete Calcine Demonstration Project (retrieval development/mock-up)
- Complete the evaluation and testing to determine path for calcine treatment
- Design and construct calcine treatment capability.

Estimated Cost

Estimated costs for this TO are yet to be determined due to the uncertainties surrounding calcine treatment technologies selection, successful completion of the Calcine Demonstration Project, and modifications of existing facilities to enable retrieval and treatment. Again, the intent is to avoid large-scale construction and capitalize on available commercial technologies and capabilities to provide reliable and cost-effective treatment capabilities. Once these uncertainties are resolved, costs for the two contemplated TO subtasks will be developed.

Contract Type

A CPIF TO is contemplated for the Calcine Disposition End State TO to balance the risk appropriately and motivate efficient and effective contract performance. It is intended for IEC to bear an equitable share of the risk but also be compensated for optimum contract performance and for assuming cost risk. Cost and performance incentives will be structured to include measurable targets with objective criteria to reward completion of this End State TO.

Completion Definition

The Calcine Disposition End State TO will be considered complete once the Calcine bin sets are emptied; the calcine is processed, packaged, and made road ready; and the bins are closed, grouted, and capped.

C.2.h Excess Facilities Demolition End State Task Order

Excess Facilities Demolition End State Task Order	
Rationale	Accelerated removal of Excess Facilities to Reduce Liability and Costs
Scope	Demolish deactivated/unneeded non-radiological facilities (AMWTP/INTEC admin. Bldgs., maintenance facilities, storage facilities, etc.)
Period of Performance	FY26 – FY31 subject to reviews, negotiations, and updates
Estimated Cost	TBD
Contract Type	Firm-Fixed Price
Completion Definition	Complete demolition of excess facilities as directed

Rational for TO Selection

The purpose of this TO is to accomplish the demolition of deactivated, unneeded facilities on an accelerated schedule as funding allows. The facilities are primarily non-radiological administrative and maintenance facilities. The end state desired under this TO is to accomplish the demolition of excess facilities to reduce liability and cost risks associated with continued facility surveillance and maintenance. This TO will be evaluated at least biennially. Excess facilities or groups of facilities identified by DOE will be evaluated as separate subtasks under this TO.

Scope and Period of Performance

The period of performance for this task is anticipated to be from FY26 through FY31.

Estimated Cost

Subtasks under this work scope will be developed as facilities are identified and the TOs are developed.

Contract Type

The contract type for this TO is anticipated to be a FFP contract due to the well-defined scope and fully quantified costs and risks for these demolition activities.

Completion Definition

The desired end state for this TO is the demolition of excess facilities as directed by DOE and as funding allows.

C.3 Incentives

The IEC IMC Phase 2 TO (TO3.2) contains a PEMP with objective and subjective fee criteria and PBIs, as required by DOE policy. Each TO released against the contract will include a stand-alone schedule that is initiated and managed in the PMB in accordance with the ICP End State Contract requirements found in Section C.9.2.01, "Program Management/Support/Administration." Specific incentives will be established to ensure that targeted scopes are completed, and subjective evaluation will be focused in three primary areas as individual TOs are developed.

Schedule

The primary objective of the schedule incentive is to encourage the Contractor to achieve schedules (STP reports, Idaho Department of Environmental Quality notifications, DOE notifications, building closures, etc.) that meet or exceed timelines. In combination with the cost incentive, this is intended to fully achieve all scope requirements without causing detriment to other areas and avoid mission disruptions or schedule delays. The Contractor will be evaluated on its ability to meet or exceed schedule requirements and the overall timeliness and achievement progress of all facets of its work. The Contractor will be evaluated in all schedule-related areas, including but not limited to the following:

- The timeliness of completion of deliverables for all ICP programs, including the timeliness of the completion of the contractual milestones
- The timeliness of submittals to DOE, including Notifications of Contract Changed Conditions and project documents such as Baseline Change Proposals and Program Change Requests, as described in the ICP Contract to provide sufficient time for review, comment resolution, and revision in advance of document due dates or impacts to work. Submitted documents shall be of sufficient quality to not require significant re-work by DOE.

Cost

The primary objective of the cost incentive is to encourage the Contractor to achieve a final actual cost less than or equal to the total cost of the TO. In combination with the schedule incentive, this is intended to fully achieve all scope requirements without causing detriment to other areas and avoid mission disruptions or schedule delays. The Contractor will be evaluated in all cost control-related areas, including but not limited to the following:

- Effective planning to control costs within the availability of funding, including alignment with the baseline and ownership of risk
- Long range planning to control costs in alignment with the baseline and ownership of risk
- The management of all obligated funds to preclude anti-deficiency and shall include in all subcontracts the appropriate clauses to allow termination with minimal cost impacts to the project
- The effectiveness in forecasting, managing, and controlling contract costs, including identification and notification to DOE of cost estimates exceeding available funding and implementing timely corrective actions
- Overall, effective utilization of available appropriated funds
- Developing and implementing initiatives which result in tangible savings to DOE (cost, schedule, or risk)
- The management of risks such that the costs expended to eliminate, mitigate, or minimize risks result in a substantial reduction in the rate at which risk costs are realized

- Cost tracking and reporting, which includes the accuracy of estimate at completion, accuracy of cost projections, effectiveness of baseline change management, and mitigation of cost overruns through earned value measurements
- The overall and specific program and project status performance against the approved baseline, and the effectiveness of program and project reporting tools and systems.

Program Management

The primary objective of the ICP program management incentive is to encourage the Contractor to continue to advance all ICP projects toward end states. The Contractor's program management support performance will be evaluated in areas including but not limited to the following:

- Effective program and project management
- Effectiveness in coordinating with and applying lessons learned from other DOE/commercial sites when implementing similar operations
- Effectiveness of coordination with the INL managing and operating contractor, the NRF contractor, and other Site contractors to support and implement provided services and the reduction of costs to implement these services
- Performance in interfacing with the community and other stakeholders in the execution of the ICP scope, including but not limited to follow-through on stakeholder commitments.

Performance Management Incentive (PMI)

Per Section B.13 of the ICP Contract, a PMI fee of $2M per fiscal year may be earned based upon outstanding results in Contractor performance, as determined by the contracting officer (CO) in the following areas:

- Safety and operational performance
- Meeting regulatory or court ordered milestones
- Quality assurance
- Maintaining the operability of facilities and other infrastructure
- Management of Contractor's team
- Establishment, maintenance, and implementation of sound business systems
- IDIQ management.

The $2M will be available among all active TOs, at the discretion of the CO, on an annual fiscal year basis. The PMI is a unilateral action that shall not exceed $2M per fiscal year, applied for all active TOs combined, and will not be negotiated with the Contractor. This incentive is exclusive of any PEMP fee.

Anticipated incentives for each TO are shown in Exhibit 7, "Desired End States."

Exhibit 7. Desired End States

TO Title and Scope	Notional TO Incremental End States and Metrics	Desired 10-year End State	Risks to achieving 10-year End State	Activities Required Beyond Contract Period to Achieve Final End State
Integration & Mission Continuity Phase 2 (TO3.2)– Programmatic support required for life of the contract and assure variable/high-risk work scopes not resolved during IMC Phase 1 are continued until risks have been mitigated	• Update biennially throughout contract POP • Metrics established in annual PEMP with PBIs (Performance Based Incentives) • Resolve high-risk scopes to develop TOs • Complete WIPP certification • Ship remaining CH TRU Waste Inventory to WIPP	• Uninterrupted programmatic support • High-risk scopes resolved and transferred to End State TOs	• WIPP certification and availability • Availability of WIPP containers/overpacks (supply chain) • Subject to the DOE Order 413.3B Capital Asset Acquisition Process which is a risk to schedule • Inadequate funding to support waste disposition, infrastructure upgrades, etc.	• May be extended if contract is extended or become the responsibility of the new contractor • Not an End State TO
RWMC Closure (TO4) – Completion of activities needed to achieve RWMC Closure	• ARP/SDA Demolition & OCVZ Well Abandonment • ICDF Construction • SDA Cap Installation with 1st load of dirt to SDA, 25%, 50%, 75% dirt hauled; cap complete, report submitted • RCRA Closure/Demolition of AMWTP Treatment Facility • RCRA Closure/Demolition of 9 AMWTP Storage Facilities	• Closure of the RWMC • RWMC returned to natural vegetation	• Dependent upon treatment capabilities to address CH TRU and MLLW • Dependent upon WIPP certification and availability • Availability of WIPP containers/overpacks (supply chain) • Dependent on ICDF expansion to receive demolition waste • New ICDF cell is subject to the DOE Order 413.3B Capital Asset Acquisition Process which is a risk to schedule • SDA Cap subject to the DOE Order 413.3B Capital Asset Acquisition Process which is a risk to schedule • Inadequate funding	• RWMC Closure will be completed within the 10-year contract period
Naval Reactors (TO5) – Removal and disposition of aging Naval facilities	• Deactivation of S1W & A1W • Demolition of S1W & A1W • Commence D&D Planning for S5G • Complete design, testing, and processing of Core Car	• Complete demolition of specified NRF facilities • Complete processing of Core Car	• No on-site current capacity for disposal of large reactor components - ICDF expansion required • New ICDF cell is subject to the DOE Order 413.3B Capital Asset Acquisition Process which is a risk to schedule	• The S1W, A1W, and S5G facilities will be dispositioned within the 10-year contract period • The Core Car will be processed within the 10-year contract period
Non-Defense Project (TO6) – Manage SNF from Ft. St. Vrain and on-site NRC licensed facilities	• Manage Ft. St. Vrain & on-site NRC facilities fuels for future disposal	• Provide NRC licensed fuel facilities support to fuels management as directed • Not an End State TO	• Maintenance of aging facilities	• Not an End State TO
Tank Closure (TO7)– Completion of activities needed to achieve Tank Closure	• IWTU Operations • Removal & treatment of 900K gallons of SBW contained in tanks • RCRA closure and stabilizing the emptied tanks under DOE O 435.1 • Placing an interim cap over the tank farm	• Tanks emptied of waste and cleaned • Ancillary liquid waste treated (Process Equipment Waste Evaporator [PEWE]) • Tank Farm Closed • Interim cap placed over Tank Farm • Determine final treatment Path for SBW treated product	• The IWTU must remain reliably operational to support interim SBW treatment • No identified final treatment process for SBW	• Tank Closure will be completed within the 10-year contract period • SBW treatment process must be identified • SBW must be treated, packaged, and “Road Ready” for transport to disposal
SNF Transfer & Packaging – Activities required to prepare and ready SNF for shipment	• Packaging Fuel Operations for Staging • Begin retrieval & packaging demonstration project for SNF from dry storage	• Complete the facility mod and SNF packaging demonstration (CPP-603) • Complete design for SNF Interim Staging and Packaging capability	• Critical activities for the facility modification and SNF packaging demonstration support are still in development • The Design and Construction of the SNF Interim Staging and Packaging Facility is subject to the DOE Order 413.3B Capital Asset Acquisition Process which is a risk to schedule • No out of state repository for SNF disposal	• Develop the SNF Interim Staging and Packaging capability • Complete packaging and preparation of fuel • Ship SNF out of state • Close unneeded facilities and storage areas
Calcine Disposition – Activities to support retrieval, processing, and disposition of Calcine waste	• Begin Calcine processing & operations (transfer Calcine from Bin 1 to Bin 6) • First canister produced, 50th, 100th, processing complete • Empty each bin set, close/grout bins and interim cap complete	• Complete Calcine Demonstration Project (Retrieval Development/Mock-up) • Complete the evaluation to determine path for Calcine treatment • Design and construct Calcine treatment process	• Calcine Demonstration Project must be completed successfully to remove uncertainty in completing the Calcine Disposition End State • No identified path for calcine treatment • This activity is subject to the DOE Order 413.3B Capital Asset Acquisition Process which is a risk to schedule	• Retrieve and process all calcine waste to make it “Road Ready” • Ship treated Calcine waste out of state to final disposition • Complete Bin Set Closure (RCRA closure and interim cap)
Excess Facilities Demolition – Removal of excess facilities as funding allows as directed by DOE to reduce risk and costs	• Identify candidate excess facilities & prioritize according to risk & integration with ongoing operations (AMWTP/INTEC admin. bldgs., maintenance facilities, storage facilities, etc.)	• Demolish priority excess facilities • Support RWMC closure • Reduce excess building footprint at INTEC	• Need to minimize impact to higher priority projects and ongoing operations in other areas • Dependent on available funding and resources	• Complete demolition of identified non-radiological excess facilities

C.4 Workforce

This plan maximizes the retention and use of a flexible and highly skilled workforce that can be reassigned from one TO to another as work scopes ebb and flow. For example, D&D workers can be shifted between RWMC, Naval Reactors, and Excess Facilities as D&D activities shift on these active TOs. This presumes full funding availability for these activities to run somewhat concurrently/sequentially. TOs are notionally laid out to optimize workforce efficiency, maximize use of the trained and qualified workforce, minimize down-time between TOs, and assure availability of qualified personnel to meet end states.

The work force is further optimized through:

- **Planning** – Funding and timing of TO implementation. Delays in funding and timing of implementation will increase costs significantly as end states are pushed to the outyears for completion.
- **Training** – Workers will have opportunities to learn new skills so they can be leveraged as multi-disciplinary assets (consistent with the collective bargaining agreement, as applicable) and on multiple TOs as the work shifts around the ICP facilities.
- **Recognition for Achievements** – When workers complete tasks safely and compliantly, achieving the desired end states for DOE as required by the task, they will be recognized for their achievements.
- **Transition Support** – As the achievement of end states at the ICP occurs and skill set demands change, IEC will work to provide advanced planning and preparation for initiation of tasks to allow placement of resources on other ICP activities, or to provide opportunity for the workforce in the ongoing missions, or new missions that are part of the future of the Idaho site.
- **Union Collaboration** – IEC will work strategically and collaboratively with the bargaining units to ensure that end states are achieved in a safe, effective, and timely manner without significant labor impacts.

C.5 Integration

The IMC TO (TO3) is the key mechanism for ensuring a fully integrated approach to End State TO development and implementation over the life of the contract. This allows the planning of TO scopes to achieve end states, while balancing workforce and resource allocations against funding or scope availability. IMC also allows flexibility to move resources between TOs as work is completed or in response to unanticipated situations that require resource reallocation.

C.6 Internal Controls

IEC brings a systematic, standardized approach to managing, implementing, and executing TOs that is of value to the government and contractor alike, driving accountability and engagement by all parties to define and reach agreement on the desired end state objectives.

The TOs will be prepared under separate proposals designed to allow for segregated tracking and charging by TO (separate WBS structure and separate charge codes to allow tracking of individual work scope under each task independently). In addition, the WBS is set up with links between individual TOs to support life-cycle tracking.

D. End State

Exhibit 7, "Desired End States," shows the end states desired for each end state TO as well as the anticipated status of each TO at the end of the 10-year contract period.

E. Partnering

The DOE ICP and IEC have established a routine collaborative and iterative process wherein each party has been present and engaged in the identification of the DOE's strategic imperatives. The foregoing strategy, including the defined end states, was developed and agreed to between the parties.

The parties also recognize the need for continuing a defined process for strategic risk management that sets priorities and informs TO development in a way that reduces risk, reduces EM liabilities, and supports end state achievement in a tactical manner that considers resource availability, funding, regulatory, and budget limitations.

F. Schedule

The contemplated schedule for TO development and deployment is provided in Exhibit 8, "Notional Task Order Schedule."

G. Risk and Liability

DOE-EM employs a risk management plan for the initiation, execution, monitoring, and close-out of risks throughout the life cycle of the project. As part of the execution to this plan, the proposed end state TOs will achieve significant risk and liability reductions in each key area of site cleanup and will demonstrate significant progress toward achieving DOE end state goals and objectives, as well as stated goals for implementation of the ESCM to influence a completion mindset. The risks to accomplishing each end state are discussed in Exhibit 5, "Risk to End States," and throughout this plan.

G.1 Funding Risk/Liability

Funding for completion of enabling projects is critical to maintaining the qualified workforce and achieving the End States discussed in this Plan. Any lapse or delays in funding will drive significant cost, liability, and schedule increases in the future.

The greatest single risk to achieving the end states in this plan and completing the ICP Contract scope is funding, as the plan for achieving end states is dependent on the optimal funding levels shown in the Executive Summary and detailed in Exhibit 4, "Notional End State Task Order Contract Strategy," being available to support critical End-State accomplishments and to maintain the qualified workforce to support these work activities. Specifically, adequate funding is required to support TO3 waste management activities concurrent with completion of SDA Cap installation, Tank Closure, and the ICDF construction, and ongoing support of the SNF Staging and Packaging and Calcine Construction Project Line Items to accomplish desired end states, as discussed below.

Exhibit 8. National Task Order Schedule

Task/Subtask Order Title	Task Order Contemplated Period of Performance (POP)	ROM Estimated/ Negotiated Value	IEC Contract Base 10-Year POP										IEC Contract Potential Extended POP				
			FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035	FY2036
IMC Phase 2 (TO3 P2)	FY24-FY31	$761M/2YRS			IMC Phase 2												
RWMC Closure (TO4)	FY23 -FY31	$789M		RWMC Closure													
ARP/SDA Demolition & OCVZ Well Abandonment (TO4a)	FY23 -FY25Q1	$82.2M		ARP/SDA Demolition & OCVZ Abandonment													
ICDF Construction Line Item	FY24Q3 -FY26Q1	$90M				ICDF Construction											
SDA Cap Installation	FY25 -FY29Q1	$190M				SDA Cap											
AMWTP Treatment Facility RCRA Closure & Demo	FY26 -FY30Q1	$250M					AMWTP Facility Closure										
AMWTP Storage Facilities RCRA Closure & Demolition	FY27 -FY31	$195M						AMWTP Storage Facility Closures									
Naval Reactors (TO5)	FY24 -FY31	$395M			Naval Reactors												
Naval Reactors Planning	FY25-FY31	$40M				Naval Reactors Planning											
S1W Facility D&D (TO5.1)	FY24-FY26	$58.2M			S1W D&D												
A1W Facility D&D	FY25-FY28	$146M				A1W D&D											
S5G Facility D&D	FY28-FY31	$120M							S5G D&D								
Core Car	FY26 -FY29	$30.6M					Core Car										
Non-Defense Project (TO6)	FY24-FY31	$37.66M			Non-Defense Project												
Tank Closure (TO7)	FY24-FY29	$763M			Tank Closure												
IWTU Operations Line Item (TO7.1)	FY24-FY29	$228M/2YRS			IWTU Operations												
Tank Closure (4 tanks & supporting structures)	FY26-FY29	$65M					Tank Closures										
SNF Transfer & Packaging	FY24-FY50	$455M			SNF Transfer & Packaging												FY50
Fuel Transfer (Peach Bottom from Gen1 to Gen2 Vaults)	FY24-FY25	$5M			Fuel Tranfers												
Packaging Fuel Operations for Staging	FY30-FY50	$250M									Pkg Fuel for Staging						FY50
SNF Staging and Packaging Line Item	FY26-FY29	$200M					SNF Staging and Packaging										
Calcine Disposition	FY28-FY59	TBD							Calcine Disposition								FY59
Calcine Processing and Operations	FY34-FY59	TBD							Calcine Processing & Ops								FY59
Calcine Project and Bin Set Closure Line Item	FY28-TBD	TBD							Calcine Project								TBD
Excess Facilities Demolition	FY26-FY31	TBD					Excess Facilities Demolition										

KEY: IMC Phase 2 | RWMC | Naval | Non-Defense | Tanks | SNF | Calcine | Excess Facilities Demolition | Task Order Awarded | Outside Base Contract

G2898-04

RWMC Closure is dependent upon continuous waste disposition in an expeditious manner. Without adequate funding to support removal of waste from RWMC facilities, the site may not be closed within the planned time frame.

Completion of the ICDF expansion is critical to our ability to dispose of waste and large components resulting from RWMC Closure, Naval Reactors, and excess facilities D&D activities.

Installation of the SDA Cap is planned to be completed in the first quarter of FY29. Any delay will result in increased future costs for this activity and will challenge regulatory milestones. Once completed, resources from SDA Cap installation will be reassigned to NRF D&D and excess facilities for INL. It will further delay additional work should the funding be provided at a later date due to the time required to hire and train additional personnel for these activities.

The SNF Staging and Packaging Capability is needed to ensure sufficient capacity for storage of packaged SNF while awaiting shipment to a yet-to-be-determined repository and meet regulatory commitments.

The Calcine Project is needed to support timely IWTU modifications to support calcine processing and packaging to make it road ready for ultimate transport to a yet-to-be-determined repository and meet regulatory commitments. Funding is essential to provide reliable, long-term support to develop capabilities to both retrieve and treat the waste.

The ICP Mission and End State objectives are enabling works that facilitate the increased capabilities of the INL to meet national objectives in clean energy research and improved technologies for increasingly reliable and cost-effective energy systems. Failure of the ICP to meet regulatory commitments to the State of Idaho creates significant risk to not only meeting End State objectives of the ICP but also increases costs over the long-term, and jeopardizes the continuing mission of the INL.

If significant delays in TO completion occur, the State of Idaho may choose to prohibit the INL from continuing its mission which could significantly impact fuels and energy research.

G.2 DOE O 413.3b Capital Asset Acquisition Process Risk/Liability

Another significant risk to end state TO completion is in regard to the subtasks for ICDF construction, SDA Cap installation, the SNF staging and packaging capability, and the Calcine Construction Project, which are each subject to the requirements of DOE O 413.3B, “Program and Project Management for the Acquisition of Capital Assets,” and must pass through CD-1, “Approve Alternative Selection and Cost Range”; CD-2, “Approve Performance Baseline”; and CD-3, “Approve Start of Construction/Execution,” prior to construction. These subtasks are capital projects interrelated and essential to completion of several end state objectives. Not only is it critical to achieve CD-3 timely, but the appropriate funding needs to be available to support the start of work and to retain critical resources.

Each of these subtasks, initiated in the IMC P1 TO (TO3.1), will continue to be managed in the IMC P2 TO (TO3.2) until we have obtained CD-1, CD-2, and CD-3 approval. At which time, if funding is available, they can be managed as discrete subtasks under the RWMC Closure, Naval Reactors, SNF Transfer and Packaging, Calcine Disposition, and the Excess Facilities Demolition TOs.

H. Metrics

Metrics for the IMC P1/P2 TOs are established in the PEMP with separate metrics identified as TOs are developed. FY22 completed metrics are shown in Exhibit 3, “FY2023 Metrics Demonstrating Successful TO Performance,” with anticipated metrics for each TO shown in Exhibit 7, “Desired End States.”