

Interim Award Fee Evaluation Period 1 Determination Scorecard

Contractor: Four Rivers Nuclear Partnership, LLC

Contract: DE-EM0004895

Interim Award Fee Evaluation Period: Period 1 (October 20, 2017 – September 30, 2018)

Basis of Evaluation: Award Fee Plan for Performance Evaluation Measurement Plan, Paducah Gaseous Diffusion Plant Deactivation and Remediation Contract Number DE-EM0004895

Categories of Performance: Adjectival: \$2,145,630 PBI: \$7,351,392

Award Fee Available: \$ 9,497,022 **Award Fee Earned: \$ 5,732,451.78 (60.36%)**

Categories of Performance Award Fee

Award Fee Area Adjectival Ratings

Base Fee Available: \$2,145,630

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|--|----------------------|
| 1. Quality (20%): | ● Satisfactory (20%) |
| 2. Schedule (15%): | ● Satisfactory (30%) |
| 3. Cost Control (20%): | ● Satisfactory (30%) |
| 4. Management (15%): | ● Satisfactory (30%) |
| 5. Regulatory Compliance (15%): | ● Satisfactory (40%) |
| 6. Implementation of Business Systems (15%): | ● Good (75%) |

The overall fee awarded based on these grades is: **Satisfactory**

$$[(0.2 \times 0.20) + (0.15 \times 0.30) + (0.2 \times 0.30) + (0.15 \times 0.30) + (0.15 \times 0.40) + (0.15 \times 0.75)] \times \$2,145,630 = \$777,790.88$$

This amount takes into consideration Four Rivers Nuclear Partnership, LLC (FRNP) overall performance, both positive and negative. In one of the six adjectival ratings, the contractor has exceeded some of the award fee criteria and has met overall cost, schedule or technical performance requirements of the Task Order in the aggregate as defined and measured against in the evaluation criteria.

Quality: Overall, the minimal requirements of the contract were met. The contractor's performance in the aggregate supports an overall rating of "Satisfactory." However, some areas of improvement have been identified.

Most FRNP submittals (i.e., letters, program documents, regulatory documents, contract deliverables, etc.) met the minimal contract requirements; however, multiple contract and regulatory deliverables were rejected due to not meeting contract requirements, regulatory requirements, and/or expectation of a quality document. FRNP did change their document processes to improve the quality of the documents. In the last quarter, there was some improvement in deliverable quality. The document process changes have not yet proven to be fully effective.

There were no exceedances of an occupational exposure limit over 1 million labor hours without a Lost Workday Case Away. There were zero violations following landfill state inspections; zero radiological work package violations; no radiological control Occurrence Reporting and Processing System reports; and no skin/clothing contamination above 10 CFR § 835 limits for the year.

FRNP successfully completed the DOE Safeguards and Security Survey with no Findings, one non-security Observation, and two Proficiencies noted, which is one of the best reviews for the Paducah Protective Force to date. FRNP also received Certificates of Excellence in 2018 Nuclear Materials Management & Safeguard System reporting for 2017. FRNP completed the Nevada National Security Site Waste Certification Audit with zero Findings, one Observation, and one Proficiency. DOE EA-31 conducted an assessment of the Non-Destructive Assay and Criticality Safety Programs with zero Findings. A review of the Fire Protection Program was documented as adequate but identified four Findings and three Observations.

Schedule: Overall, the minimal requirements of the contract were met. The contractor's performance in the aggregate supports an overall rating of "Satisfactory."

FRNP has achieved an overall contract schedule performance index (SPI) of 0.91. However, several major scope areas that are on the critical path (Stabilization and Deactivation projects) were behind schedule and not completed as planned during the performance period, including excess laboratory material disposition, disposal of previous contractor waste assumed at contract transition, C-400 deactivation, disposition of 22 cold traps, and utility optimizations. The Stabilization and Deactivation program that represents a significant portion of the fieldwork for this year had an SPI of 0.55 at the end of the period. While not completed, these discreet areas did make progress. Deactivation of the C-535 and C-537 Switchyards was completed on schedule.

No improvements were made on Deferred Maintenance with respect to repairs of Fire Protection Impairments. At the end of the period, there were 10 impairments over 90 days past due and eight impairments over 180 days past due. FRNP also did not meet contract requirements with respect to timeframes for correcting roof leaks.

Project management support deliverables are generally on schedule. Regulatory documents were submitted to the agencies on time during this period; however, the contractor struggled to meet the internal delivery dates to DOE. Internal schedules and regulatory responses were not performed in a timely manner. In some cases, documents were provided on schedule but significant errors were identified, which required the deliverable to be resubmitted. By the end of the reporting period, FRNP showed some improvement in meeting internal schedules and responsiveness to regulatory comments.

Cost Control: Overall, the minimal requirements of the contract were met. The contractor's performance in the aggregate supports an overall rating of "Satisfactory."

The overall contract cost performance index was 0.82 at the end of this evaluation period. At the beginning of the evaluation period, FRNP struggled with implementing the initial contract baseline and implemented changes to the baseline without utilizing proper change control. For over half of the evaluation period, FRNP also struggled with assigning costs to the correct project. By the end of the reporting period, many of these issues were corrected and FRNP's reporting and invoicing were much improved.

FRNP continued to improve development and delivery of monthly performance reports, estimates at completion, monthly cost forecasting, and funds management because processes and procedures were put in place, training of staff continued, organizational changes were made, and organizational

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integration was enhanced in the later part of the evaluation period. FRNP has provided actuals and revised projections in a timely manner for use in the Paducah run out of funds summary reporting. FRNP closely monitored overtime costs by department through a rigorous approval process.

A DOE surveillance of the cost estimating program determined the cost estimating process for FRNP was adequate (no Observations or Findings) in meeting the requirements of DOE Order 413.3B, Change 4. FRNP also maintains compliance with standard business systems, accounting practices, and applicable regulations.

FRNP began monitoring and reporting against the Final Contract Performance Baseline (CPB) in September 2018. Though FRNP did not achieve Earned Value Management System (EVMS) self-certification by the end of the evaluation period, FRNP has made improvement toward achieving EVMS. Government property was tracked and protected.

Management: Overall, the minimal requirements of the contract were met. While some issues remain in this area, performance in the aggregate supports a rating of "Satisfactory."

During a majority of the performance period, the contractor could not properly track cost and schedule performance resulting in discrete projects falling behind plan which resulted in corresponding delays and increased cost. FRNP management did not effectively integrate different project elements in order to safely and efficiently execute projects. As an example, FRNP developed the Sampling and Analysis Plan for the C-400 Building Basement but deviated from the plan multiple times after it was approved without DOE approval. FRNP did not appear to programmatically recognize the importance of following the approved plan to maintain sampling integrity and credibility. Another example was during pipe cutting piping activities at C-400 Building deactivation where hydrogen fluoride was unexpectedly encountered during the work evolution. FRNP did not sufficiently identify potential hazards during work planning. The event resulted in a three month delay in the C-400 and C-360 projects.

FRNP management did not comply with the DOE letter of direction stating that FRNP was not authorized to sign waste manifests "on behalf of DOE." FRNP continued to sign manifests in this manner and as a result, DOE issued a "Stop Work" order on June 5, 2018. FRNP worked through various actions in order for DOE to resume shipments and avoid storage violations. FRNP's response to regulator requests and comments did not meet expectations. For example, FRNP did not support a timely response to issues raised during a regulator inspection. FRNP's response was not finalized for multiple months. Verbal requests from the C-400 scoping meetings were not submitted in a timely manner and resulted in written requests from the regulators to get the information. Responses to regulator written comments on regulatory documents were not provided to DOE in a timely manner which resulted in shortened review times for DOE.

FRNP has taken organizational steps to improve the experience and depth of managers in key areas with additional organization changes made to improve overall contract performance. While corrective actions have been taken, it is too early to gauge the effectiveness of these changes.

FRNP was aggressive in their public affairs outreach and promoting the work at the site in a positive fashion. FRNP regularly met with DOE to coordinate media releases. FRNP successfully completed the public tours and responses from participants rated the tours in high regard. The intern program was very successful. All of these activities helped communicate the site's mission and build community support.

Regulatory Compliance: FRNP performance in this category in the aggregate results in a rating of "Satisfactory."

FRNP received approval of the revision to the C-746-U Landfill permit modification, as a result of discussions on the revised Toxicity Reduction Evaluation Plan strategy. This approval allowed for removal of the toxicant source in the C-746-U Landfill leachate.

FRNP supported DOE during multiple meetings held with regulators. FRNP supported DOE during all aspects of the Federal Facility Agreement processes, including regulatory disputes. There were 18 regulatory inspections in this evaluation period. FRNP received two Notices of Violations, one of which was rescinded, and one Notice of Deficiency (NOD) in this period. In addition, FRNP received two inspection reports identifying noncompliance (one with the Title V Air Permit and one with the Kentucky Drinking Water Regulations), and a Notice of Federal Interest and Expedited Settlement Agreement from EPA resulting from the January 10, 2018, oil spill. Corrective actions were developed, and the majority of the actions have been completed. In response to an NOD and other assessments, the Spill Prevention and Counter Control Measures Plan and the Facility Response Plan have been revised and approved.

FRNP has not systematically implemented the environmental management system (EMS) throughout the organization in accordance with DOE Order 436.1. FRNP has not integrated the sustainability plan with the operations plans and the sustainability goals have not been integrated into EMS in accordance with DOE Order 436.1. FRNP continues to make progress, but still has not demonstrated a robust EMS.

FRNP ended the evaluation period with a total recordable case rate of 0.60 and Days Away, Restricted, or Transferred rate of 0.15. Two security violations were encountered during the last quarter of the evaluation period. FRNP were mostly compliant with Comprehensive Environmental Response, Conservation and Liability Act removal and remedial implementing documents, including sampling plans, Operations and Maintenance plans, etc., during the year. FRNP did miss multiple sampling events for the Northeast Pump-and-Treat System. Four quarters of required analytical samples in two monitoring wells, one quarter of piezometer water level measurements in eight wells, and water level measurements in two monitoring wells were not collected as required by the Operation and Maintenance Plan.

Implementation of Business Systems: FRNP performance in this category in the aggregate results in a rating of "Good."

FRNP maintained compliance with standard business systems, accounting practices, and applicable regulations. The Defense Contract Audit Agency in September conducted an independent audit on FRNP's cost accounting practices disclosed in its Initial Disclosure Statement and found that FRNP's disclosed cost accounting practices comply, in all material respects, with Cost Accounting Standards and applicable Federal Acquisition Regulations. FRNP awarded 85% of procurements to small businesses, far exceeding FRNP's goal of 50%. Additionally, FRNP completed its procurement compliance review by the Procurement Evaluation Review Team (PERT) and submitted its corrective action plan to the Contracting Officer for the one identified weakness. FRNP procurement completed the necessary corrective action and implemented the PERT's recommendations. FRNP recognized that some initial contract proposals and Baseline Change Requests lacked requisite quality and made marked improvement in the latter half of 2018. FRNP began monitoring and reporting against the Final CPB in September FY 2018. FRNP continued to evaluate opportunities to recycle, reuse, or disposition excess property to gain efficiencies and incur cost savings or cost avoidances on behalf of DOE.

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Performance Based Incentives Award Fee

Performance Based Incentive Fee Available: \$7,351,392

1. Base Operations and Remediation (72% of total PBI fee)

PBI 0101-A: Manage the planning, execution and reporting of work per a Contract Performance Baseline (CPB) and shall establish, maintain and use an Earned Value Management System (EVMS) that accurately records and reports the contract performance against the requirements of the contract.

1) An approvable CPB shall be submitted by 12/01/2017. (\$634,758)

● Partially Met (\$317,379.00)

2) EVMS self-certification in conformance with EIA-748 standards, shall be obtained by 4/30/2018. (\$634,758)

● Partially Met (\$190,427.40)

PBI 0101-B: Implement and sustain a safe, secure, and effective work environment that is protective of the workers, the public, and the environment.

1) By 9/30/2018, a minimum of 80% of the Fire Department Responders on each shift shall be trained to National Fire Protection Agency 1006 Level I requirements for technical rescue. (\$158,690)

● Met (\$158,690)

2) Develop and implement an Integrated Safety Management System Program that complies with the Section I Clause I.146, DEAR 970.5223-1, Integration of Environment, Safety, and Health into Work Planning and Execution by 02/15/2018. (\$528,965)

● Partially Met (\$423,172)

3) Identify the common mode failures (e.g., valve line-ups) associated with moisture sampling of cascade equipment and develop controls as appropriate to prevent the failure(s). Revise the Nuclear Criticality Safety Evaluations and procedures to implement the new controls by 05/30/2018. (\$264,483)

● Partially Met (\$198,362.25)

4) Submit an approvable Documented Safety Analysis, including supporting documentation, by 09/30/2018. (\$581,862)

● Met (\$581,862)

PBI 0101-C: Implement a consolidated Engineering Configuration Management System (ECMS) to ensure that current versions of all site drawings are electronically available and managed as controlled documents. All characterization data will be electronically managed in a manner that facilitates easy retrieval and is traceable to the building and process equipment to which it applies.

1) By 05/31/2018, complete the inclusion of all current site-wide engineering drawings and interface the ECMS with the Engineering Service Order and Electronic Records Management Systems. By 09/30/2018, complete inclusion of all historical engineering drawings and documents into the Electronic Records Management Systems and linked to the ECMS for reference viewing. (\$264,483)

● Met (\$264,483)

2) By 08/15/2018, develop and implement an Information Management System that supports the implementation of Criticality Incredible (CI) and waste management programs with respect to tracking characterization data, including Non-Destructive Assay (NDA). A Software Requirement Specifications document shall be developed and submitted to DOE for review and approval. (\$952,137)

● Partially Met (\$333,247.95)

PBI 0101-D: Make every effort to optimize and reduce S&M costs. Minimize the size/footprint of occupied facilities to the greatest extent practical. Manage all records (regardless of media) generated/received in the performance of the Contract, including records obtained from a predecessor contractor.

1) By 09/15/2018, complete the removal of rust from exposed structural steel associated with the process building truck alleys, along with the painting of the Criticality Accident Alarm System air accumulator tanks. (\$158,690)

● Not Met (\$0)

2) Remove and permanently disposition at least 15 of the trailers and their contents by 08/01/2018. (\$158,690)

● Met (\$158,690)

3) Properly segregate, organize, and disposition all record and non-record material currently stored in the locations listed by 03/30/2018. (\$158,690)

● Met (\$158,690)

4) Complete disposition of personal property by 09/30/2018. (\$158,690)

● Met (\$158,690)

5) Complete the shut-down, isolation, de-energization and draining of the C-537 and C-535 Switchyards and ancillary support facilities by 09/30/2018. (\$634,756)

● Met (\$634,756)

2. Stabilization and Deactivation (28% of total PBIs)

PBI 0105-A: These activities support the accurate characterization of "00" process facilities (C-331 and C-335) and the C-360 process facility to enable the removal of uranium holdup/deposits. Successful completion of this work will ultimately allow DOE to defensibly declare the facilities criticality incredible enabling downgrade of their hazard category.

1) Construct and certify WRM standards required for NDA measurement system initial calibration, calibration confirmation, calibration verification, and performance demonstrations.

a) Straw Sources (\$61,852)

● Partially Met (\$37,111.20)

b) Aluminum Tubes (\$41,235)

● Partially Met (\$24,741.00)

2) Complete development of NDA capability and measurement methods for characterizing C-360 in a manner that supports achieving CI and meeting the Waste Acceptance Criteria (WAC) for an OSWDF by 09/30/2018. (\$206,174)

● Met (\$206,174)

3) Complete development of the CI limits and associated documentation for the "00" facilities and C-360 by 09/30/2018. (\$206,174)

● Met (\$206,174)

4) Complete all characterization for the C-360 facility in support of achieving CI and meeting the WAC for an OSWDF by 09/30/2018. (\$154,630)

● Met (\$154,630)

5) Complete specified deposit removal activities for C-360 by 09/30/2018. (\$360,805)

● Partially Met (\$252,563.50)

PBI 0105-B: Complete disposition of 22 cold traps stored in C-746-Q including the compliant disposition of all waste (including the trap bodies) by 08/15/2018. (\$412,348)

● Not Met (\$0)

PBI 0105-C: Complete full deactivation of the remaining C-400 Cleaning Facility Work Zones by removing all hazardous equipment and materials, all fissile materials and equipment, and other items necessary to leave the facility in a demolition-ready state by 09/01/2018. (\$618,522)

● Partially Met (\$494,817.60)

Performance Based Incentive Fee Earned: The overall fee awarded is based on completion of PBI activities is 67.4%: **\$4,954,660.90**