

## Award Fee Evaluation Period 3 Determination Scorecard

Contractor: Four Rivers Nuclear Partnership, LLC

Contract: DE-EM0004895

Award Fee Evaluation Period: Period 3 (October 1, 2019 – September 30, 2020)

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: \$3,883,991 PBI: \$3,901,562

Award Fee Available: \$7,785,553 **Award Fee Earned: \$ 5,388,000 (69.2%)**

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### Categories of Performance Award Fee

#### Award Fee Area Adjectival Ratings

Base Fee Available: \$3,883,991

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

The overall fee awarded based on these grades is: **\$1,700,000**

*Quality:* Overall, the contractor did not meet some of the contractual requirements and expectations. Nuclear Material Control and Accountability (NMC&A) continued to effectively manage contract requirements and provided exceptional customer support to DOE. Most of the FRNP submittals submitted to the Department of Energy (DOE) met the minimal contract requirements. FRNP provided quality documentation of meetings and documents for several programmatic activities (i.e., Paducah Risk Assessment Working Group and Modeling Work Group). DOE evaluated FRNP's programs and management processes based on hazards, process maturity, and operational performance. DOE conducted eight surveillances which determined the reviewed processes were adequate with the exception of one surveillance regarding the abandonment of wells and piezometers. Additionally, an independent assessment was performed and identified a significant condition adverse to quality (SCAQ) with regard to management and control of software and databases that led to a determination that the Software Quality Assurance Program was not effectively implemented. Four additional SCAQs were identified in the areas of software quality assurance, Conduct of Operations, component control, and commercial grade dedication. The Contractor continues to be below the Environmental Management (EM) Days Away, Restricted, or Transferred (DART) target of 0.60 with a 12-month rolling average of 0.58; however, the Contractor exceeded the EM Total Recordable Case (TRC) target of 1.1 with a 12-month rolling average of 1.17. The Contractor experienced a negative performance trend with regard to both TRC and DART rates throughout Fiscal Year (FY) 2020. There were several instances where work planning and control was inadequate to effectively protect employees during field activities. Failure to properly implement detailed attributes of Conduct of Operations resulted in numerous work pauses and caused significant project delay. There were zero radiological work permit violations, one radiological control Occurrence Reporting and Processing System report, one skin/clothing contamination event, and 16 Radiological Anomalous Condition Reports during the year. The Contractor struggled to meet Protective Force contract requirements and did not meet DOE expectations throughout much of the year.

*Schedule:* Overall, the contractor did not meet some of the contractual requirements and expectations. The adjectival rating for this category of performance takes into consideration impacts due to the COVID-19 pandemic. The contractor achieved an overall contract schedule performance index (SPI) of 0.90, which includes both discrete and level of effort activities. The contractor responded to multiple COVID-19 requests related to personal protective equipment quantities, supply chain issues, teleworking counts, school and daycare postures and local healthcare capacity. The requests required quick turnarounds that were met by the contractor. Project management support deliverables, project proposals, and baseline changes were generally on schedule. Regulatory documents were submitted to the agencies on time. FRNP continued to show improvement in regard to meeting contract requirements for responding to and correcting roof leaks in both nuclear and non-nuclear facilities. FRNP failed to meet contract requirements with regard to allowing degradation of systems, equipment, or items related to safety to extend beyond 30 days without obtaining the express written consent of DOE. No improvement was made on Deferred Maintenance with respect to repair of Fire Protection Impairments. The period began with 11 impairments over 90 days past due and 8 impairments over 180 days past due, and concluded with 2 impairments over 90 days past due and 10 over 180 days past due; however, the decrease in number was primarily associated with DOE granting permission to allow some long-term impairments to remain permanently out-of-service and no longer be reported as an impairment and not due to repairs being completed. 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 C-746-Q cold trap disposition, C-400 Complex remedial investigation, C-400 Building deactivation, and utility optimizations. The Stabilization and Deactivation program that represents a significant portion of the fieldwork for this year was behind schedule with regards to baseline work performed in many areas. Some of the areas include buildout of a facility to perform deposit removal activities, design and commissioning of a neutron detection system (LINAS) to characterize large components, and characterization of the purge and evacuation stations and boosters.

*Cost Control:* Overall, the minimal requirements of the contract were met. The adjectival rating for this category of performance takes into consideration impacts due to the COVID-19 pandemic. FRNP maintains compliance with standard business systems, accounting practices, and applicable regulations. FRNP completed the annual Earned Value Management System self-assessment with no major issues identified. Government property was tracked and protected. 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. FRNP provided actuals and revised projections for use in budget funds summary reporting in a timely fashion. During this performance period FRNP actuals were within 7% of the FY20 spend plan cumulative forecast without fee. The contractor achieved an overall contract cost performance index (CPI) of 0.83, which includes both discrete and level of effort activities. A CPI of 0.83 is considered "Yellow," an area of concern. Ten of 18 project are within the 0.90 cost performance threshold; however, the eight projects outside of this threshold contribute to more than \$34 million of negative cost variance for FY20 only. On the C-400 Deactivation project, physical pre-demolition work was completed in September 2020; however, FRNP has spent \$21.7M (CPI of 0.34) for a project that had an overall budget of \$7.9M. Utility Operations (CPI of 0.59), Analytical Lab Clean Out (CPI of 0.48), C-400 Remedial Action (CPI of 0.49), C-400 Groundwater Source Remediation (CPI of 0.49), Southwest Plume Sources

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Remediation (CPI of 0.88), and Surveillance and Maintenance (CPI of 0.85) also experienced cost overruns during this performance period. The CPI for these projects are trending downward.

**Management:** Overall, the contractor did not meet some of the contractual requirements and expectations. FRNP consistently provided updated information to support the DOE COVID-19 effort, often within 24 hours of the DOE Headquarters request. FRNP found vendors to supply critical items during low inventories and shared information with other contractors. FRNP's shared site coordination and support was excellent during the reporting period. 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, public events, and site visits. Prior to access restrictions placed on the site due to the COVID-19 pandemic, FRNP successfully coordinated multiple site tours, which helped communicate the site's mission and build community support. However, other areas were less successful. An Independent Assessment performed in FY20 determined that the Safety Conscious Work Environment/Safety Culture program is marginally effective and well short of the expectations of DOE. Near the end of FY19, FRNP replaced several senior level managers in an effort to improve overall contractor performance in key areas. The immediate impact of removing some of these managers was an increase in employee morale and improved performance; however, FRNP did not maintain the momentum created by these changes and overall contractor performance in FY20 revealed that weaknesses in several areas of management still existed. FRNP has not capitalized on areas of strength and established programs and processes are not consistently applied across FRNP organizations; indicating a lack of focus on organizational excellence and continuous improvement. For example, cost estimating procedures utilized within one organization are not used in another, which leads to confusion and a lack of confidence in the quality of detailed and rough order of magnitude cost estimates. Some FRNP management did not seek to understand DOE concerns based on site history and knowledge in many instances, which created inefficiencies in completing project scope. Many High Hazard Review Boards lacked the formality and rigor to definitively state the work has been properly analyzed and is safe to commence. Also, FRNP did not incorporate lessons learned into activity level work control documents to prevent issue recurrence. Project integration continued to be a source of weakness throughout the performance period and created project delays, thereby increasing costs. Project integration and organizational enhancement was identified by FRNP as a process improvement focus area during all four quarters of FY20; however, weaknesses still exist which warrant continued attention. During the performance period, the contractor did not effectively incorporate quality assurance requirements into the procurement of services, which resulted in project delays and significant rework. Lastly, FRNP management exhibited a lack of understanding of security requirements as evidenced by not implementing changes to human resource processes to address SF-85 and SF-86 submittals.

**Regulatory Compliance:** Overall, the minimal requirements of the contract were met. Compliance with standard business/accounting systems/practices has been good during this reporting period. FRNP provided good support to DOE during multiple meetings held with regulators. FRNP supported DOE during all aspects of the Federal Facility Agreement (FFA) processes, including regulatory disputes. There were six regulatory inspections without negative results. FRNP satisfactorily met regulatory requirements in the areas of National Environmental Policy Act and Sustainability. FRNP was 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. DOE Security requirements and regulations were mostly maintained and compliant; however, protective force personnel did not perform required firearm/ammunition inspections for a period of several weeks during the COVID-19 partial work pause. The 2020 Periodic Safeguards and Security Survey Report found one finding, one observation, one opportunity for improvement, and one proficiency in the areas of material control and accountability and protective force. FRNP received four Notices of Violation, zero Notices of Potential Violation, and one Technical Notice of Deficiency in FY20. An oil spill led to a noncompliance with the Kentucky Pollutant Discharge Elimination System Permit. Additionally, issues were identified with improper labelling, storage, and shipment of RCRA waste.

**Implementation of Business Systems:** Overall, the contractor met the contractual requirements and exceeded expectations in some areas. FRNP performance in this category in the aggregate results in a rating of "Very Good." FRNP maintained compliance with standard business systems, accounting practices, and applicable regulations. FRNP awarded 63.3% of procurements to small businesses, exceeding FRNP's goal of 50%. FRNP provided good cooperation to ensure the successful disposition of excess property to the Paducah Area Community Reuse Organization. FRNP passed the Facilities Information Management System Annual Validation Audit with no findings to ensure that property is tracked, protected, and evaluated for disposition. Defense Contract Audit Agency field tests resulted in zero findings of the accounting system. DOE's Office of Acquisition Management provided accolades regarding the strategic sourcing program achieving \$460,000 in savings. Monthly Project Reports are timely, informative, and provide sufficient detail to allow DOE project management to confirm project status and support project planning.

### Performance Based Incentives Award Fee

Performance Based Incentive Fee Available: \$3,901,562

### Base Operations and Remediation (62% of total PBI fee)

**PBI 0101-A:** Optimize and reduce Surveillance and Maintenance (S&M) costs by Disposition of trailers, sheds, tanks, and other structures; Remove, disposition, and/or relocate fissile material in C-710 to eliminate Criticality Accident Alarm System requirements; Modify the C-333 High Pressure Fire Water systems to eliminate the need for heat; Disposition legacy records; Disposition personal property and relocate stores receiving and shipping functions outside the C-720 footprint; Shutdown, isolate, de-energize, and drain the C-531 Switchyard and ancillary support facilities; and Complete a hydraulic model to optimize site potable water. ● Partially Met (95.1%)

### Stabilization and Deactivation (38% of total PBI fee)

**PBI 0105-A:** Support Stabilization and Deactivation of the C-333/C-333A process facility to ultimately allow DOE to defensibly declare the facility criticality incredible and enable downgrade of its hazard category by Placing four cell high bay cranes in service; Remove and disposition asbestos cell housing panels on 9 of 60 cells; Characterize, remove, and disposition process gas components between the inlet and outlet of the seal exhaust and wet air stations; Characterize, remove, and disposition process gas components associated with the assay machine, line recorder, and datum pump systems; Remove R-114; Characterize 30% of all loose process gas equipment on the ground floor; and Characterize, prepare, and package one "000" converter for future shipment off-site. ● Partially Met (93.5%)

Performance Based Incentive Fee Earned: The overall fee awarded based on completion of PBI activities is: **\$3,688,500**