Interim Award Fee Evaluation Period 2 Determination Scorecard

Contractor: Four Rivers Nuclear Partnership, LLC

Contract: DE-EM0004895

Interim Award Fee Evaluation Period: Period 2 (October 1, 2018 – September 30, 2019)

Basis of Evaluation: Performance Evaluation and Measurement Plan for Four Rivers Nuclear Partnership, LLC

Categories of Performance: Subjective: \$2,329,588 PBI: \$8,051,407

Award Fee Available: \$10,380,997 Award Fee Earned: \$6,968,206.88 (67.12%)

Categories of Performance (Subjective)

Subjective Fee Available: \$2,329,588

1. Quality (20%):

2. Schedule (15%):

3. Cost Control (20%):

4. Management (15%):

5. Regulatory Compliance (15%):

6. Implementation of Business Systems (15%):

The overall fee awarded based on these grades is: \$1,013,370.78

SatisfactorySatisfactorySatisfactorySatisfactorySatisfactoryVery Good

Quality: Overall, the contractor did not meet some of the contractual requirements and expectations. DOE evaluated FRNP's programs and management processes based on hazards, process maturity, and operational performance. DOE conducted twenty-three surveillances which determined the reviewed processes were adequate with the exception of one surveillance regarding parts control supporting nuclear maintenance. Additionally, a Nevada National Security Site Waste Certification Audit was completed with no findings. NMC&A has effectively continued with interaction with Operations to ensure NMC&A requirements are maintained during the ongoing, expanding FRNP mission, developed new or revised Plans and procedures, and evaluated efficiencies for the success of the FRNP Program. The Contractor has a DART of 0.26 and TRC of 0.26 which are below the EM DART and TRC targets. There were zero radiological work permit violations and zero radiological control Occurrence Reporting and Processing System reports during the year..." Most of the Four Rivers Nuclear Partnership, LLC (FRNP) submittals submitted to 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). FRNP was successful in the development and approval of the Remedial Investigation (RI)/Feasibility Study (FS) Work Plan. The contract (Section H.65.E) requires certification that regulatory information submitted is "true, accurate and complete. However, multiple contract and regulatory deliverables were rejected due to not meeting contract requirements, regulatory requirements, and/or expectation of a quality document. Multiple contract and regulatory documents were rejected (some multiple times) due to poor quality or the inability to certify the documents. Previous changes to the document production processes have not effectively increased the quality of some of the submitted regulatory documents. Of the two independent assessments performed, one assessment identified issues that inhibited the deployment of safety software. The second assessment determined that the contractor assurance issues tracking process was marginally effective. Failure to properly implement detailed attributes of Conduct of Operations resulted in numerous work pauses and caused project delays. Recurring issues include: failure to follow approved procedures, inadequate work planning and control, ineffective corrective actions to prevent issue recurrence, and inadequate control of equipment. While FRNP has taken action to improve Conduct of Operations, which include staffing a new organization with mentors, these efforts have yet to be proven effective due to corrective actions not being fully implemented.

Schedule: Overall, the minimal requirements of the contract were met. The contractor achieved an overall contract schedule performance index (SPI) of 0.83, this includes both discrete and level of effort activities. Project management support deliverables, project proposals, and baseline changes were generally on schedule. Regulatory documents were submitted to the agencies on time (regulatory due date). FRNP maintained system health reports on critical systems and effectively used them as a tool to monitor for equipment degradation and prioritize maintenance based on safety significance. FRNP showed improvement in regard to meeting contract requirements for responding to and correcting roof leaks in both nuclear and non-nuclear facilities. No improvements were made on Deferred Maintenance with respect to repairs of Fire Protection Impairments (11 impairments over 90 days past due and 8 impairments over 180 days past due). Several major scope areas on the critical path that were behind schedule and not completed as planned, including disposition of 22 cold traps, 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 had an SPI of 0.45 at the end of the period. The cold trap disposition scope was to be completed in 2018 and had an SPI of 0.0 but incurred costs. Deactivation of the C-533 Switchyard was completed on schedule.

Cost Control: Overall, the minimal requirements of the contract were met. The contractor achieved an overall contract cost performance index (CPI) of 0.86, this includes both discrete and level of effort activities. A DOE Cost Estimating System Review was performed and determined that the FRNP estimating is compliant, with no significant deficiencies; staff are knowledgeable; and policies/procedures were very good. FRNP maintains compliance with standard business systems, accounting practices, and applicable regulations. FRNP completed their EVMS self-certification and DOE's surveillance had zero findings. 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 which is needed to track the funds applied to the contract, actual expenditures, and forecasts of pending funding shortages. FRNP actuals were within 2% of the August 2018 spend plan forecast (not including C-400 Demolition). FRNP has 12 of their 18 projects within the 0.90 cost performance threshold. However, the 6 projects that are outside of this threshold contribute to more than \$38 million of negative cost variance. On the C-400 Deactivation project, FRNP has already spent \$16.4M (CPI of 0.45) for a project that had an overall budget of \$7.9M. Utility Operations (CPI of 0.61), Analytical Lab Clean Out (CPI of 0.49), C-400 Remedial Action (CPI of 0.54), and Surveillance and Maintenance (CPI of 0.87) also experienced cost overruns during this performance period. The CPI for these projects are trending downward.

Management: FRNP has performed satisfactorily in some areas but struggled in some key management areas during the contract period. FRNP was aggressive in their public affairs outreach and promoting the work at the site in a positive fashion. FRNP met regularly with DOE to coordinate media releases, public events, and site visits. FRNP successfully completed the contract required public tours. The intern program was very successful. All of these activities helped communicate the site's mission and build community support. However, other areas were less successful. FRNP did not provide adequate legal support and interpretations for regulatory decisions. FRNP brought in regulator legal support in July 2019 and this area is trending in a positive direction.

Interim Award Fee Evaluation Period 2 **Determination Scorecard**

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FRNP management did not effectively integrate different project elements in order to safely and efficiently execute projects. The FRNP management team failed to work together to find solutions that would allow projects to move forward. Projects were stopped due to internal debates as to which organization was responsible for performing the work. By not identifying a path forward and proceeding with the work scope, the project schedule continued to slip on a cope of work with an already high schedule variance. Additionally, FRNP had an above average number of employee concerns related to overall management and specific project management. Lastly FRNP management exhibited a lack of understanding of security requirements as evidenced by: management of foreign national subcontractor, disregard for established security protocols, and not following the security requirements for access/entry to the onsite landfill.

FRNP has taken action to improve management performance by creating a project management office and replacing several key managers. These efforts occurred at the end of the performance period and effectiveness will be realized in the next performance period.

Regulatory Compliance: Overall, the minimal requirements of the contract were met. 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 10 regulatory inspections without negative results. The 2019 Safeguards and Security Survey Report found no findings, one observation, one opportunity for improvement, and four proficiencies in the areas of material control and accountability and protective force. DOE Security requirements and regulations were maintained and compliant. Compliance with standard business/accounting systems/practices has been good. FRNP was mostly compliant with the FFA removal and remedial implementing documents, including sampling plans, Operations and Maintenance plans, etc. FRNP satisfactorily met regulatory requirements in the areas of NEPA and Sustainability. FRNP received three Notices of Violation, one Notice of Potential Violation, and one Technical Notice of Deficiency, and fines and penalties are pending. FRNP received an inspection report from the Kentucky Division of Water identifying noncompliance with Kentucky Drinking Water Regulations. FRNP has created a compliance field surveillance group to help monitor projects and programs real time in order to change the trend in this category in the positive direction.

Implementation of Business Systems: 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 73.9% of procurements to small businesses, far 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.

Performance Based Incentives

Performance Based Incentive Fee Available: \$8,051,407

Base Operations and Remediation (69% of total PBI fee)

PBI 0101-A: Design and construction of two new cells at the C-746-U Landfill

PBI 0101-B: Disposition the sealed section of a bypass pipe at the C-746-Q facility

PBI 0101-C: Identify and eliminate unnecessary systems and chemicals. Develop and implement the controls necessary to safely open to atmosphere, non-interstage equipment (ISE) headers. Provide additional quarterly mutual aid exercises.

PBI 0101-D: Optimize and reduce Surveillance and Maintenance (S&M) costs by Disposition of trailers, structures and equipment; Review of public records to ensure completeness; Disposition waste legacy and other legacy records; Removal of excess stores inventory in C-331 and C-720; Design of a water storage tank; Replacement of the HVAC for C-100/101/102, C-200/205, and C-300; Transition from air horns to electronic horns; Disposition infrastructure located

on the east side of the C-400; and Place in service 5 of the 8 cell floor high bay cranes in C-331.

Stabilization and Deactivation (31% of total PBIs)

PBI 0105-A: Characterization of the process facilities by development of Working Reference Material standards, transfer all remaining WRM stock material to an alternate long term storage location, and deploy a Convertor Measurement System

PBI 0105-B: Complete the deactivation of all fire systems in the C-360 facility

PBI 0105-C: C-331: Hazardous material removal and characterization in Unit 2

Met (100%)

Met (100%)

Partially Met (83.44%)

• Partially Met (78.19%)

Met (100%) Not Met (0%)

Partially Met (37.14%)

Performance Based Incentive Fee Earned: The overall fee awarded based on completion of PBI activities is: \$5,954,836.10