

## Award Fee Determination Scorecard

**Contractor:** Bechtel National, Inc. (BNI)  
**Contract:** Design, Construction, and Commissioning of the Hanford Tank Waste Treatment and Immobilization Plant  
**Contract Number:** DE-AC27-01RV14136  
**Award Fee Period:** January 1, 2017, to December 31, 2017  
**Basis of Evaluation:** 2017 Performance Evaluation and Measurement Plan  
**Award Fee Available:** \$7,872,103  
**Award Fee Earned:** \$3,805,961 (48.0\* percent)

### Incentive B.1 – Award Fee-Project Management – Satisfactory

The fee for Project Management is divided into five award fee objectives (AFO) as follows:

	<u>Available</u>	<u>Rating</u>	<u>Earned</u>
AFO 2: One System, Startup and Commissioning, and Engineering Performance	\$1,400,000	40%	\$560,000
AFO 3: Environmental, Safety and Health, and Safety Conscious Work Environment	\$1,100,000	53%	\$583,000
AFO 4: Quality Assurance Program and Quality of Performance	\$1,200,000	40%	\$480,000
AFO 5: Nuclear Safety	\$1,300,000	52%	\$676,000
AFO 6: Pretreatment Facility	\$900,000	55%	\$495,000
AFO 7: High-Level Waste Facility	\$572,103	79%	\$451,961*

### Incentive B.2 – Award Fee-Cost - Satisfactory

The fee for Cost consists of one AFO as follows:

	<u>Available</u>	<u>Rating</u>	<u>Earned</u>
AFO 1: Project Performance (Cost, Schedule, and Efficiencies)	\$1,400,000	40%	\$560,000
<b>Total Award Fee – Period 2017</b>	<b>\$7,872,103</b>	<b>48.0%*</b>	<b>\$3,805,961</b>

\* Figures rounded to the nearest whole number.

#### **Key Positives for AFO 1: Project Performance (Cost, Schedule, and Efficiencies)**

- BNI continues to make satisfactory physical progress on completing construction of the balance of facilities and analytical laboratory. In the Low Activity Waste Facility (LAW), the four contract interim LBL construction complete fee milestones were completed on time.
- The Direct Feed LAW (DFLAW) achieved completion of the design completion fee milestone, as well as significant concrete progress on the Effluent Management Facility.

#### **Areas for Improvement for AFO 1: Project Performance (Cost, Schedule, and Efficiencies)**

- DOE, Office of River Protection (ORP) has concern with the performance trends as reported in calendar year (CY) 2017, which indicated completion of the commissioning milestones were at risk.
- The considerable number of trends, BCPs, and realized risks is a significant concern, as BNI is using a significant amount of Management Reserve. Management Reserve is being managed by questionable processes leading ORP to doubt BNI's ability to commission the DFLAW on time.

- The schedule for startup turnover of systems has DOE concerned beyond construction of the LAW Facility to ensure delivery of the contract milestone date.

**Key Positives for AFO 2: One System, Startup and Commissioning, and Engineering Performance**

- WTP One System continues to provide integration support to ORP for the DFLAW program, and satisfactorily manages the interface control document process to focus on requirements for startup and commissioning.

**Areas for Improvement for AFO 2: One System, Startup and Commissioning, and Engineering Performance**

- Nonradioactive liquid waste disposal system testing/closeout and turnover to Plant Management was a specific PEMP milestone to be completed by May 27, 2017. The milestone was achieved on August 3, 2017, over 2 months late.
- Testing encountered interface configuration and equipment performance issues. The time to address test deficiencies which were the result of engineering design errors in flow calculations and complete test result packages was excessive.
- One of the key rating considerations for this award fee objective was due to system turnovers from construction to startup, which were inefficient and were impacted by construction and design completion during this evaluation period.
- Lockout/Tagout (LOTO) issues were encountered that resulted in management suspensions of work that delayed startup activities.

**Key Positives for AFO 3: Environmental, Safety and Health, and Safety Conscious Work Environment**

- They met all milestone deliverables in the PEMP for quality submittals of permit documentation to the regulator. They have maintained a comparative and collaborative relationship with the regulator contributing to their success.
- BNI is making good progress towards being prepared for the Integrated Safety Management System Phase I verification readiness assessment with the development of the environmental management program and commissioning chemical and waste management program.
- The injury rate performance goals were met for the WTP Project and construction site. BNI also met the DOE Office of Environmental Management safety goals of less than 1.1 total recordable case and less than 0.6 days away, restricted, or transferred rates.

**Areas for Improvement for AFO 3: Environmental, Safety and Health, and Safety Conscious Work Environment**

- In regards to the recordability of injuries, in CY 2017 there was notable delay due to follow-on investigations of specific cases. Worth noting is that while first aid injuries are reported promptly to the DOE facility representatives through the IRIS system, reevaluations and subsequent upgrades or downgrades with regard to recording status are not as well communicated.

**Key Positives for AFO 4: Quality Assurance Program and Quality of Performance**

- During the review period BNI submitted approvable corrective action plans needed to address and close longstanding Priority Level 1 finding U-13-QAD-RPPWTP-001-F01 on BNI's Quality Assurance Program from 2013. This is a notable accomplishment since completion of the remaining actions will be needed before ORP can verify the effectiveness of BNI's implemented Quality Assurance Program.

**Key Areas for Improvement for AFO 4: Quality Assurance Program and Quality of Performance**

- Aspects of BNI's Causal Analysis and Corrective Action programs will need to be improved to support startup and operations of DFLAW.
- ORP also observed examples where reviewed supplier quality verification documents did not contain correct or sufficient quality documentation to demonstrate that material and equipment had met requirements.

**Key Positives for AFO 5: Nuclear Safety**

- BNI has met overall the Nuclear Safety technical performance requirements of the contract in the aggregate.

**Areas for Improvement for AFO 5: Nuclear Safety**

- BNI's Nuclear Safety Program showed some improvement; however, ongoing attention and commitment is necessary to ensure current progress is maintained.

**Key Positives for AFO 6: Pretreatment Facility**

- BNI placed a strong emphasis on fostering a transparent and collaborative relationship to address critical issues and drive toward decisions necessary to resolve PT Facility issues.

**Areas for Improvement for AFO 6 Pretreatment Facility**

- Final resolution of a number of technical issues are behind schedule.

**Key Positives for AFO 7: High-Level Waste Facility**

- BNI and ORP management and nuclear safety staff teamed up in a collaborative manner in responding to comments associated with the HLW PDSA change package and met the aggressive schedule of ORP approval on September 27, 2017, meeting a major ORP performance goal.
- Completion of the HLW PDSA update and meeting the criteria to release full procurement and construction at the end of CY 2017 represented two major accomplishments for ORP and the WTP Project.

DRAFT