

Award Fee Determination Scorecard

Contractor: Bechtel National, Inc. (BNI)

Contract: Design, Construction, and Commissioning of the Hanford Tank Waste Treatment & Immobilization Plant

Contract Number: DE-AC27-01RV14136

Award Fee Period: July 1, 2014 to December 31, 2014

Basis of Evaluation: 2014-B Performance Evaluation and Measurement Plan

Award Fee Available: \$6,300,000

Award Fee Earned: \$4,095,000 (65.0%)

Incentive B.1 – Award Fee-Project Management - Good

The fee for Project Management is divided into three Award Fee Objectives (AFOs) as follows:

| | <u>Available</u> | <u>Rating</u> | <u>Earned</u> |
|---|------------------|---------------|---------------|
| AFO 1: Self-Analysis/Assessments/ Discovery/Action | \$1,260,000 | 87% | \$1,096,200 |
| AFO 2: Environmental/Safety/Health | \$1,260,000 | 75% | \$945,000 |
| AFO 3: Quality Assurance Program | \$1,260,000 | 50% | \$630,000 |

Incentive B.2 – Award Fee-Cost - Good

The fee for Cost is divided into two AFOs as follows:

| | <u>Available</u> | <u>Rating</u> | <u>Earned</u> |
|--------------------------------------|------------------|---------------|---------------|
| AFO 4: Project Leadership/Management | \$1,260,000 | 66% | \$831,600 |
| AFO 5: Technical Issue Resolution | \$1,260,000 | 47% | \$592,200 |

Total Award Fee – Period 2014-B 65% \$4,095,000

Key Positives for AFO 1: Self-Analysis/Assessment/Discovery/Action

- There was a significant improvement in transparency in virtually all areas, which provided ORP a better understanding of emerging issues and input into BNI issue resolution.
- Issues self-identification continued through project issues evaluation reporting (PIER), resulting in quicker issue resolution. Eighty-three percent of issues were self-identified.
- Improved discussions and self-questioning in BNI's Management Performance Improvement Review Board has led to improved products.
- BNI's Project Director continues emphasis on becoming a learning organization, getting results.
- Standing up the requirements management and project training procedure groups has improved the reliability validation process (RVP).
- The gate process implemented was effective in supporting the High-Level Waste (HLW) Facility authorization to proceed and resolving outstanding RVP issues.

Key Areas for Improvement for AFO 1: Self-Analysis/Assessment/Discovery/Action

- Engagement with ORP during the self-assessment process is not maturing as fast as expected.
- Development of Extent of Condition metrics to determine performance and provide visibility to ORP is needed.
- Faster PIER backlog reduction and improvement in timeliness of causal analysis is needed.

Key Positives for AFO 2: Environmental/Safety/Health

- Requirements for the nuclear safety and quality culture's (NSQC) corrective action plan actions were met in five of six key areas, with the sixth expected shortly.

- BNI continued to look for new opportunities to improve its NSQC and was self-critical in its evaluation during the NSQC Health Evaluation.
- The HLW Facility Safety Design Strategy was approved by ORP with no conditions of approval.
- BNI was responsive to ORP's comments on the Pretreatment (PT) Technical Issue Resolution (TIR) plans and Defense Nuclear Facilities Safety Board briefings.
- Safety performance continues to be very good for a project of this size and complexity. Construction staff maintained good questioning attitude; BNI management responded effectively to equipment malfunction events.

Key Areas for Improvement for AFO 2: Environmental/Safety/Health

- Not all roles, responsibilities, authorities, and accountabilities are complete to the shop level.
- Lack of integrated hazards analysis affected the Justification for Continued Design, Procurement, and Installation (JCDPI) for HLW Radioactive Liquid Waste Disposal System redesign. JCDPI not yet approved by ORP.
- ORP and BNI have not reached agreement on commercial grade dedication of the emergency turbine generator.
- ORP found Occupational Safety and Health Administration deficiencies on some installed electrical equipment.

Key Positives for AFO 3: Quality Assurance Program

- BNI completed 9 of 33 actions to address Priority Level 1 finding for ineffective Quality Assurance Program implementation; and 10 of 40 actions to address Priority Level 1 finding for ineffective corrective action program.
- BNI implemented specialized software to make the action tracking process more efficient and provide a more robust method to gather metrics.

Key Positives for AFO 4: Project Leadership/Management

- BNI initiated timely organization and commencement of the Direct-Feed Low-Activity Waste (DFLAW) conceptual design effort, which is proceeding as planned despite resource constraints.
- There was increased focus on schedule metrics in the Low-Activity Waste (LAW) Facility, Balance of Facilities, and Analytical Laboratory, which resulted in improved accuracy of the LBL forecast schedule.

Key Areas for Improvement for AFO 4: Project Leadership/Management

- Nuclear Safety Engineering resources are limited, resulting in some slippage in completion of the LAW Documented Safety Analysis supporting documentation.
- Development and internal review of technical products did not meet mission requirements in terms of quality or technical approach.

Key Positives for AFO 5: Technical Issue Resolution (Cost, Schedule, and Scope on Technical Issue Performance)

- BNI set effective organizational structure for PT technical issue resolution, HLW design issue completion.
- The BNI Design Authority began to demonstrate active involvement in PT TIR.
- The Test Completion Team performed very well. Work scope was well planned and executed.
- BNI's staff effectively supported December 2014 briefings to the Defense Nuclear Facilities Safety Board.
- BNI Engineering was very responsive on the Volcanic Ash Natural Phenomenon Hazard effort. The DOE-led effort, supported by BNI, has the potential to avoid significant costs to the WTP project.

Key Areas for Improvement for AFO 5: Technical Issue Resolution (Cost, Schedule, and Scope on Technical Issue Performance)

- Limited work was completed on the T8 PT ventilation system issue resolution.
- BNI proposal supporting HLW key decision on a transfer duct was not supported by an engineering calculation.
- The test approach on the proposed Standard High Solids Vessel test program has not been established yet.
- Some milestones in the T5 Erosion/Corrosion Plan are behind schedule.