

Steam Plant Life Extension Project

Pro2Serve provided complete design and engineering services for the repair and replacement of structures, systems, and components (SSCs) for the Steam Plant Life Extension (SPLE) Project at the Y-12 National Security Complex. The objective was to revitalize the 1950s vintage steam plant and peripheral auxiliaries to ensure the reliability and affordability of steam production to the year 2025. Pro2Serve served as prime contractor, prepared the majority of the design documentation, and managed the effort of two specialty subcontractors. Timely completion of the detailed design portion of the project enabled the Operating Contractor to achieve a Performance Based Incentive from the National Nuclear Security Administration.

Pro2Serve's design engineering responsibilities included:

- Preparation of design documents including drawings, flow or single-line diagrams, equipments lists, outline construction specifications, calculations, software description, and reports
- Conducting and documenting all necessary field investigations concerning structural integrity, most suitable equipment type, and method of accomplishment
- Preparation of a detailed material take-off construction cost estimate
- Preparation of a detailed construction schedule properly phasing work to match seasonal steam production requirements
- Preparation of a written report (including a written quote for each item) identifying all major procurement items and materials obtained by the Operating Contractor in support of the construction completion
- Identification of all long-lead-time procurement items
- Preparation of the required configuration of the Title II design documents to accommodate planned construction by the fixed price subcontractor
- Review of the complete project with the Operating Contractor's engineering staff regarding safety, security, environmental protection, and fire protection
- Conducting and documenting all necessary field investigations required to prepare detailed design documentation
- Preparation of approved certified for construction documents including drawings, process and instrumentation diagrams, specifications, calculations, and construction cost estimate
- Preparation of equipment specifications for the major equipment items to be procured by the Operating Contractor