



Decommissioning Experience

Yankee Atomic Electric Company

Decommissioning & Independent Spent Fuel Storage Installation (ISFSI) Projects

Absolute Consulting Inc. developed the ISFSI/Dry Fuel Storage operations program manual and procedures. Supported the environmental group site survey team to include final status surveys for site license termination. Supported Yankee Atomic Quality Assurance group and oversight/independent review team. Performed audits and surveillances of decommissioning activities. Performed all due diligence of waste disposal sites for both radioactive and non-radioactive waste streams. Performed program assessments that would include provided corrective action processes.

Burns & Roe Engineering

Engineering and Licensing Support

Absolute Consulting, Inc. Nuclear Fuels & Environmental Management Division, in alliance with Burns & Roe, has provided support for the West Valley Decommissioning design associated with the high level radioactive vitrified waste container storage facility. Additionally, Absolute provides licensing support on an as-needed basis.

Ginna Nuclear Station

Procedure Upgrade Project and Power Uprate

Absolute Consulting Inc. personnel are assisting the Ginna Procedure Upgrade Project. Our personnel are also upgrading procedures related to the Power Uprate.

Constellation Energy, Corporate

Fleet Policy Development

Absolute Consulting Inc. personnel are developing corporate policies, which include both nuclear and non-nuclear facilities.

Palo Verde Nuclear Generating Station

Procedure Upgrade Project

Absolute Consulting Inc. personnel are performing a Procedure Upgrade of the Operations procedures. This project includes the development of a new Plant Writer's Guide.



Decommissioning Experience (cont'd)

Florida Power & Light, Juno Beach Corporate Office

Dry Fuel Storage Project

Project engineering, licensing, scheduling and procedure writing to assist the spent fuel projects group in project plan development, site selection, cask selection, and design and construction of various required plant upgrades related to spent fuel projects including ISFSI, Crane upgrades and security system.

Florida Power & Light, Juno Beach Corporate Office

Procurement Engineering Backlog Reduction Project

Absolute Consulting provided procurement engineering to prepare evaluations for dedication and equivalency, resolve concerns with receipt inspections, and evaluate supplier deviation discrepancies.

St. Lucie Nuclear Station

Dry Fuel Storage Project

Providing Project Management to assist in preliminary activities associated with the design build of the ISFSI facility.

St. Lucie Nuclear Station

Hurricane Recovery Projects

Provided Project Managers for many hurricane recovery projects including:

- Electrical projects including 4kV and 6.9kV breaker replacements as well as parking lot lighting, security lighting, electrical distribution and other electrical hurricane recovery activities.
- Estimating, technical direction, and coordination of construction in support of building repair and/or replacement analysis, dune restoration, dredging supervision, etc.
- Corrective actions coordination and analysis.
- Senior P3 Scheduling and Project Controls.

Turkey Point Nuclear Plant

Plant Computer Project

Absolute Consulting conducted a computer utilization analysis to determine impact of extended unavailability of current plant computer capability. The analyst identified alternate methods of complying with Data acquisition and analysis requirements to maintain plant operations during the transition to a new plant computer platform.

Seabrook Nuclear Station

Dry Fuel Storage Project

Providing licensing support for preliminary scope of work to include project plan. Will be assisting in crane upgrades.

Callaway Nuclear Plant

Procedure Support for Steam Generator Replacement and Procedure Backlog

Absolute Consulting personnel are incorporating modification into plant procedures due to the SG replacement. Absolute personnel are also responsible for the day to day maintenance of all procedure groups.



Decommissioning Experience (cont'd)

Callaway Nuclear Plant

Emergency Operating Procedures (EOPs) and Abnormal Operating Instructions

Absolute Consulting personnel performed a fixed price procedure upgrade of the Callaway Emergency Operating Procedures (EOPs) and Abnormal Operating Procedures (AOPs) to meet the requirements of Rev. 2 of the Westinghouse ERGs. Specific work included development of the procedures, bases documents, deviation documents and setpoint database. Our personnel also revised entry Annunciator Response Procedures (ARPs).

St. Lucie Nuclear Plant

Warehouse Hurricane Recovery Project

The Warehouse Hurricane Recovery Project Team provided assessment, inspection, evaluation, and remediation guidance for some 500,000 piece-parts with a medium seven figure value. Recovery efforts were performed under arduous physical conditions (in the beginning, buildings were functional, but not repaired). The project team kept the 1,500 site workers supplied with the materials necessary to do their jobs with minimal interruption due to the recovery process. The project members worked cross-functionally to provide the support in every facet of the process, from education on the process, to material remediation options. Our goal was to work outside the existing structure to seamlessly pick up issues and resolve those issues in an expeditious fashion. Project was completed on time and within budget. Team members are currently assisting with major outage.

Florida Power & Light – Corporate Office, Juno Beach, FL

Senior Project Engineering

Provided overall mechanical engineering support for Steam Generator (RSG) and Pressurizer (RPZR) replacement projects for St. Lucie Units 1 and 2. Developed equipment purchase and design engineering specifications and calculations. Reviewed and evaluating vendor bid proposals, procurement, design and fabrication drawings, design calculations and procedures. Evaluated and assisted in the resolution of purchase contract options. Provided interface between RSG and RPZR supplier and FPL engineering and maintenance organizations. Provided Project Engineering for the Turkey Point 3 and 4 Reactor Vessel Closure Head (RVCH) Disposal Project. Performed owners' acceptance reviews of calculations, drawings and specifications. Additionally, provided oversight in coordinating multidiscipline reviews of Vendor documents. Evaluated and assessed the maintenance being performed on 120V, 480V, 125 VDC molded case circuit breakers and 480V and 4160V metal-clad circuit breakers. This evaluation involved the maintenance programs and practices used at St. Lucie, Turkey Point and Seabrook. Additional work included development of a circuit breaker tracking system that will automatically track the movement of circuit breakers (eliminating the need for manually updating the current tracking databases) upgrading and standardizing the circuit breaker maintenance programs, and creating refurbishment procedures for metal-clad circuit breakers.



Decommissioning Experience (cont'd)

St. Lucie Nuclear Plant

Projects Department Training Coordination

Florida Power & Light's Turkey Point and St Lucie Nuclear Plants have undertaken a major effort to update plant systems in order to address aging and obsolescent equipment issues. Projects scheduled to be completed within the next several years include major primary plant component replacement (reactor vessel head, steam generators, and pressurizer) as well as a phased installation of a distributed control system which integrates the plant's major primary and secondary plant controls. When completed various stand alone plant control and computer systems will be integrated into a single computer based control and monitoring system and primary component integrity will be established for the extended licensed plant life. The projects department at St Lucie and Turkey Point are implementing these changes and as projects department training coordinators, we are evaluating training needs for operations, maintenance and engineering departments and ensuring training is developed, funded, scheduled and implemented to support these upgrades as they are implemented.

Millstone Nuclear Power Plant

Operating Procedure Development

Absolute Consulting developed Annunciator Response Procedure revisions (ARPs), backlog reduction, corrective action closure, and modifications for Operations.

St. Lucie Nuclear Plant

Projects Procedure Development

Absolute Consulting is developing Operations and I&C procedures in support of Distributed Control System (DCS) implementation and of Life Extension projects.

St. Lucie Nuclear Plant

Maintenance Procedure Upgrade Support

Absolute Consulting is supporting the Maintenance Departments efforts to upgrade electrical, mechanical and I&C procedures.

St. Lucie Nuclear Plant

Security Procedure Upgrade

Absolute Consulting is developing/upgrading security procedures in support of the new security upgrades/modifications at St. Lucie.



Decommissioning Experience (cont'd)

Turkey Point Nuclear Plant

Projects Procedure Development

Absolute Consulting is developing Operations and I&C procedures in support of Distributed Control System (DCS) implementation, Reactor Vessel Head replacement, EDG Upgrade, modifications to the Containment Sump, Reactor Protection System modifications, ERDADS and QSPDS replacement, Security Upgrade project, and Dry Cask Project.

Millstone Nuclear Station

Planning – Outage Support

Absolute Consulting provides Planners to Millstone to assist in preparation for and assistance during their refueling outages.

Nine Mile Point Nuclear Station

Procedure Program

Absolute Consulting provided consulting services for the Nine Mile Point Maintenance Procedure Program. Specific work included a revision of the Maintenance Procedure Writer's Guide to incorporate best practices from the nuclear industry, creation of a comprehensive Technical Review Checklist, and development of a Microsoft Word template incorporating industry best practices.

Possum Point Power Plant - Dominion Power

Startup and Commissioning Services

Absolute Consulting provided Senior Operations Advising Services to a 575 MW combined-cycle facility-post start-up, as the owner's representative (Facility commercial one day after arriving, all commissioning personnel left site with little status turnover). Major equipment included two GE Frame 7FA GT's / 1 D11 ST generator set, two NEM HRSG's, and a GE Mark VI Simplicity ICS. Duties included advisement on all shift operations to affect efficient and timely daily start-up / shutdown of units to achieve reliability and increasing availability. Provided update reports to O&M Manager on daily plant status and status of personnel competency. Provided guidance for outage work scope and prioritization. Developed and validated:

- System Standard Operating Procedures and non-typical operating procedures for owner's site-specific system idiosyncrasies.
- Equipment Status Round Sheets.
- Plant Chemistry Logs for owner's post-commissioning needs.
- Plant Equipment Component Trip Response Procedures for owner to aid in entire plant trip avoidance due to a particular plant component failure.

Researched operational challenges of upcoming GT fuel oil commissioning. Provided training expertise to the owner's full time operating staff on the proper, efficient and safe operation of all plant systems. Identified ICS screen inadequacies and working with GE warranty personnel and owner to modify for most efficient operation while still complying with owner's Operations Excellence Standard. Maintained log of sequence of shift events.



Decommissioning Experience (cont'd)

Organized and developed items database for monitoring and providing progress reports on facility post-commercial warranty and outstanding issues items (control tuning disparity, logic discrepancies between units, much troubleshooting and problem resolution to supposed commissioned plant systems not performing to guarantee standards, etc, etc.). Advised owner on:

- Safe means of LOTO of all systems as necessary for outage preparedness and otherwise.
- Unit operations necessary for non-exceedance of state and federal regulatory permit limits for stack, wastewater and noise emissions from the facility.
- Coordination of unit synchronization / voltage control between local electrical dispatch / system operator / owner.
- Permits to work and coordinated all mechanical, electrical and I&C work on the units during operation.

United States Enrichment Corporation (USEC)

Corrective Action and Procedure Program Consulting

Absolute Consulting provided staff consultants to assist USEC in the evaluation of software support for their Corrective Action, Commitment/Action Item Tracking, and Procedure Processes. Absolute personnel researched available industry software vendors and provided recommendations to USEC personnel regarding advantages, disadvantages, implementation, support and cost of different software packages.

Callaway Nuclear Plant

Operations and Maintenance Procedure Development

Absolute Consulting is providing support for an Operations and Maintenance Procedure Upgrade Project. Specific work includes development or revision of AOPs, ARPs, SOPs, and surveillance procedures on the Operations side, and preventive, corrective and surveillance procedures on the Maintenance side.