

Big Rock Point Restoration Project Major Component Removal

Location:	Client:	Duration:	Scope:
Big Rock Point Nuclear Station Charlevoix, Michigan	EnergySolutions, LLC (formerly BNFL Inc.)	November 1998 to March 2005	Decommissioning Operations Support

Key members of REIN were responsible for a contract to provide comprehensive project management, support, oversight, and performance of decommissioning operations to BNFL Inc. in the removal of reactor internals, large components, and buildings in the full scale decommissioning of Consumers Energy's Big Rock Point Nuclear Station. Activities included:

- Preparation of programs, plans, and procedures to support the D&D effort;
- Preparation, removal, packaging, and transport of the reactor pressure vessel to the Barnwell, SC, LLRW Disposal Facility consistent with the regulatory requirements of 10CFR, 49CFR, and SC DHEC;
- Removal of the reactor pressure vessel internals;
- Design, fabrication, mock-up testing, and deployment of the Hydraulically Operated Rotating Cutting Equipment (HORCE) to mechanically segment the upper grid;
- Removal of activated lead and concrete from around the reactor bioshield;
- Removal of the steam drum, emergency condenser, poison tank, and RWCU heat exchangers;
- Decontamination of radiologically affected areas to free release limits;
- Demolition of the containment sphere and internal concrete structures including the spent fuel pool;
- Demolition of site support structures including the turbine building, auxiliary building, alternate shutdown building, rad-waste storage building, pumphouse, and screenwell;
- Development and implementation of final survey approach, general survey plan, reference grid system, sample collection with chain of custody protocol, and compilation and interpretation of survey results to free release the facility consistent with Reg. Guide 1.86 and the more onerous local Bulk Materials Release (BMR) criteria.



Project Performance Features:

- ✓ Reactor decommissioning planning, field operations management, oversight, and performance of Greater Than Class C (GTCC) reactor internals removal and reactor decommissioning activities.
- ✓ Preparation of comprehensive programs and procedures which include Project Management, Component Removal Schedule, Radiological Controls, Health and Safety, Quality Assurance, Waste Minimization, Characterization, Sampling and Analysis, Decontamination and Decommissioning, and Final Status and Release Survey.
- ✓ Design and successful deployment of innovative equipment to remove GTCC reactor internals.