

PROJECT MANAGEMENT SUCCESS

Recent Successes – By Michael Regan’s Project Management Teams

Duke Energy - Brunswick Nuclear Plant:

Service Water Piping Replacement U1-U2 \$257 MM FY 2015-2024 Project Forecast 64 EC’s

Plant Life Extension: Responsible for funding approvals, P-6 schedule, Development of RFP's to AE's for Modification Design Proposals, Contract Management, and Cradle-to-Grave Execution of Major Modification Projects, Manage EC Design and Implementation Process, Areva Metrology / Photogrammetry Fabrication of large bore pipe, and Implementation of large pipes / pumps / valves / Electrical / I&C.

Tritium Remediation Groundwater U1CST \$23.8M FY 2011-2015

Developed initial Tritium Groundwater Migration Study involving test wells in suspected areas and implemented Groundwater Monitoring and Report Generation to NRC, EPA, NC DPNR. Developed well field remediation solution involving an automated tritium level monitoring building with sampling and discharge treatment facilities. Monitoring facilities involved an Integrated 3D underground piping system and tritium plume tracking for 90,000 Gal. per day extraction utilizing AB PLC's and Grunfos VFD pumps. Significant Plume Reduction to Within EPA and NC DPNR allowable levels.

Condensate Margin Improvement U1/U2 \$42M FY 2012-2015

Large bore 32-inch piping condensate pump suction parallel piping modifications to restore 2 condensate pump operation at 100% power uprated levels during ascension and normal operations with net 15 % condensate NPSHa margin improvements. Increased operational and equipment reliability of Condensate System preventing nuclear plant scrams while under 2 pump operation versus continual 3 pump operation after 2002 20% EPU plant upgrades. Maintenance and Operational savings under 2 pump operation versus 3 pump operation provided a 6 year EV payback. Original study from outside A/E's required 12 modification packages (6 packages/unit) to resolve Condensate Margin issue with an estimated Price tag of 190 million dollars. Capital project savings of 150 million dollars.

Refuel Bridge Crane Replacement U1/U2 \$25M (Total Project Cost Estimate) FY (Study Phase 2012-2013)

Developed Study and Cost estimate for replacement of Refuel Bridge cranes both units with semi-automatic PLC controls

**Florida Power & Light- Next Era Energy EPU Unit 2 05/2010 to 07/2011-Point Beach Nuclear Plant, Two Rivers, WI
Instrumentation & Controls and Control Valves**

Point Beach Unit 2 NextEra successfully implemented a 17% EPU within a 120 day (24/7) Single Outage.

Michael Regan PM Lead Projects:

Systems Modifications:

BOP, NSSS, ESFAS, & IC Rescaling for EPU
Main Feed Reg. Valves
MSSV Set-points
MSIV-NRV disc replacements
MFIV implementation

Digital Controller Modifications:

Yokogawa Digital Controllers for Heat Drain Tank, Feed Regulating Valve, Inst Air Dew Point, Main Feed Pump Temp Seal Gland, HP Cylinder Turbine Steam Gland, Feed Water Heaters 1-5
Level Control Simulator control panel migration to digital controllers.