

SOUTHEASTERN FEDERAL POWER ALLIANCE

Savannah District Update

Scott Hopkins

Chief, Hydropower Technical Center

Savannah District

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US Army Corps of Engineers
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Hartwell Unit 3

Scope:

- Repair failed stator windings, analyze unit vibration, and apply corrective actions to eliminate vibrations. \$2,185,000 in Customer Funds provided for this work.

Background:

- First winding failure occurred on August 12, 2010. Unit 3 returned to service on May 19, 2011 at a cost of \$427,000. Initial vibration analysis report was delivered on May 16, 2013. Second winding failure occurred on July, 18 2013. Repair contract awarded on October 30, 2013 for \$822,000. A \$216,842.75 contract modification was executed on April 4, 2014 repair additional damage found.

Status:

- The contract work has been completed, but more damage was found. The Corps is working with HDC to develop a way forward for Unit 3 to be made operational for vibration testing and repair.



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Hartwell Unit 3 Completed Contract Work



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Richard B. Russell Flow Diversion Structure Repair

Scope:

- Repair the stone flow diversion structure (Rock Spur) that was damaged during tainter gate testing on September 5, 2013.

Background

- The tailrace rock spur was constructed to suppress the formation of a vortex in the area immediately downstream of Unit 8 and to reduce entrainment of fish at Unit 8. Prior to the construction of this spur, pump operations with Unit 8 routinely lead to the formation of a vortex that was both large and persistent enough to be a concern for unit operation.

Status:

- Repair contract awarded on February 21, 2014 and completed on 30 June 2014 for \$1,775,000.



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Richard B. Russell Flow Diversion Structure Repairs Complete



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Savannah Remote Operations

Scope:

- Remotely operate the three Savannah River projects using a distributed operations methodology. This would allow any singular plant to operate any of the other two plants on the river system.

Background:

- 2012 study by HDR Engineering determined that remote operations was feasible based on current technology. HDR's preliminary budget estimate was \$10.5M. Savannah District Remote Operations PDT reviewed HDR's findings and recommended distributed remote operation. Conceptual approval received on 17 July 2013 from the Savannah District Commander.
- Remote Operations Project comprised of multiple sub-PDTs established to accomplish specific tasks: Policy Development, Organizational Structure Revision, Electronic Security System Enhancement, Interim Operations Plan, Microwave System Installation, and Control System Replacement/GDACS Installation.

Status:

- Complete remote operations funding of \$14.98M, including \$2.48M contingency was approved by the PRC on 7 August 2014 and was collected and available for use on 22 October 2014.
- Initial remote operation capability expected in 4th Qtr FY 2015, with full system availability by 4th Qtr FY17.



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Russell Switchyard Component Replacement

Scope:

- Replace 230 kV oil circuit breakers with SF6 gas circuit breakers. Remove buried oil circuit breaker piping.

Background:

- The contract was awarded for \$1,898,898 on 14 July 2014 to Koontz Electric. The contract will be completed by 30 September 2015.

Status:

- Contract submittals are being reviewed as they are submitted. The Contractor will be on site on 5 January 2015 to begin the on site activities.



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