

AEP

Order-of-Magnitude EPC Cost Estimate

Big Sandy Station – Unit 2

Project No. 12721-000

9-Aug-10

DFGD OEM Cost Summary

	1.75 w/o ESP	3 w/o ESP	1.75 w/ESP	3 w/ESP	Comments
Reagent Prep	\$ 5,560,000	\$ 7,985,000	\$ 5,914,000	\$ 8,616,000	Vendor scope: - Rotary feeders, chain conveyors, and slakers through the lime slurry pumps and lime slurry storage tanks - Structural steel integral to the support of the vendor's equipment - Piping inside buildings to terminal point - All pumps and all motors required by vendor scope of supply - Process instruments and control logic - Trolleys and Hoists By others: - Piping from terminal points out to the plant - Conduit, cables, etc... to vendor's motors - Site grading, roads, foundations, etc... - Lime conveying, storage silo, etc... - All required DCS upgrades
Absorber Island	\$ 39,438,000	\$ 39,438,000	\$ 39,438,000	\$ 39,438,000	Vendor scope: - Absorber modules and atomizers with lube oil system - Duct work from the absorber inlets to the fabric filter outlet - Recycle storage silo, recycle slurry mix tanks, slurry storage tanks, and all ancillary systems with piping inside FGD buildings - Structural steel integral to the support of the vendor's equipment - Piping inside buildings to terminal point - All pumps and all motors required by vendor scope of supply - Process instruments and control logic - Trolleys and Hoists By others: - Conduit, cables, etc... to vendor's motors - Site grading, roads, foundations, etc... - All required DCS upgrades

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Fabric Filter	\$ 19,980,000	\$ 19,761,000	\$ 19,409,000	\$ 19,276,000	Vendor scope: - A single fabric filter unit for all of the flue gas - All internal fabric filter elements such as bags, cages, ash hoppers, 2 broken bag detectors per compartment - Ash conveying system from the fabric filter to the recycle silo - Structural steel integral to the support of the vendor's equipment - Piping inside buildings to terminal point - All motors required by vendor scope of supply - Process instruments and control logic - Trolleys and Hoists By others: - Air compressors for the pulse-jet cleaning system - New ID fans - Duct from fabric filter to new ID fans - Piping from terminal points out to the plant - Conduit, cables, etc... to vendor's motors - Site grading, roads, foundations, etc... - Byproduct conveying, storage, etc... - All required DCS upgrades

Costs for the reagent preparation, absorber island, and fabric filter equipment are based on a 2009 quote from Alstom. The previous quote was factored for the AEP Big Sandy Unit 2 capacity (865 MW) and adjusted for each sulfur and ESP operation. It should be noted that the previous Alstom quote was slightly higher than the other two budgetary quotes received for the same scope of supply.