



FOLSOM POWER PLANT TRANSFORMER REPLACEMENT

CONTRACT NO / AWARD DATE:

R09PC20R03 / September 4, 2009
KECI Job No 09-2122

JOB SITE LOCATION:

Folsom Dam and Power Plant
7794 Folsom Road
Folsom, CA 95630

OWNER:

Bureau of Reclamation - Mid Pacific Office
2800 Cottage Way, RME 1815
Sacramento, CA 95825-1898
Don Neal

T 916.978.5144

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GENERAL CONTRACTOR:

Koontz Electric Company, Inc
1223 E Broadway
Morrilton, AR 72110
Project Manager: Jamie Zimmerman
T 501.354.2526 ext 135
F 501.354.2580

SUBCONTRACTORS:

Delta Star Inc.
270 Industrial Rd
San Carlos, CA 94070
Robert Smith
T 650.508.3313

Electrical Technologies
12335 W 53rd Ave, Suite 200
Arvada, CO 80002
Gerry Suman
T 303.462.0317

INITIAL MOBILIZATION / COMPLETION DATE:

March 2010 / February 2011

AWARDED / CURRENT CONTRACT AMOUNT:

\$4,499,994 / \$4,629,707

Price Increase Due to Government Requested & Approved Change Orders

SCOPE OF WORK:

This project included the design, fabrication, installation and startup of two GSU Transformers, K1A and K2A at the Bureau of Reclamation's Folsom Powerplant in Folsom, CA. K1A is a three-phase, 60-hertz, outdoor, generator step-up type unit. This unit has a capacity of 80MVA and a voltage rating of 115/13.8kV. K2A is a three-phase, 60-hertz, outdoor, generator step-up type unit. This unit has a capacity of 80MVA and a voltage rating of 230/13.8kV.

Koontz Electric purchased the new transformers from Delta Star and worked closely with their engineering department and the Bureau of Reclamation to ensure specification requirements were met.

Upon arrival to site the transformers were inspected, assembled, processed and tested. This required close coordination with heavy haulers, crane operators, transformer service technicians and plant personnel. Once the transformers were onsite, Koontz was responsible for removing the existing units from service and storing them in long term storage. Koontz worked within the Bureau's Hazardous Energy program to ensure personnel safety throughout the project. Along with the units, Koontz also removed existing cooling water piping, surge arresters and all other associated appurtenances.

Once removed, Koontz Electric installed the two units, including high side jumper bus connections, low side isolated phase bus connections, grounding, and anchoring. The anchor system itself was a custom engineered seismic rated system, which required extensive design and a challenging installation. Once installed, the units underwent final testing and were turned over to the Bureau for operation.

After the new transformers were in operation for 6 months, Koontz Electric was required to dispose of the old, stored transformers according to all state and federal regulations.