





# WOODWARD SUBSTATION CONSTRUCTION

#### **CONTRACT NO / AWARD DATE:**

08317842 & 8318340 / July 28, 2009 KECI NO 09-2121

#### JOB SITE LOCATION:

**Woodward Substation** 48468 S. County Rd. 204 Sharon, OK 73857

OG & E Energy Corporation PO Box 24990 Oklahoma City, OK Point of Contact: Gale Towery T 405.553.5704

### GENERAL CONTRACTOR:

Koontz Electric Company, Inc 1223 E Broadway Morrilton, AR 72110 Project Manager: Paul Zimmerman T 501.354.2526 ext 102 F 501.354.2580

## **INITIAL MOBILIZATION / COMPLETION DATE:**

August 2009 / April 2010

# AWARDED / CURRENT CONTRACT AMOUNT: \$1,359,631 / \$2,137,475

Price Increase Due to Customer Requested & Approved Change Orders





#### SCOPE OF WORK:

Koontz Electric Company, Incorporated (KECI) was responsible for the construction of a complete 345/138kV substation near Woodward, Oklahoma.

The installation will accommodate one (1) 345-kV transmission line to Northwest Substation and one (1) 345/138/13.8-kV autotransformer position. The 345-kV bus designs are now expandable to a breaker-anda-half configuration. 345-kV line and transformer disconnect switches all have grounding switches installed. KECI installed a 4-position 138-kV ring bus. This ring bus is connected to the secondary terminals of the new auto-transformer. Three (3) of the 138-kV positions will be for termination of transmission lines to Woodward District and Lodine substations. 138-kV line disconnect switches are manually operated and have grounding switches installed. The transformer tertiary installed will provide VAR compensation by means of shunt reactors and primary station service to the substation. Backup AC station service will be sourced from the local utility. The required tertiary equipment and bus work (per Northwest Substation design) will be installed at this time. KECI will also furnish and install crushed rock surfacing as required. KECI will excavate, construct, furnish, backfill and compact all concrete foundations. KECI received, unloaded, moved, stored and erected all Owner-furnished materials including all equipment and steel. KECI installed all control building equipment including, but not limited to, drains, cable tray, lighting, heating, ventilation and grounding. KECI installed 125-volt DC battery systems including panel boards, breakers, fuse boxes, accessories, batteries, chargers, and battery racks. KECI installed all grounding, conduit, outdoor cable trench, and power and control cables. KECI installed 120/240-volt ac power systems including panel boards, breakers, dry type, and pad mounted transformers. KECI installed line protection, breaker control, communication, supervisory and fault recorder racks (set and anchor in place). KECI also received, unloaded, moved, stored, installed and tested power circuit breakers and power transformers. KECI furnished, installed and connected all power and communication cables.