



**Project:**

Lake Maumelle  
Generator Controls

**Location:**

Roland, AR

**Owner Representative:**

Central Arkansas Water  
Dennis Yarbro  
10629 Hwy 300  
Roland, AR 72135  
Ph. 501-868-4390  
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**Description of the project:**

This project consist of the addition of new instrumentation and controls for two existing 3000 KW diesel generators to provide back-up power, and peak shaving for the water intake structure at Lake Maumelle outside of Little Rock, Arkansas for Central Arkansas Water.

Unique features of work for this project include:



**Design Engineer's**

**Project Manager:**

Garver Engineers  
Bruce Brown  
1010 Battery St.  
Little Rock, AR 72202  
Ph. 501-376-3633  
Fx. 501-372-8042

**Contract Amount:**

\$1,172,732

**Start & Completion Date:**

August-2004 to June-2005

1. Replacement of existing 5KV switchgear with 6 new section of 5KV ARC vented switchgear, and reconnecting the existing secondary feeders associated with this switchgear.
2. Replacement of the existing 5KV feeders between the existing generators and the new switchgear.
3. Installation of new ground grid around the existing generator building.
4. Replacement of (6) existing high bay light fixtures in the existing generator building.
5. Replacement of the existing 5KV parallel feeders from the generator switchgear to the main switchgear located in the Power Control Room.
6. Installation of new generator control cabinets to provide complete HMI / SCADA control of the entire generator back-up system. This includes cabinets, touch screens, PLC's, software, programming, relays, and other associated equipment.
7. Replacement of the existing DC charger, and battery system.
8. Installation of (2) grounding resistors for the generators.
9. Installation of kirk key interlocks into the existing main switchgear.
10. Installation of new selector switches for the existing fuel, pre-lube, and other local generator functions.
11. Installation of new conduit and wire to the existing local generator instrumentation to provide complete computer monitoring and control.
12. Removal of the existing protective relays, DC power, and control functions from the existing tie breaker within the main switchgear.
13. Training in the complete operation and maintenance of the system.

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