

# PHEASANT BRANCH SUBSTATION

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MADISON, WI  
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COMPLETION DATE: 2002  
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## PROJECT DESCRIPTION

ECI provided engineering services for reconstruction of the Pheasant Branch Substation located in Middleton, Wisconsin. This 69/13.8 kV facility was updated to include two (2) 20 MVA transformers, five (5) 69 kV SF<sub>6</sub> gas power circuit breakers and two (2) 13.8 kV nine-cubicle metal clad switchgear units. A second control building with full cable vault basement was also added. The existing open air distribution structure was removed and the 69 kV high profile deadend structure was re-used, requiring extensive analysis and re-configuration to support the new rigid aluminum bus and disconnect switches.

ECI was responsible for all physical and electrical design of the substation and associated transmission line reroute.



**Pheasant Branch Before Construction**

## KEY FACTS & HIGHLIGHTS

- ◆ **69-13.8 kV SUBSTATION**
- ◆ **MAJOR RECONSTRUCTION AND EXPANSION OF EXISTING FACILITY**
- ◆ **PREPARED MATERIAL & CONSTRUCTION SPECIFICATIONS**
- ◆ **INCLUDED TRANSMISSION LINE RE-ROUTE**



**Pheasant Branch Completed Project**

◆ *Engineering With Distinction* ◆