



# **DOMINION VIRGINIA POWER**

## **Chesterfield Generating Station BET Projects**

#### Introduction

Dominion's Chesterfield Power Station is the largest fossil-fueled power station in Virginia. Located about 15 miles south of Richmond on the James River in Chesterfield County, the station can generate more than 1,700 megawatts.

#### **Generating Capacity by Unit:**

Unit 3 - 110 megawatts – coal fired unit Unit 4 - 181 megawatts – coal fired unit Unit 5 - 344 megawatts – coal fired unit Unit 6 - 693 megawatts – coal fired unit

Unit 7 - 238 megawatts – combined cycle Unit 8 - 241 megawatts – combined cycle

#### **BET Projects with MEL**

MEL has designed, installed and commissioned the DCS system for the recent station BET projects including the following units and processes:

Unit 4 SCR (B&W Unit)
Unit 6 SCR (Alstom Unit)
Unit 6 Baghouse (Hamon)
Unit 6 Wet FGD Unit (Wheelabrator)
Unit 3, 4, 5 FGD Unit (Wheelabrator)

Common Limestone Slurry System and Gypsum Filter Presses (Marsulex)

### **Dynamic Simulation and Functional Testing**

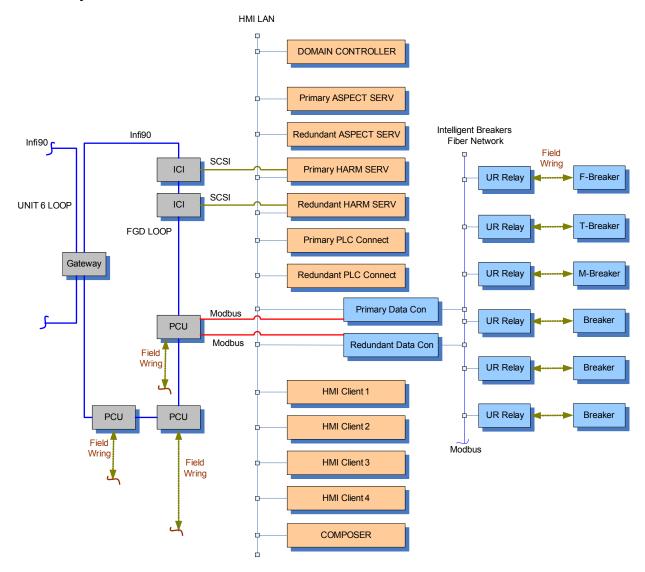
MEL utilizes a dynamic simulator to evaluate and validate all DCS logic and HMI graphics prior to on-site installation. As a result, each BET project has been commissioned without delay, immediately following the completion of plant construction.

The control system components include: PPA with Harmony Connectivity Servers, Infi90 BRC400 Controllers, Intelligent GE protective relays, and Foreign Device Interfaces to Ash Handling, Waste Water Treatment, Oxidizing Blower PLC, and CEMS.









CHESTERFIELD POWER STATION UNIT 6 FGD DCS NETWORK