



FMI- SILVER CITY, NM 8-DAM PROJECT

Quantum Integrated Solutions designed, developed and implemented this 2008 SCADA Radio and Fiber Network System at the Silver City, NM mine site. The system included the electrical engineering and design of the radio and fiber network interface, PLC hardware and software design / integration as well as the creation of the headend SCADA screens and database.

The project objective was to capture the PLS solution currently being stored behind an earthen dam and place the solution into a 1M gallon storage reservoir. After storage, we pumped the PLS up to the refinery for processing of the solution into pure copper plates.



CONTROL EQUIPMENT

Quantum integrated the following systems, and sensors into the overall SCADA network system.

- ✓ Instrumentation Flow, Pressure and Level
- ✓ Control Logix PLC Control Panels
- ✓ PTZ Video Surveillance system
- ✓ Fiber Network Design and Interface
- ✓ Ethernet Network Design and Interface
- ✓ VFD Motor Control
- ✓ Softstart Motor Control
- ✓ Computer System Integration

ENGINEERING, MANAGEMENT & DESIGN SERVICES

Quantum provided a variety of management and engineering design services for the project:



- ✓ Project Construction Management
- ✓ Electrical Engineering
 Design Services
- ✓ Radio System Design
- ✓ Computer System Design and Selection
- ✓ Project SCADA Software Development
- ✓ Systems Integration Radio Systems / Networks
- ✓ Industrial

 Networking Design

ENGINEERING & PROCESS DESIGN SERVICES

Quantum developed the entire software system for this project:

- ✓ SCADA design
 - O Wonderware Archestra Galaxy
- ✓ PLC Systems & Programming Design
 - O Rockwell Control Logix
- ✓ Industrial Network Design
 - Ethernet
 - O Wireless Radio & Microwave
 - Fiber network integration to radios
 - Engineering Raceway Design







CONTROL EQUIPMENT

Quantum can evaluate, design, fabricate, install and configure necessary equipment for a wide range of process control designs.

- ✓ Instrumentation
- ✓ PLC Control Panels
- ✓ Motor Control

ADDITIONAL SERVICES

Quantum provides many additional industrial automation applications. Listed below are some additional engineering services provided by Quantum.

- ✓ Radio Surveys
- ✓ Industrial Energy Audits
 - Search for qualifying energy rebates
- ✓ SCADA and HMI Support
- ✓ SCADA Video Surveillance Design and Installation
- ✓ Process Control Training
- ✓ Secure internet access to project backups 24/7
 - o Design Drawings
 - o Programming codes
 - O Operation and maintenance manuals
- ✓ Fiber Network Design
- ✓ Computer Aided Drafting (CAD)



CERTIFICATIONS AND AFFILIATIONS









MAJOR MARKETS SERVED

Mining



Water/Wastewater



Renewable Energy



Semiconductor

