

Western Electricity Coordinating Council (WECC)

When two are better than one...

The Western Electricity Coordinating Council (WECC) is the Regional Entity responsible for coordinating and promoting bulk electric system reliability in the Western Interconnection. WECC's service territory extends from Canada to Mexico. It includes all or portions of the 14 Western states between. Due to the vastness and diverse characteristics of the region, WECC and its members face unique challenges in coordinating the day-to-day interconnected system operation and the long-range planning needed to provide reliable electric service across nearly 1.8 million square miles.

Prior to 2009, WECC performed operations within other Transmission Operators (TO). As WECC's responsibilities grew, it was evident that new control centers were necessary. WECC decided that 2 separate locations were critical to operate their service territories. Eventually, a pre-built location in Colorado and Washington State were chosen.

Mauell was instrumental in the site selection,

providing insight to the property access, security, potential of the space and modifications necessary to the floor plan to sustain control room and data center operations. Once WECC closed on the properties, Mauell set to work designing identical spaces between both centers that addressed the entire operational scope. WECC's main requirement was that an operator could move across any part of the service territory and perform his job at either center. Future expansion was another main project goal. WECC needed to staff up to four (4) operators at any one time on a 24/7 basis.

Each operator needed to have readability of system-wide content. The ability to view operations activity between both centers was another requirement of the design. After extensive data gathering and a collaborative review process, Mauell designed each control room with the following;

- four (4) purpose built custom Mauell designed operator consoles,
- four (4) custom storage units (2 bookcases, room storage credenza, and room map storage unit),
- 2 high x 3 wide video matrix of rear access 67-inch cubes placed on a
- custom display structure and controlled by a multi-window display processor,
- A/V system to control the processor inputs and scenarios as well as display video content from the other site.
- Seismically qualified by WECC's engineering contractor.



While both WECC control rooms had identical

deliverables, the spatial plans were not. Mauell diligently coordinated a project plan that would meet WECC's aggressive schedule. Additionally each of the installation sites were at different construction stages, the Colorado room was new construction and the Washington room was a renovated room. Once Mauell received approvals, Mauell constructed the systems for both facilities in parallel performing a Factory Acceptance Test prior to integration. Mauell installed the systems and completed the project with time to spare and on budget. Meeting WECC's go live date was critical as operations from the new facilities needed to commence on January 1, 2009.

Mauell Corporation is a privately held firm specializing in the supply of mission critical command and control spaces for the utility marketplace. Mauell also provides hardened control systems for nuclear simulation, train control and process control environments. Headquartered in Dillsburg, PA, Mauell provides turn-key services including design, build, installation and support.