

Challenge

Collaboratively design and build a custom engineered, advanced chemical feed system in an enclosure for a major utility and meet a tight timeline.

Solution

Deploying a disciplined, process oriented approach, EquipSolutions led a team of engineers to complete the project on budget and significantly ahead of schedule.



"The equipment was delivered six weeks ahead of schedule by listening to our customer's needs, responding rapidly, and managing the project professionally."

Mike Radel
EquipSolutions

Powerful Performance

A large midwestern nuclear generating station working with a world leading water treatment company was seeking an innovative turn key solution to the challenge of making a major upgrade to an existing chemical feed system used to implement a technologically advanced, comprehensive water treatment program.

EquipSolutions partnered with the water treatment company's engineering staff to collaboratively design a custom engineered, turn key solution that integrated multiple primary and backup chemical metering systems, local control panels, proprietary monitoring and control technology, and a partitioned laboratory / office into a climate-controlled shelter.

This fully integrated shelter needed to be installed in an existing space and utilize existing piping and electrical connections to contain costs and ease transition during the tight timeframe of a scheduled outage.

Through a series of collaborative sessions with the Utility personnel, water treatment company engineers and EquipSolutions' staff, the team developed a detailed scope for every aspect of the program operation.

Once the scope was approved, a detailed quotation was provided along with preliminary drawings to bring greater definition to the commercial document. Upon acceptance of the quotation, a series of milestones consistent with the Utility schedule were developed along with a full set of detailed mechanical drawings, electrical drawings, and I/O summaries. (continued)



These documents were prepared and reviewed in a series of group meetings to incorporate new ideas and revisions until a final, collaborative design was approved. Long lead time items were addressed first and approved for procurement to avoid any delays.

Bills of materials (BOM) were quickly constructed utilizing the SolidWorks parametric modeling software used to design the systems. Once approved, the BOMs were released to procurement and material staging was completed in six weeks. Fabrication, integration milestones, and inspection points were established and satisfied despite a last-minute requirement of shortening the delivery date.

Upon completion, the system underwent a vigorous series of factory acceptance tests and inspections from all parties. The system was fabricated, tested and delivered successfully within six weeks of final approval.

The unit was installed and is operating as designed, winning high praise for the quality, reliability, and operator friendliness of the design and controls.

