



# PRELIMINARY STUDY RESULTS

Pioneer Power Group was hired to conduct a study for a new switchboard. The project was focused on revising an existing study completed by a different firm while assisting the customer with a lead time issue for a new switchboard. The customer needed to complete the study quickly to meet lead time requirements from the equipment manufacturers. Our team was tasked with verifying the withstand rating of a new switchboard, coordinating the new switchboard with the rest of the power system, and then protecting ATSS, all the while maintaining lead times with the equipment manufacturers.

## ▶ CHALLENGES



Due to continued supply chain challenges from Covid-19, the customer had a 48-hour deadline for short-circuit results to be delivered. It was imperative that the switchboard was confirmed to be adequately rated within this timeframe so that the customer could maintain their supply chain position with the equipment manufacturer. If the customer was not able to confirm short circuit results in time, their order would be pushed into the next quarter, thus significantly delaying the project.



The previously completed study was developed based on a different switchboard. Those study results were used to confirm withstand ratings of downstream ATSS. Since the switchboard was being changed, the withstand ratings of the ATSS had to be re-evaluated. The new switchboard did not allow for adequate withstand ratings of the ATSS, so the customer was forced to consider two options: replace the breakers in the switchboard with breakers approved by the ATS manufacturer, or install fused disconnect switches so the withstand rating of the ATSS could be increased.

### CONTACT US:



(301) 569-7931



info@pioneerpwr.com



www.pioneerpwr.com

## ▶ OUR SOLUTION



Pioneer Power Group was able to collaborate with the customer, contractor, and equipment manufacturers to deliver preliminary short circuit and coordination results in 24 hours. Within four days our team provided a completed report, detailing short-circuit, coordination, and arc flash results for the new equipment along with recommendations for improvement.

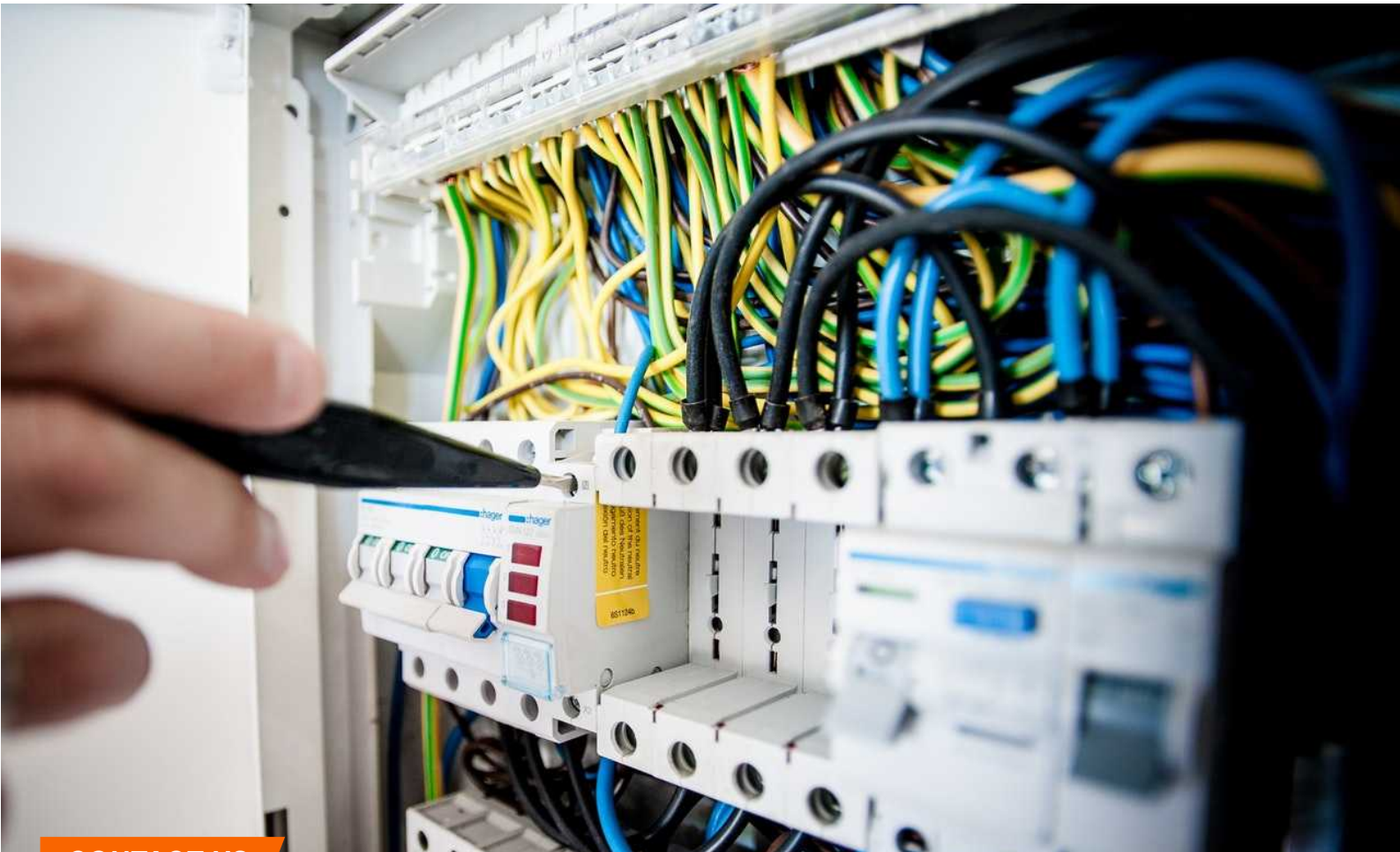


Pioneer Power Group was able to assist the customer and contractor in selecting current limiting fuses for upstream disconnects to properly protect the ATSS. The customer was able to provide submittals for the new disconnect switches, allowing our team to revise the study and report all equipment as properly rated, coordinated, and protected.

## ▶ RESULTS



By completing a short-circuit analysis and understanding the requirements of ATS manufacturers, Pioneer Power Group was able to ensure that the equipment being supplied was protected without costly and time-consuming redesign. Despite the significant time crunch, our team was able to assist the customer in providing a properly protected distribution system while remaining on time and within budget despite the unexpected challenges. Pioneer Power Group is focused on helping our customers to understand such complex protection discrepancies, and to highlight which options are best to resolve them.



**CONTACT US:**



(301) 569-7931



[info@pioneerpwr.com](mailto:info@pioneerpwr.com)



[www.pioneerpwr.com](http://www.pioneerpwr.com)