

What would it cost your company to be *Shut Down* for a Day? *Two Days? A Week?*

Electrical failure can strike without warning. Unfortunately, most companies are not adequately prepared to handle it. Below are a few examples.

At 3:30 am, Alfa Transformer received an emergency call from the maintenance supervisor of a large paper mill saying their mill was shut down and losing \$50,000 per hour. The Alfa team went to work collecting data on the failed transformer and searching their inventory for a replacement. In less than 8 hours Alfa delivered a 2000/2667 KVA transformer and power was restored to the mill. In less than two weeks matching switchgear was delivered.

When a major cereal manufacturer lost a 2500 KVA transformer, Alfa was hired to provide an emergency repair. In just 8 days the transformer was completely remanufactured and returned saving the customer “hundreds of thousands of dollars” in lost production time.

Without warning a southern U.S. chain manufacturer was struck with a debilitating transformer failure. Again,

the Alfa team went to work. A 1500 KVA transformer was immediately shipped from Alfa’s inventory and power was restored in time for the first shift’s production to begin the next morning. The plant superintendent sent a letter stating, “We were very pleased with the excellent service we received.”

A large Kansas City shopping mall suddenly lost power. In just 5 days Alfa supplied a custom-built 750 KVA transformer with a specially-designed outdoor enclosure. A helicopter was hired to immediately lift the transformer onto the roof upon its arrival.

These actual events are a day-in-the-life at Alfa Transformer. Alfa has handled hundreds of critical electrical emergencies like the ones listed above for customers all over the U.S. like Weyerhaeuser, Texaco, AEP, Entergy, Pfizer, General Mills, Tyson Foods and the Federal Aviation Administration.

How does Alfa respond so quickly? “We have always kept close tabs on what transformers our customers are asking for. We then take that information and use it to develop and maintain



our inventory,” says Alfa marketing manager Steve Lockridge. “Fast response and reliable products and repair are what have made Alfa the first choice of many companies.”

Alfa’s inventory includes pad mounted transformers through 3750 KVA, pole mounted transformers through 333 KVA, dry type transformers through 2500 KVA and drive isolation transformers through 770 KVA. Some units are Alfa’s own line of new transformers built to applicable ANSI and NEMA standards. Some are remanufactured units that Alfa has redesigned and/or rewound. Others are surplus units purchased from cancelled construction projects and incorrectly ordered items. Later this year Alfa plans to expand their inventory to include metal-enclosed and pad mounted switchgear.

Another way Alfa responds quickly is through their affiliation with vendors who share their philosophy of “what you need, when you need it.” According to Lockridge, “most major manufacturers offer lead times that customers can’t live with. If your plant is down or you have a project deadline in 4 weeks, the major manufacturers aren’t going to be able to help you. That’s where we come in.” Alfa supplies new dry type transformers from stock to a lead time of about 3 weeks. Pad mounted, substation and pole mounted transformer shipment times range from stock to a lead time of about 6 weeks.



Even more remarkable is how quickly Alfa can repair a failed transformer. Alfa President David Allen says, once again, the key is inventory. "In our 35+ years of experience, we have learned what wire sizes and insulating materials to stock and that drastically reduces our turnaround time. When a customer has an emergency, if we have the materials in stock, we can rewind most transformers within one week. Some in as little as 4-5 days."

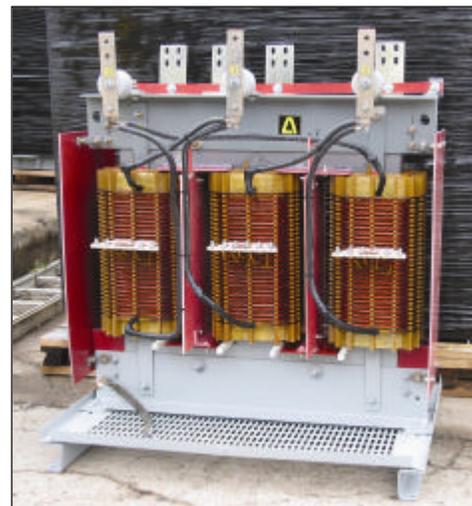
Fast turnaround time is not the only thing Alfa offers with its repair service. Design improvements are always a priority. "We're talking about a transformer that has failed. So we always look to improve the existing design. In many cases we can improve cooling efficiency and short-circuit strength, and increase the life-expectancy of the transformer," Allen said. In addition to saving money over buying a new transformer, redesign of a failed transformer can translate into reduced energy consumption and savings due to the greater efficiency.

One investor-owned utility hired Alfa to analyze, redesign and rewind approximately 30 dry type transformers in 1000 and 1500 KVA capacities, the majority of which had not yet failed.

"These transformers were obviously failing prematurely. The customer sent some units in for us to analyze and we found a design flaw. We redesigned and rewound those failed units. Then the customer decided to have us rewind the remaining transformers that had the same design flaw but had not yet failed. Those redesigned transformers have been in service now for several years without any failures," said Lockridge.

Alfa offers this failure analysis service to help customers determine where problems or weaknesses in their system may reside. "Failure analysis is not an exact science. We get to look at one piece of the electrical system puzzle. But in that piece are clues that point to a possible cause of failure. We take those clues and formulate a hypothesis that will hopefully help our customers prevent the same failure in the future," said Allen. In one case Alfa was able to determine that switching surges outside of the customer's electrical system were causing catastrophic failures.

Alfa's repair services aren't limited to standard distribution transformers either. "We repair a lot of different types of coil-based equipment like oil filled transformers, dry type transformers, precipitator transformers, welding



transformers, autotransformers and saturable core reactors. We even repair rectifiers and power supplies for laser-cutting equipment," added Allen.

Lockridge concluded with this thought. "We have developed a solid relationship with our customers because when they call with a need, we don't tell them we can't help them. They know when they call Alfa, they're going to get quick action, not a call back two days later. That's why we adopted our two slogans, 'Fast. Reliable. Guaranteed.' and 'What You Need, When You Need It.'"