



CE Power Solutions

Solutions Profile # 7 – 69 kV Circuit Switcher Replacement

Project Scope: Replace or repair a failed 69 kV, 20 kA, stored-energy Circuit Switcher located at a refuse burning Generating Stations' Substation, as quickly as possible

Client: A large, national Independent Power Producer (IPP)

Project Challenge: With the loss of generating revenue and the requirement to cover their obligations, the switch failure was costing the IPP approximately \$100,000 per day. The two major manufacturers of Circuit Switchers in the marketplace quoted (8) to (12) week delivery for replacement units. The unit was determined to be not repairable.

Service Team: Client, CE Power Engineering Services, a Circuit Switcher manufacturer, CE Power Solutions Field Service Team, and a metal fabricator and plating operation

Project Profile: The 69kV Circuit Switcher failed on a Sunday. On Monday, CE Power was called and promptly went on-site to evaluate the failure. CE Power Field Services worked through the night on Monday in attempt to repair the switch. Tuesday, CE Power Field Services determined that the switch needed complete replacement. The customer agreed to replace the switch on Wednesday.



CE Power Solutions' Engineering Project Manager, experienced in substation construction, made inquiries to the switch manufacturers and discovered the components of the switch are available in 2-3 days – without the structure. Structure is reverse engineered, material and plating is specified, ordered and delivered at the site in coordination with the major switch components. CE Power Field Services, under the direction of the Project Engineer, remove the existing failed unit and construct the new switch installation. In addition, the associated transformer was tested and CTs rebuilt while the switch was being assembled.

Circuit Switcher was put in service on the following Tuesday – 8 days after the failure and 6 days after coming to the conclusion on what had to be done to get the IPP back online.

Solution is delivered in 6 days and the generating Unit is put back on line in (8) days after initial failure!

