# Case Study: Local Nuclear Power Station



#### Objective

 Refurbish DHP breakers locally, using a more efficient procedure than the standard method requiring packing, shipping, and additional time to complete the project.

#### Solutions

• The Quad Plus Senior Technician devised a new procedure to complete the refurbishment process at our local Breaker Lab, a procedure that did not previously exist in this market.

#### **Results/Benefits**

- All breakers were restored to working order.
- The customer was spared the time and expense of special packing and long-haul carriers to transport the breakers to an out-of-state refurbishment facility.
- No out-of-state travel was necessary for the customer to complete inspections and witness testing.
- Faster turnaround time for the entire project as all aspects of the refurbishment, from pickup to delivery, were completed by the local Quad Plus team.
- The faster turnaround time correlated to lower costs for Quad Plus and we were able to pass on the savings to the customer as well.
- Environmentally friendly procedure with less packaging materials and fewer miles of transportation.

# Westinghouse DHP Breaker Refurbishment Procedure

## Background

Local nuclear power stations had DHP 5kV and 15kV breakers that needed to be refurbished. The process typically involves removing the breaker, packing using specialized materials, utilizing longhaul carriers to transport the breakers to a service facility, and then reversing the process to return the breakers to the customer. This customer requested a local refurbishment process to save on time and costs.

### **Quad Plus Solution**

The Quad Plus Senior Technician has extensive experience rebuilding medium-voltage breakers. The refurbishment process, sometimes called major reconditioning, includes completely tearing down the breaker and rebuilding it and replacement of wear items such as springs and coils.

In response to the customer's request, he developed a specialized procedure to refurbish Westinghouse DHP 5kV and 15kV breakers, a procedure that did not previously exist in this market. The Quad Plus crew was then able to pick up the breakers on our own trucks and transport them to our local Breaker Lab to complete the procedure, then transport the breakers back to the customer's site.

Because our team was responsible for the entire process, we were able to save a substantial amount for the customer, especially on packing and transportation. It also allowed us to increase the volume of breakers refurbished compared to the traditional process to complete the job more quickly and at a lower cost to both us and the customer.

