

Helping Detroit Edison eliminate power quality charges

emPowering Energy

Innova[™] STS helps a major US utility eliminate power quality compensation penalties.



Need

A Ford Motor Company automotive component plant in Detroit was experiencing numerous electrical incidents – 17 in 1996 alone – that were shutting down lines and affecting Ford's primary downstream automobile assembly lines.

Because of this recurring loss of production time, the utility, Detroit Edison, negotiated a special manufacturer's contract with Ford. The contract stipulated that any interruptions in power supply to the component plant would require monetary compensation from Detroit Edison to offset Ford's estimated losses.

Solution

The utility quickly realized that a comprehensive power quality solution was required to avoid paying power quality charges. A goal of reducing plant disturbances to no more than two per year was established. Various power quality solutions

were investigated and the STS was selected as the most reliable and practical answer based on the criteria of cost, delivery and the probability of success. Working closely with the utility, the switch manufacturer custom tailored the STS to meet the application's specific requirements. In November of 1996, an STS was tested and installed at the Detroit Edison Norway substation.

In the first year of service ten disturbances were averted, saving the utility \$360,000 in compensation penalties as stipulated in the contract. Over a two and a half year period, the Ford plant experienced only one disturbance, although the feeders serving the facility suffered over 30 interruptions or sags.



Success Story Results

Uninterrupted Operation



Before

Ford Motor Company plant was experiencing numerous electrical incidents – 17 in 1996 alone – that were shutting down lines.

After

In the first year of service the Innova STS averted ten disturbances.

Saving the utility \$360,000 in compensation penalties in the first year of service.

Notes:

- 1. PowerDigm was later rebranded to Innova STS.
- In January 1996, Detroit Edison established a holding company — DTE Energy. "DTE" was selected because it was the existing stock symbol for Detroit Edison. "Energy" was chosen to represent the company's vision to provide integrated energy (not just electric) solutions to customers.



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