

UAA Professional Development Seminar Series

Development of an IoT-Based Power Monitoring System for the Substation of Petrochemical Facilities

Presented by, Long Zhao, University of Texas Arlington

Abstract Petrochemical industry not only consumes a large amount of electricity every year but also requires high-quality power supplies. Any unexpected power failure could shut down the entire production line and cause significant financial loss. Meanwhile, due to the large electricity consumption and intensive power demand, in-house cogeneration plants have been equipped for most petrochemical facilities. Thus, any power interruption or disturbance between a petrochemical facility and interconnected power grids could affect both sides of the power systems. Therefore, having high power quality becomes one of the most critical parts for