



SWITCH GEAR BUILDING CASE STUDY

COOLING FOR SWITCH GEAR BUILDINGS

Northern Air Systems recently had the opportunity to develop six integrated cooling systems for a large national financial institution. They have data centers located in Texas and Virginia. Our HVAC systems are placed on modular switch gear buildings, located outside of the main data centers. These buildings house all of the controls to run important electronics inside of the data centers.

Each switch gear building has three V180, 15-ton wall mount units that have an N+1 redundancy. This means two units will operate at once and the third is a backup. If one of the two units go down, then the third will automatically start up. It also means the units will work in rotation where one of the two units will turn off on it's own to rest and the third will start up to cover it.

All three units have an economizer built in. When the units sense that there is cold air outside, they will bring that cold air inside. This helps with efficiency and power usage. The units also have 10kW of heat, communicate through Modbus, are remote controlled via pads inside and were powder coated in a custom color (Ash Gray) to match the switch gear building color scheme. The manufacturer of the modular buildings installed the units but Northern Air was commissioned to be on-site to help with installation and start up at both locations.

To learn more about Northern Air Systems, visit our website today at www.northernairsystems.com.

