

# POWERPROFILE

**Customer:** Bank of America  
**Location:** Charlotte, North Carolina  
**Market Segment:** Mission Critical: Financial  
**Customer Business Issue:** Standby Power for a 2.8 million square foot, multi-use commercial space  
**Solution:** Six CAT® 3516 generators, CAT® Paralleling Switchgear and Transfer Switches



## POWER NEED

Charlotte, North Carolina, home to several major financial institutions, is currently the nation's second largest financial center, behind New York City. Bank of America, headquartered in the Queen City, spearheaded its One Bank of America Center project in 2008.

One Bank of America Center, located in the heart of uptown Charlotte, North Carolina, is a series of commercial developments operating as one unit in the center of one of the busiest financial hubs in the United States. The project includes the Bank of America Superblock tower, a 32-story high-rise office tower, which represents the bank's long-standing commitment to Charlotte's urban core as well as their dedication to creating sustainable work environments. The 75,000 square foot building, designed by architecture and design firm, Perkins+Will, is LEED Gold Registered. Sky gardens adjoin office floors at every third level for use as collaborative meeting spaces. An urban roof garden and a tiered multi-level green space adjoin the office tower; Founders Hall, a 5-story sub level parking garage with loading dock, and the 18-story Ritz Carlton hotel, the first LEED Certified Gold hotel in Charlotte.

## SOLUTION

Carolina CAT Power Systems partnered with Charlotte-based electrical contractor, WB Moore, as well as Balfour Beatty Construction, on this project. Six CAT 3516 generators, each producing 2,500 kW of power, were installed: five on top of a separate, existing 10-story parking garage, and one referred to as the "Life Safety Generator," located in the sub-level parking garage of the office tower, which had to be operational for the hotel while construction continued on the tower. A separate feed allows the generators to also provide backup power for the adjacent Bank of America Corporate Center.

The 3516 generators are also used for energy conservation. The bank keeps the electricity flowing through a peak load shaving effort that includes the CAT 3516 diesel generator sets, examining wholesale energy prices to determine the most cost-effective combination of potential power sources to meet demand at any given time. When it costs less to address a portion of the demand by generating its own electricity, they fire up one or all of the generator sets to fill the need. On afternoons and early evenings in the summer when local electric demand peaks, and the cost of purchasing energy on the energy markets is expensive, the bank may strike all of the generator sets.

"Keeping Bank of America's facilities up and running is our top priority," said Senior Project Manager for Carolina CAT Power Systems, Chris Griffith. "We will be there for them from installation through the life cycle of their equipment."

