

Cooling and Electrical Team Up to Protect Supercomputing Uptime



Designed to double its megawatts of capacity for High Performance Computing (HPC), a supercomputing center supporting large-scale projects at N+1 Tier II data facilities needed a partner to cost-efficiently elevate performance across their entire mission critical infrastructure. ABM delivered strategic electrical and cooling solutions that helped optimize operations, lower costs, and increase uptime.

CHALLENGE

This N+1 Tier II supercomputing center caters to a wide range of industries and needed services that meet strict standards across multiple technical disciplines. With tons of cooling capacity and state-of-the-art power distribution for critical HPC assets on site, they required operations and maintenance support that adheres to engineered specifications for a vast array of equipment.

Higher Service Standards

The ABM solution applies Tier III and Tier IV service standards to these N+1 Tier II data centers. The ABM team now operates, maintains, and services all mission critical equipment within scope. ABM also performs daily rounds to verify operations and minimizes infrastructure issues. The ABM team also and escorts vendors and construction personnel to assure work performed meets standards of uptime protection.





The challenge for this mission critical facility was finding a partner with the specialized expertise and integrated solutions to effectively operate, maintain, and improve their infrastructure.

SOLUTION

High-level Specialized Expertise

ABM was selected for its ability to self-perform mission critical services along with its extensive experience with top-tier data centers. The ABM solution was designed to deliver an efficient and comprehensive service plan.

Full Infrastructure Support:



Equipment and Power

ABM maintains equipment across the supercomputing center's entire infrastructure, including switching, power, backup power, and power distribution.

- Paralleling switchgear
- Double conversion and rotary UPS
- VLRA battery backups
- Megawatts of standby generator capacity
- PDUs and distribution panels



Cooling and Climate Control

ABM's depth of mechanical and HVAC services ensure that the datacenter has accurate, resilient, and efficient climate control from chilling to thermal storage and humidity control.

- 500-ton air-cooled chillers
- 150-ton dry coolers
- Thermal storage tanks
- Free cooling, airside economizers, waterside economizers
- Humidity control
- Custom AHUs, CRAC/CRAH units, fan walls, and in-row cooling
- Smoke detection





BENEFITS

ABM has delivered consistent, measurable value for our supercomputing partner with mission critical solutions focused on controlling costs and protecting uptime.

- Achieved uptime assurance at or above industry standards for N+1 Tier II
- Increased cost efficiency
- Integrated, self-performed services across all mechanical maintenance and in-scope electrical system upgrades
- Improved operational efficiency across multiple facilities (metric)
- Provided greater control during critical events

ABM Mission Critical Services



ABM services and maintains data centers with 4000+ megawatts of power capacity.



US government security clearance



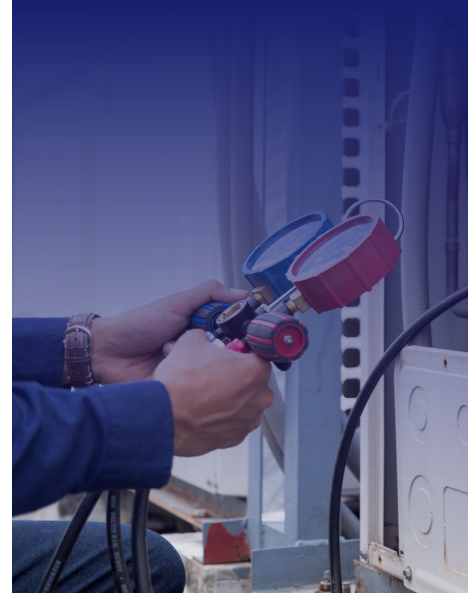
Years of mission critical experience



50% of Fortune 500 companies rely on ABM

ABM MISSION CRITICAL CERTIFICATIONS

- NETA
- Liebert/Emerson
- Stulz
- DataAire
- CDCD



ABM helped this data center optimize operations, lower costs, and increase uptime.

Find out how we can make it possible for you by calling **866.624.1520** or visiting **ABM.com**.