



Hackensack Meridian Health Hackensack University Medical Center New Central Utility Plant & 26kV Substation

PROJECT INFORMATION

CONCORD DIVISION
Power & Infrastructure

PROJECT LOCATION
Hackensack, NJ

MARKET
Healthcare/Hospital

SERVICES
Engineering Design

CONSTRUCTION COST
\$100 Million

REFERENCES

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PROJECT SUMMARY

Based on prior performance Concord was selected by HUMC to be the engineer of record for a new free standing Central Utilities Plant (CUP) that will support all electrical and thermal needs for the existing HUMC complex and the new 500,000 sf tower. The CUP will consolidate all services and required 2 “enabling phases” to support the relocation of existing services. Of prime importance was the relocation and expansion of the existing 26 kV substation.

PROJECT HIGHLIGHTS

- New free-standing CUP that will support all electrical, chilled water, steam and emergency power needs for the existing HUMC complex and new 500,000 SF tower.
- 12,000-ton hybrid chilled water plant comprising steam turbine and electric chillers
- 180,000 lb/hr boiler plant
- 7.5MW diesel generator plant with provisions for additional temporary power
- The new three-story facility is located in a city and adjacent to a residential apartment property. The design incorporated stringent acoustic requirements within the severely constrained footprint.
- (2) “enabling phases” to support the relocation of existing services
- Relocation and expansion of existing 26 kV substation
- Hospital’s main 26 kV distribution system designed to accommodate a pair of 26 kV underground redundant feeders.
- The project involved multiple phasing of the projects to ensure uninterrupted operation of the hospital throughout the construction period.
- All designed per PSE&G standards and guidelines. This included close coordination and meeting with PSE&G for interconnections, metering requirements, SCADA communication, etc.
- [PEER](#) (Performance Excellence in Electricity Renewal) pending

SUCCESSFUL SWAP TO NEW 26 KV SUBSTATION

- The new dual feed 26 kV utility interconnect substation and 13.2 kV distribution switchgear, designed by Concord, is fully operational & is now repowering the existing hospital campus to make way for the future 530,000 sf hospital expansion.