

CPN POWER

UPS Systems for Diagnostic Imaging
& Radiation Therapy Applications

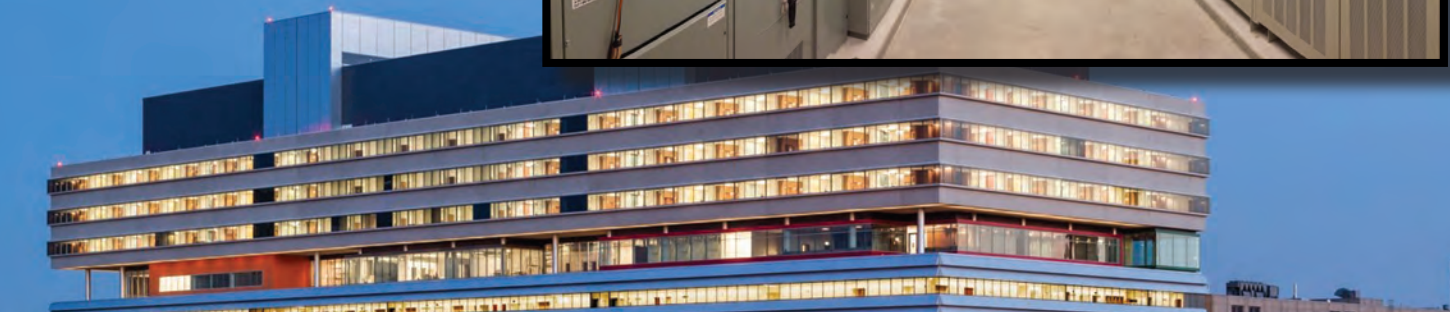
CENTRAL UPS IMAGING PROJECTS



- **NYU Tisch II Langone Medical Center in New York, NY** - The hospital recently installed a 225 kVA UPS to support a Siemens Aera 1.5T MRI and a Siemens Skyra 3T MRI. In total, CPN Power has provided over 30 UPS or Double Conversion Power Conditioners to NYU over the past 15 years.
- **Massachusetts General Hospital in Boston, MA** - The hospital installed (3) 150 kVA UPS with Flywheels to support Multiple OR Suites. Each Isolation Panel (two per room) were fed from different 150 kVA UPS Systems. The loads were rotated through the (3) UPS Systems to provide a high level of redundancy in the OR Suites.
- **Abington Asplundh Cancer Center in Willow Grove, PA** – Abington Health has previously installed multiple 300 kVA UPS for the ED department supporting several CT Scanners and Rad Rooms. A 2nd 300 kVA UPS was installed at an offsite Outpatient Center supporting an MRI, CT Scanner, Rad Room, Mammo, and Ultrasound. The Cancer Center Project also installed a 300 kVA UPS to support (2) Varian True Beam LinAc's, (1) Varian Edge LinAc, (1) Siemens Somatom Definition AS CT Scanner, (1) HDR Room, and (1) IR Lab.
- **York Hospital in York, PA** – The hospital installed a 2nd 500 kVA UPS to support (1) CT Scanner, (2) Rad Rooms, (1) IR Lab with plans for many additional modalities in the coming future.
- **Lancaster General Hospital in Lancaster, PA** – The hospital installed a 500 kVA UPS to support (9) Cath, EP, and Hybrid OR Labs. A second 500 kVA UPS is planned for 10 Radiology Suites.
- **Johns Hopkins Health – Suburban Hospital in Bethesda, MD** – The hospital installed a 500 kVA UPS to support (1) Siemens 3T MRI, (1) Siemens 1.5T MRI, (1) Siemens 64 Slice CT Scanner, (1) GE Lightspeed VCT CT Scanner, (3) Siemens IR/Angio Labs, (3) Cath Labs, and room for multiple future modalities.
- **Summit Medical Group – MD Anderson Cancer Center in Florham Park, NJ** – The group has installed a 300 kVA UPS to support (1) MRI, (1) CT Scanner, and (2) Siemens IR/Cath Labs.



**25 Imaging Suites
and 25 OR Suites
Supported by the Two Central
500 kVA Imaging UPS System**



**The University of Chicago Medical Center
A LARGE CENTRAL IMAGING UPS CASE STUDY**

**MODALITIES SUPPORTED BY THE TWO CENTRAL,
PARALLEL 500 KVA IMAGING UPS SYSTEM**

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|---|--|--|
| 1 Philips Ingenia 3T MRI | 25 OR Suites – 1 3 kVA isolation panel per OR Suite | 1 Siemens Artis Zeego Angio/1 Siemens Agile RAD/Fluoro Hybrid Lab |
| 2 Philips FD 20/10 Bi-Plane IR Labs | 1 Siemens Luminous TF GI Fluoro | 2 Philips FD10 Bi-Plane EP Labs |
| 1 Philips FD20/10 Single Plane IR | 1 Siemens Artis Zee MP GI Fluoro | 1 Philips FD20 Single Plane Cath Lab |
| 1 Philips Allura Single Plane IR Lab | 1 Siemens Luminous TF Bronch Fluoro | 1 Philips FD20 Bi-Plane Cath Lab |
| 4 Philips FD20 Single Plane IR Labs | 2 GE Discover XR Digital RADs | |
| 1 Philips Brilliance 256 Slice iCT | | |
| 1 Philips 64 Slice CT | | |

- **Roxborough Memorial Hospital in Philadelphia, PA** – The hospital has installed a 300 kVA UPS to support a Siemens Ysio Rad Room, a Siemens Definition AS 64 Slice CT Scanner, a Toshiba Aquilion CT Scanner, a Siemens CR Rad Room, a GE Precision R&F Room, a Toshiba Titan 1.5T MRI, and a IR Lab/Special Procedure Room.
- **Children's Hospital of Philadelphia (CHOP) in Philadelphia, PA** – CHOP has installed a 667 kVA N+1 Flywheel UPS System to protect 11 Imaging modalities + Future modalities at a Specialty Care Center. A 275 kVA Flywheel UPS to protect an MRI and Rad Room at another Specialty Care Center. There are plans to continue supporting Radiology and Cardiology modalities at other facilities.
- **OSF St. Francis Hospital in Peoria, IL** – The hospital installed a 500 kVA UPS to support (15) Imaging suites in Radiology and Cardiology – including a new Intraoperative iMRI Suite.
- **Monongalia "Mon" General Hospital in Morgantown, WV** – The hospital installed a 300 kVA UPS to support (1) Philips Cath Lab, (1) Siemens EP Lab, and plans for (2) future Labs.
- **North Vista Hospital in Las Vegas, NV** – The hospital has installed a 300 kVA UPS to support (1) Philips Brilliance CT Scanner, (1) Siemens MCR CT Scanner, (1) Siemens Luminous R&F Room, (1) Siemens Ysio Rad Room, (1) Philips Achieva 1.5T MRI, and (1) Philips Allura Cath Lab.
- **Mercy Medical Center in Mason City, IA** – The center installed (3) 225 kVA UPS in parallel to support (2) Cath Labs, (2) 64 Slice CT, (1) PET/CT, (1) SPEC/CT, (4) R&F Rooms, (2) Rad Rooms, and several future Radiology and Cardiology Suites.
- **McFarland Clinic in Ames, IA** – The clinic installed a 300 kVA UPS to support (1) Siemens Verio 3T MRI, (1) Toshiba Aquilion 64 Slice CT, (1) Siemens mCT PET/CT, (1) Future 1.5T MRI, (2) Hologic Selenia Mammography, (1) GE Seno Advantag Mammo Workstation, (1) Mammotome Biopsy System, (4) Toshiba Aplio Ultrasounds. A 225 kVA UPS was also installed at a site in Marshalltown, IA to support (1) Siemens Aera 1.5T MRI, and (1) Toshiba Aquilion 64 Slice CT.
- **Yale New Haven Hospital in New Haven, CT** – The hospital installed a 225 kVA UPS to support a Philips Bi-Plane Pedi Cath Lab. A 300 kVA UPS installation will protect a Neuro Bi-Plane Lab and a Cath/Hybrid Lab with capacity for future Labs.



Abington Memorial Hospital

Abington Memorial Hospital **UPDATING THE ED WITH A CENTRAL UPS FOR IMAGING**

MODALITIES SUPPORTED BY THE CENTRAL 300 kVA IMAGING UPS

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|-------------------------------------|------------------------------------|
| 1 Philips Digital Diagnost Rad Room | 1 Philips Brilliance 256 Slice iCT |
| 1 GE VCT 64 Slice CT | 2 Future Modalities |



- **St Mary's Regional Medical Center in Reno, NV** - The hospital installed two Central UPS. A 500 kVA UPS for Radiology supports (2) GE MRI, (1) GE CT Scanner, (1) Siemens CT Scanner, (1) Angio Lab, (2) R&F Rooms, (3) Rad Rooms, (2) Nuclear Cameras, multiple Radiology receptacles, and the Radiology Laboratory. The hospital also installed a 300 kVA UPS for Cardiology to support (1) Toshiba Hybrid Lab, (2) Cath Labs, and (2) Future Modalities.
- **UVA (University of Virginia Medical Center) in Charlottesville, VA** - The hospital installed a 500 kVA UPS 7 years ago to support (10) Siemens and Philips Cath and EP Labs and an IMRIS Intraoperative MRI Suite. The hospital then installed a 300 kVA UPS to support (5) Siemens IR Labs. That was followed by installation of a 300 kVA and 150 kVA UPS for multiple MRI's. In early 2017, the hospital ordered a 500 kVA UPS to support (2) CT Scanners, (3) Cath Labs, (6) IR Labs, (2) Hybrid OR Suites, (2) ER Rad Rooms, and (4) Trauma Rooms
- **Kaiser Permanente in various locations** – Kaiser has installed many CPN Power UPS Systems at various facilities ranging from a 150 kVA UPS supporting (1) IR Lab to a 750 kVA UPS to support (22) Imaging Suites in Radiology and Cardiology. Kaiser Vallejo installed (1) 225 kVA UPS to support an IR Lab and CT Scanner. A 2nd 225 kVA UPS was also installed to support (2) MRI. Kaiser Redwood City installed (1) 300 kVA UPS for Radiology and a 2nd 300 kVA UPS for Cardiology.
- **Harlingen Medical Center in Harlingen, TX** – The hospital purchased a 500 kVA UPS recently to support (1) MRI, (1) CT Scanner, (2) Cath/EP Labs, (1) Cysto Room, (2) Rad Rooms, (1) R&F Room, Nuc Camera, Mammo, with room for growth.
- **Brigham and Women's Hospital in Boston, MA** – The hospital installed a 500 kVA UPS with flywheels several years ago to support (4) GE single and Bi-Plane EP Labs, (2) Siemens Zeego Hybrid OR Suites, and capacity for (6) future Labs. More recently CPN Power received an order for (1) 750 kVA UPS with Flywheels to support (4-5) MRI's, (1) CT Scanner, (2) PET/CT, (1) Fluoro Room, (3) Animal MRI's, (8) X-Ray Rooms, future MRI upgrades, and capacity for many future modalities. A 2nd 300 kVA UPS with Flywheels was purchased to support Network IT closets. A 3rd 150 kVA UPS with Flywheel was purchased to support clinical loads.
- **LifeBridge Health Sinai Hospital in Baltimore, MD** – The hospital has purchased multiple UPS for imaging projects over the years. Past projects include: (1) 150 kVA UPS to support a Siemens 3T MRI and (1) 375 kVA UPS to support (5) Philips Labs with capacity for several future Labs; and a 300 kVA UPS for the ED to support (2) Philips 256 Slice CT Scanners and (3) Rad Rooms was also installed. Recently, another 300 kVA UPS has been installed at Northwest Hospital to support (5) imaging suites.



Hartford Hospital

THREE BUILDINGS – THREE CENTRAL IMAGING UPS SYSTEMS

BLISS BUILDING – 500 kVA UPS

- 2 Siemens Artis Zee Angio Labs
- 1 Philips Eleva Fluoro System
- 1 Siemens Agile Fluoro System
- 1 Siemens Sireskop Fluoro System
- 2 GE Discovery XR656 Rad Room
- 1 Philips Digital Diagnost Rad Room
- 1 Siemens Artis Zee Cardiac Cath Lab C
- 1 Philips Allura FD10 Cardiac Cath Lab D
- 1 Siemens Urooskop Cysto System
- 3-4 Future Modalities

CORE BUILDING – 500 kVA UPS

- 1 (1) GE VCT Scanner
- 1 GE Qxi CT Scanner
- 1 Siemens Artis BA Bi-Plane Angio Lab
- 1 GE VCT Scanner
- 1 Siemens Artis Zee Bi-Plane Neuro Angio Lab
- 1 Siemens Artis BC Bi-Plane Angio Lab
- 2 GE Discovery XR656 Rad Rooms
- 1 Siemens Zeego Robotic Angio Lab
- 1 45 kVA Step-down Transformer for IT and Control Room Loads
- 3-4 Future Modalities

HIGH BUILDING – 300 kVA UPS

- 1 Philips Allura FD20 Cardiac Cath Lab A
- 1 Philips Allura FD10 Cardiac Cath Lab B
- 1 Siemens Urooskop Cysto System
- 1 GE Discovery LS PET/CT
- 2 Future SPECT/CT



- **Mercy Hospital in Ardmore, OK** – The hospital installed a 225 kVA UPS to support (1) Siemens Aera 1.5T MRI, (1) Siemens Luminous Max R&F, and (1) GE Revolution Evo CT Scanner.
- **The Christ Hospital Medical Center North Outpatient Facility in Liberty Twp, OH** – The hospital installed a 300 kVA UPS System to protect (1) Philips 256 Slice iCT Scanner, (1) Philips Ingenia 1.5T MRI, (1) Rad Room, and the MRI Chiller.
- **Methodist University Hospital in Memphis, TN** – The hospital installed a 300 kVA UPS to support (1) Philips FD20 Cath Lab, (2) GE Innova 2100 Cath Labs, (1) Siemens Artis Q Bi-Plane Cath/EP Lab, (1) Siemens Artis Zee Cath Lab, and (1) Siemens Artis Zeego Cath Lab. This UPS was the first installation at the hospital and was installed to determine the impact of resolving power problems and outages for imaging applications.
- **Methodist University Hospital in Memphis, TN** – The hospital has also ordered a 500 kVA UPS to support (2) GE CT Scanners, (1) GE Definium 8000 Rad Room, (3) GE R&F Rooms, (2) Nuc Med Camera, (1) GE Optima 640 NM/CT, (1) GE Optima 450W MRI, (1) GE Excite 3T MRI, (1) GE Infinity Hawkeye SPECT/CT, (1) Philips FD20 IR Lab, and (2) GE IR Labs.
- **Methodist Hospital North in Memphis, TN** – The hospital is also ordering a 500 kVA UPS to support (1) GE Brightspeed 16 Slice CT Scanner, (2) GE VCT 64 Slice CT Scanners, (2) GE Precision R&F Rooms, (1) GE XT650 Digital Rad Room, (1) Fuji/Siemens Chest Rad Room, (1) OEC Uroview Cysto Room, (1) GE Optima 450W MRI, (3) GE Discovery NM630 Nuclear Cameras, (1) GE Innova IR/Special Procedure Room, (2) Siemens Artis Zee and dBA Cath Labs, and (1) GE Innova Cath Lab.
- **Pampa Regional Medical Center in Pampa, TX** – The medical center installed a 300 kVA UPS to support a Philips Integris Cath Lab, Philips Brilliance 64 Slice CT Scanner, a GE Precision R&F Room, a Philips R&F Room, a Nuclear Camera, a Siemens Inspiration Mammography, and a Philips 1.5T MRI.
- **SSM St. Louis University Hospital in St. Louis, MO** – The hospital just ordered a 750 kVA UPS to support (1) Hybrid OR (Cath), (1) Hybrid OR (IR), (1) Hybrid OR (swing), (1) EP Lab, (2) Cath Labs, (4) IR Labs, (3) CT Scanners, (2) 1.5T MRI, (1) PET/CT, (1) 3T MRI, (2) IR Procedure Rooms, (2) SPECT/CT Scanners.
- **Valley Medical Center in San Jose, CA** – The medical center installed a 225 kVA Double Conversion Power Conditioner to support a GE Discovery 64 Slice 610/710 PET/CT.
- **HSHS St. Elizabeth Hospital in O'Fallon, IL** – The hospital installed a 300 kVA UPS to support (2) Siemens Artis Q Cath Labs, (1) Siemens Artis Q Vascular Lab, (1) Siemens Artis Zee Bi-Plane EP Lab, and (1) future Hybrid Lab.

Dell Seton Medical Center A FLYWHEEL CASE STUDY

MODALITIES SUPPORTED BY THE CENTRAL 500 kVA IMAGING UPS SYSTEM

- | | |
|--------------------------|--------------------------------------|
| 1 Cath Lab | 2 R&F Rooms |
| 1 Hybrid OR Suite | 2 Rad Rooms |
| 1 IR Lab | 2 120/208 Distribution Panels |
| 2 MRIs | • Future MRI Upgrades |
| 2 CT Scanners | |



Seton Medical Center
at The University of Texas



- **Carle Hospital in Urbana, IL** – The hospital installed a 750 kVA UPS several years ago to support (8) Cath Labs, (1) EP Lab, (1) IR Lab, (1) PET/CT, various critical outlets, and all Network Closets throughout the Heart and Vascular Institute. More recently, the hospital updated the ED to include a 375 kVA UPS to support (2) GE CT Scanners, (1) GE MRI, and (2) GE Rad Rooms.
- **Sutter General Hospital in Sacramento, CA** – The hospital installed a 500 kVA UPS to support Cardiology/Radiology Suites.
- **St. Mary's Hospital in Passaic, NJ** – The hospital has installed a 375 kVA UPS to support (2) GE Innova Cath Labs, (1) GE Innova EP Lab, (2) GE Advantix R&F Rooms, (1) Siemens Luminous R&F Room, (2) Siemens Ysio/Max Rad Rooms, (1) GE Excite 1.5T MRI, (1) GE Lightspeed VCT 64 Slice CT Scanner, (1) Siemens Biograph mCT, (1) Special Procedure Room, (1) Siemens Prime Mammo, and (2) GE Millenium MG Nuclear Cameras.
- **North Shore Long Island Jewish Hospital on Long Island, NY** – Over the years, CPN Power has supplied many UPS Systems throughout the NSLIJ hospital system. The hospital chain has recently purchased/installed several 375 kVA UPS Systems to support Diagnostic Imaging Centers on Long Island. The UPS Systems are typically supporting (1-2) MRI, (1) CT Scanner, (1) Rad Room, and various IT and miscellaneous loads.
- **University of Florida MOB in Jacksonville, FL** – The facility has installed a 100 kVA UPS to support (1) Hitachi Oasis MRI.
- **Texas Health Presbyterian Hospital in Plano, TX** – The hospital purchased a 225 kVA UPS several years ago to support (2) Labs. Just recently, the hospital completed installation of a 300 kVA UPS to support (2) Siemens Cath Labs, (1) Siemens EP Lab, and (2) Future Labs or other modalities.
- **Northwestern Lake Forest Hospital in Lake Forest, IL** – The replacement hospital installed a 500 kVA UPS to support (1) Philips Juno DRF R&F Room, (1) Philips Easy Diagnost Eleva DRF R&F Room, (2) Carestream DRX Evolution, (2) GE Optima NM 640 (4 Slice) SPECT/CT, (1) Siemens Skyra 3.0T MRI, (1) Siemens Aera 1.5T MRI, (1) Omega Medical Systems E-View Single Plane IR/Angio/GI Lab, (1) Philips Allura FD20/20 Biplane Interventional IR Lab, (1) Philips Allura Xper FD20 Single Plane IR Lab, (1) Philips Allura FD20 Ceiling Single Plane Cath Lab, (1) Siemens Somatom Definition AS+ (128 Slice/Fast Care) CT Scanner, (2-3) Future Modalities.

Kaiser San Diego Central Hospital
A NEW HOSPITAL WITH NEW CENTRAL
UPS FOR RADIOLOGY AND CARDIOLOGY

RADIOLOGY

- 1 Philips Juno Digital R&F Room
- 2 Philips Digital Diagnost VS 3.0
- 1 GE Optima MR450W GEM MRI
- 2 GE Optima CT660 CT Scanners
- 1 Siemens Symbia Intevo 6 SPECT/CT
- 1 Siemens Symbia SPECT/CT

CARDIOLOGY

- 1 Philips Bi-Plane FD20 IR Lab
 - 1 Philips Single Plane FD20 IR Lab
 - 1 Philips Bi-Plane FD20 EP Lab
 - 1 Philips Single Plane FD20 Cath Lab
 - 1 Philips Bi-Plane FD-20 Cath Lab
- Note:** Planned build out for Cardiology

