

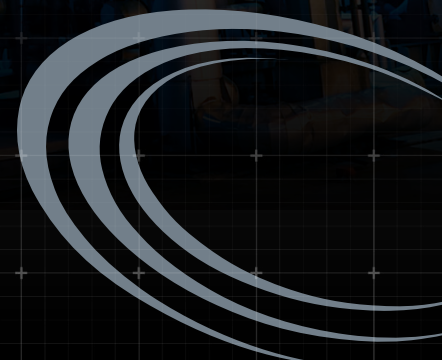


# ON-SITE POWER GENERATION SYSTEMS

**Single Source Solution for  
Advanced Electrical Power  
& Control Systems**



Tradition. Technology. Innovation.



# For Over 30 Years, IEM Power Systems has Specialized in Power Control Systems for the On-Site Power Generation Industry

IEM Power Systems specializes in the design and build of power control systems for low and medium voltage paralleling switchgear. We have been a leader in complex and innovative applications where custom design and engineering are required. Our custom designed systems can encompass a wide variety of configurations and control schemes for ultimate equipment reliability and peak performance to meet all the demanding power requirements of today's world.

Our flexible approach allows for various configurations of equipment and controls. All specially designed systems can include multiple generators with gas or diesel reciprocating engines, gas or steam turbines, hydraulic turbines, or wind turbines as prime movers. The systems may be single or three-phase, 50 or 60 cycles, and range up to 15kV. We are qualified to build products that meet or exceed the standards of all major electrical regulatory bodies and associations.

## Application Capabilities:

- Emergency Standby
- Utility / Generator Paralleling
- Prime Power
- Base Load
- Peak Shaving
- Co-Generation
- Resource Recovery

## Application Examples:

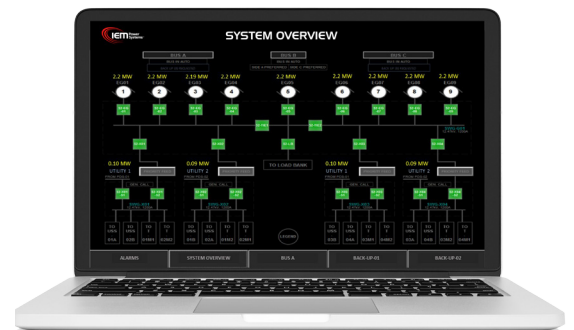
- Manufacturing & Food and Beverage Processing
- Financial Institutions & Data Centers
- Hospitals & Educational Campus
- Resorts & Sports Stadiums
- Transportation (Including airports and tunnels)
- Commercial Office Buildings and Retail Centers
- Secure Government and Military Sites



## Remote Monitoring and Automation Software

IEM delivers automation services and end-to-end system monitoring for a wide range of equipment across an array of applications and industries. Our monitoring provides data locally, either as a standalone viewer or as an input to the facility's BMS. Our system also offers secure, web-based remote viewing in a clear format, at multiple levels for authorized facility managers and technicians, keeping them informed wherever they are.

Using our monitoring software, users can view the health of their facility with customized tools to store and export data for reporting, alarming and trending. Our automation software adds the capability to manage the facility's power system.



Both our monitoring and automation systems are versatile and fully customizable to meet your exact requirements.

# Low and Medium Voltage Paralleling Systems

## Emergency Standby

Emergency Standby systems typically consist of one or more generators with an automatic starting system and a transfer switch to connect the generator(s) to the load.

The generators are utilized only when commercial power fails. Many owners are realizing that this “standby” equipment can be put into more constant service and save thousands of dollars in utility costs.

Ask us how we can help you use your stand-by generators to reduce your costs or even generate income.

## Prime Power

Prime Power systems provide all the power for a given installation. There is no normal connection with commercial power. In some cases the utility might serve as emergency standby to the on-site prime power system. IEM Power Systems can provide the basic controls required for this relatively simple system.

## Base Load

Base Load systems use the on-site power generation equipment to provide for the constant, essential, and continuous loads. Commercial power is imported to handle peak and variable loads.

IEM Power Systems synchronizing and paralleling switchgear along with import/export controls and utility protective relaying provide a fully integrated and reliable system.

## Peak Shaving

Peak Shaving applications use the on-site power generation equipment to handle variable loads above a given maximum level or peak. This helps the customer avoid costly “demand” charges from the utility company.

IEM Power Systems synchronizing and paralleling switchgear along with import / export controls and utility protective relaying provide a fully integrated and reliable system.

## Co-generation

Co-generation systems may use the electrical power in any of the above arrangements and they recover useful heat energy from the prime movers exhaust and cooling systems. This heat may be used directly in a manufacturing process, space heating and air conditioning, or to drive additional electric generating equipment.

## Resource Recovery

Resource Recovery systems capture an otherwise wasted fuel source such as landfill or digester gases to run electrical generating equipment. Generated power is used to run the plant itself with surplus power being exported to the commercial grid.



## Service and Support

IEMPS take pride in the quality of our equipment and our responsiveness to the market. Our complete service from pre-sales technical support, commissioning and after-sales care will ensure that your equipment is installed and operating to your requirements. We encourage customers to participate in factory testing to confirm that equipment is performing to specification before it leaves the factory.

### IEMPS provides the following services:

- Factory Systems Integration Test
- Control System Training and Support
- Installation
- Site Coordination with Customers, Contractors and other Suppliers
- On-Site Testing
- Start-up and Commissioning
- Technical Support
- Service and Warranty

### Retrofitting Services

IEM Power Systems understand that, as assets age and power requirements increase, cost effective upgrades are necessary to ensure that facilities can replace outdated, inefficient and unreliable legacy equipment. Our retrofitting services provide a full range of custom options from simple component upgrades to the provision and integration of whole sections of new equipment.

Our experienced team of engineers and technicians will evaluate your existing assets, work with you to understand your evolving power needs and develop a custom solution to modify your facility's equipment. Our aim is to maximize the reliability, productivity, and efficiency of your power system, all while minimizing downtime as the improvements are made.

### IEM Power Systems

IEM Power Systems is a subsidiary of Industrial Electric Mfg. (IEM), North America's largest independent full-line manufacturer of electrical distribution and control systems. We design, build and integrate innovative electrical power systems world-wide by providing complete turn-key solutions for a wide range of power applications. With facilities in the U.S. and Europe, we are able to serve businesses worldwide with innovative solutions to meet their facility's needs. Our quality products and superior service offering allows us to continually serve customers who value quality and reliability.



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