Increased reliability for a given area; help critical industries succeed

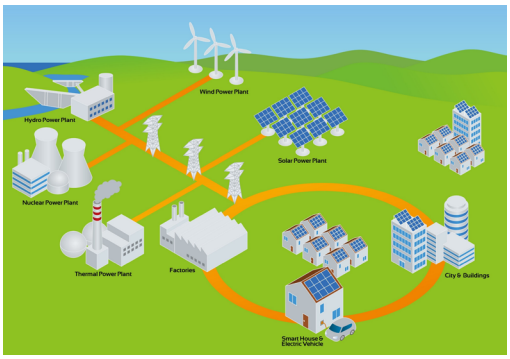
Connect existing generation facilities with critical infrastructure

Resiliency Centers: post-storm medical, food, shelter, financial, communications

MICROGRIDS

Microgrids are all about power system reliability and getting the most out of on-site generation. A microgrid contains all the components of the "macro-grid" – generation, distribution, load balancing, protection, economic dispatch, real-time communications – encapsulated in a smaller area. This concentration of assets and grid management makes it possible to automate most of the day-to-day operations and control, even in very complex systems.

Baseload and dispatchable resources may include natural gas/combined heat and power (CHP), fuel cells, biofuels, diesel gensets, battery storage, photovoltaic (PV) solar, hydro, and wind as the site dictates. Careful design, vendor choice, and comprehensive testing are crucial to a successful microgrid implementation.



SERVICES

Geomatics

- Surveying
- Identify size requirements and land constraints
- Laser scanning and 3D modeling
- Unmanned Aerial Vehicle (UAV) inspections and mapping

Consulting

- Procurement services – proposal for facilities, PPA, vendor evaluation, and recommendations
- Technical review during contract negotiation
- Engineering oversight during construction

Engineering

- Planning and analysis – feasibility, steady state, fault conditions, transients, power quality and harmonics, interconnection studies
- Civil and electrical design, requirements, bidding, construction oversight, testing & commissioning, act as owner's engineer
- Project coordination and system integration
- Communication systems subject matter expert (SME)

For more information, please contact microgrids@pdengineers.com

patterson & dewar ENGINEERS

OUR LOCATIONS

Georgia
850 Center Way
Norcross, GA 30071
(770) 453-1410

Tennessee
1531 Hunt Club Blvd.
Suite 200
Gallatin, TN 37066
(615) 527-7084

Texas
15924 Midway Rd.
Addison, TX 75001
(214) 461-0760

Virginia
4511 Daly Dr.
Suite I
Chantilly, VA 20151
(571) 299-6773

Arizona
1525 North Hayden Rd.
Suite 100
Scottsdale, AZ 85257