

PowerSecure and Crowley LNG Microgrid Solutions

Executive Summary

Why should Crowley / PowerSecure design, build, own, operate and maintain your Microgrids?

We are a Trusted Partner

- Strong values
- History of success in implementation and operations
- Focus on long-term partnerships
- Full-service approach
- Highest reliability in the industry
- Simplified and flexible energy as a service contracting models

We Have an Innovative Product Suite

- Commitment to maximize sustainability
- Industry leading microgrids controls experience
- Extensive experience integrating various generation and renewable resources
- Manufacture customized switchgear, gensets and energy storage

Single Source Accountability

- Crowley/PowerSecure guarantees fuel and electricity to a 99.5% reliability level
- In-house engineering, construction and service expertise
- In-house operating expertise
- Preventative and corrective maintenance plans and strategies
- Industry leading safety and quality programs
- Emergency response

We provide Cost Predictability and Maximum Value

- Long-term cost assurance
- Performance assurance
- Allows your capital to be deployed into core business initiatives
- Optimizes value streams
- Deep knowledge and understanding of energy markets and policy

Overview of Alliance

In the aftermath of Hurricane Maria, Crowley and PowerSecure formed an alliance to Design-Build-Own-Operate state of the art Microgrids in Puerto Rico and Guarantee Fuel and Electric Supply to a 99.5% level of reliability. By Combining Crowley's LNG fuel supply and import/transportation expertise with PowerSecure's industry leading Microgrid capabilities, we believe this team is uniquely qualified to provide the most reliable and cost effective microgrids to serve industrial customers.

PowerSecure

PowerSecure Inc. was founded in April, 2001 and has grown exponentially over the years, first trading on NASDAQ in 2006 and then NYSE in 2011, before becoming a part of the Southern Company in May of 2016. We have become the leading provider of turnkey microgrid solutions according to GreenTech Media Research (GTMR®) responsible for over 41% of the microgrid capacity in the U.S. Our nearly 3000 MWs of microgrids include distributed low emissions generation, fuel cells, energy storage, CHP and solar, often combined with traditional Central Utility Plant (CUP) assets.

Being an integral part of the Southern Company, gives PowerSecure tremendous depth and breadth of financial and energy resources, which we believe is unparalleled in the industry. PowerSecure's history and reputation for speed and innovation in the energy market has only been further enhanced by Southern Company's \$50B balance sheet and a focus on a sustainable energy future.

PowerSecure is made up of three major divisions including: Distributed Infrastructure (Microgrids). Utility

Infrastructure and Energy Efficiency all providing turnkey design, build, maintain or own/operate full service delivery. We are unique in that we have vast experience across the entire electrical grid using 100% internal resources.



Crowley Maritime Corporation has been in business for more than 125 years and has been safely and reliably serving the Puerto Rico trade for 60+ years. Through its subsidiary, Crowley LNG Puerto Rico, LLC., Crowley acts as an intermediary between LNG suppliers and end-users in the sale, marketing, transportation and delivery of Liquefied Natural Gas (LNG) for boiler fuel or power generation. Our team has comprehensive experience in negotiating, executing and administering natural gas supply agreements, including the commodity, pipeline transportation and liquefaction functions of the supply chain. The coalescence of Crowley Fuels commodity expertise in natural gas supply, and our parent Crowley Maritime Corporation, with a diverse network of trucking providers and the largest U.S. flagged vessel fleet in the United States, has made our LNG distribution model the most efficient and trusted among our customer base.

To put it simply, Crowley provides “last-mile” LNG logistical solutions for customers by:

- 1. Sourcing LNG for the customer through our existing LNG supply agreements;
- 2. Transporting LNG from the liquefaction/supply site to the customer, via truck or vessel, or a combination of the two.

Customer Benefits

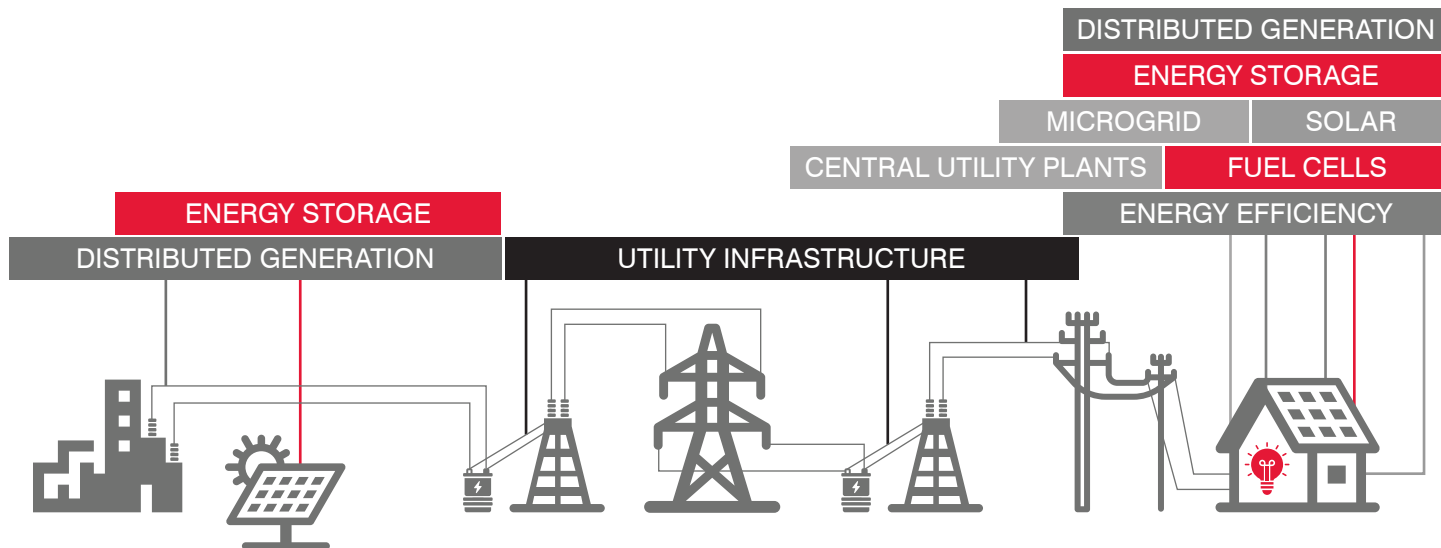
We have saved our customers over \$71M in energy costs and untold millions in business continuity benefits. Our 2.5GWs of microgrids serve over 1600 customers and provide extraordinary financial, environmental, emergency preparedness and reliability/resiliency/business continuity benefits including:

End-Use Customer Benefits	Utility Customer Benefits	LNG-Use Benefits
<ul style="list-style-type: none">▪ Energy Supply Cost Reductions▪ Improve Reliability and Resiliency▪ Carbon/Emissions Mitigation	<ul style="list-style-type: none">▪ Peak Load Management▪ Grid Frequency/Voltage Control▪ Provide Non-Spinning Substitutes for Spinning Reserve▪ Economic Integration of Renewables▪ Address Transmission and Distribution Constraints	<ul style="list-style-type: none">▪ Free Cooling▪ Stability of Supply▪ Pricing Stability vs Diesel and Propane▪ Carbon Emissions Reduction▪ Sulphur Emissions Reduction▪ Maintenance Cost Reduction

CARBON DIOXIDE EMISSIONS COEFFICIENTS BY FUEL			
	Pounds CO2	Pounds CO2	CO2
Carbon Dioxide (CO2) Factors	Per Unit of Volume or Mass	Per Million Btu	% Increase Over LNG
Propane	12.7 gallon	139.0	16%
Kerosene	21.5 gallon	159.4	27%
Natural Gas	9.7 gallon	117.0	0%
Gasoline	19.6 gallon	157.2	26%
Diesel Fuel	22.4 gallon	161.3	27%

Technical Approach

Our approach to Microgrids is to first fully understand the energy needs of our customers and then design-build-own-operate a microgrid to optimize reliability and sustainability at the lowest cost possible. Crowley will guarantee LNG fuel supply and PowerSecure will guarantee electric supply to a 99.5% reliability level.



PowerSecure manufactures key components of our microgrid, mission critical and energy solutions strategically selected to create the most reliable and cost effective solutions on the market.

OUR SERVICES WILL INCLUDE

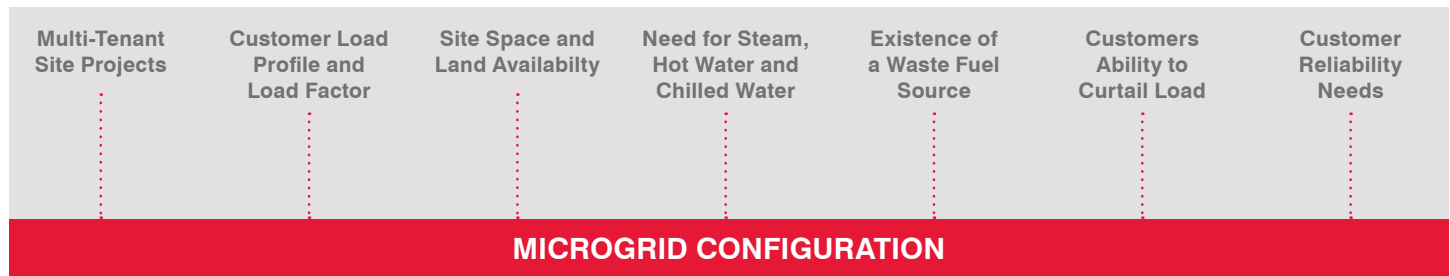
- Engineering Design
- Medium Voltage Main Microgrid Switchgear
- PowerBlock Generation Equipment
- PowerSecure Battery Energy Storage Equipment
- DC/DC Coupled Solar Arrays
- NexGear Advanced Paralleling Switchgear
- Turnkey System Installation
- Full Warranty For Project Life
- In Service Training
- Microgrid Management Services
- Environmental Permitting Assistance

Our approach will include a holistic review of the customer's supply side and demand side energy needs and then we will develop a Microgrid to serve the customer's by applying one or more of the following technologies in a highly integrated microgrid:

To put it simply, Crowley provides "last-mile" LNG logistical solutions for customers by:

1. Natural Gas, Low Emissions Generation
2. EPA Full Tier 4 Final, Super Clean Diesel Generation
3. Battery Energy Storage – Energy Arbitrage or Solar Integration
4. Battery Energy Storage – Uninterruptable Ride-Through-to-Generation
5. Solar PV Arrays DC/DC Coupled for Optimized Control
6. Fuel Cells
7. Cogeneration (CHP)
8. Thermal Energy Storage
9. Waste Fuel to Power
10. Demand Side Load Control

The configuration of each site will vary based on many factors which will be verified during the design phase of each site. The key factors that will drive the design of optimized modern microgrids are:

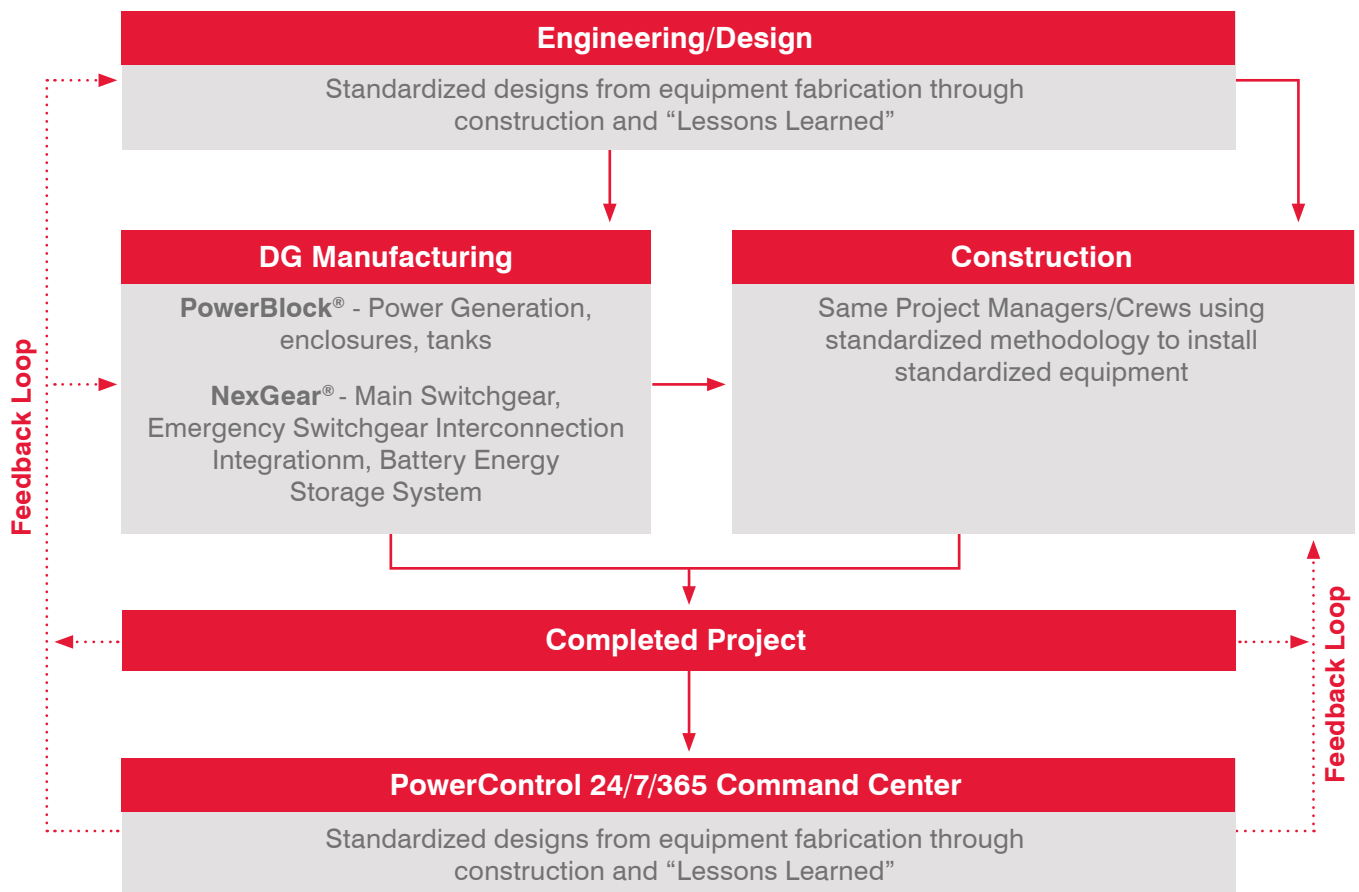


We will develop the most innovative, optimized and cost effective microgrids, found anywhere in the world. We are currently being credited with providing the most advanced microgrid in the world at the headquarters of a large technology company in Silicon Valley, California.

Our key goals in serving your facility will be as follows:

- We will deliver the project on a Turnkey Basis using our in-house resources and in accordance with our well-developed and standard **Reliability Growth Management Model (RGMM)** for delivery of Microgrid Systems. This RGMM has been used on hundreds of projects. We have developed many “standard” microgrid solutions which we would seek to apply on these projects.

POWER SECURE RELIABILITY GROWTH MANAGEMENT MODEL



- We will be recommending these solutions in your best interest to avoid “custom solutions” which often result in “custom problems” in the Microgrid Industry, many of which remain unresolved today.
- Continuous guaranteed supply of Liquefied Natural Gas for the microgrid.

Microgrid Operations and Maintenance Approach

Our PowerControl 24/7 Operations Center provides continuous Monitoring, Maintenance, Dispatch and Fuel Management Services for our utility mission critical customers and microgrids.

PowerControl is staffed full time by extremely experienced employees who have monitored and controlled the operation of over 112,000 utility-directed peak load management events and over 16,000 (2006 thru 2017 data) standby power events since our founding. This is unprecedented in our industry!

PowerControl includes two command centers, one in Wake Forest, NC and a mirror location near Atlanta, GA providing 100% redundancy in case of a natural disaster in Wake Forest. PowerControl operates 24/7/365 so you can be certain we are always just a phone call away.

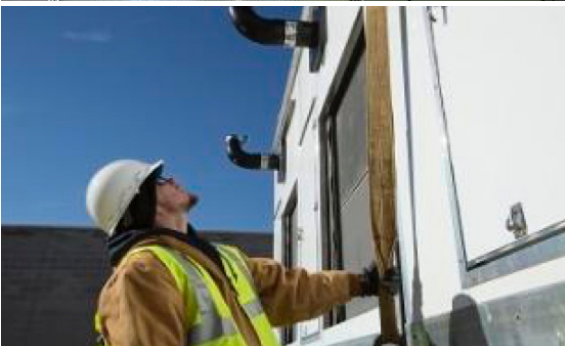
PowerControl monitors and dispatches distributed resources for: (1) peak load management, (2) peak load curtailment, (3) frequency control, (4) load balancing, (5) standby power (outage management) and (6) any change in system status with the proven ability to respond in a timely manner. PowerControl verifies each Microgrid and is operating properly 24/7/365 and reports all changes in status and updates our customers on a continuous basis. PowerControl currently monitors over 1,600 sites.

PowerControl currently monitors and dispatches generation behind over 250 utilities. Information that is available to PowerControl is also available to the utility via the internet through a secured portal on our web page. PowerControl is typically integrated with the utility SCADA System.

The vast majority of our utility partners utilize our PowerControl 24/7 Operations Center to dispatch their peaking generation resources because of our ability to immediately address any starting or operational issues to maximize kW output during critical peak time periods.

PowerControl keeps a careful watch on many parameters in our microgrids and mission critical systems. As soon as any alarm and/or a utility event occurs, PowerControl is notified. We are standing by 24 hours a day to respond. The PowerControl monitoring systems are extremely robust and a key element in our industry-leading reliability.

PowerSecure's Field Service Group includes a staff of approximately 110 technicians with seven field offices across the U.S. and growing.



POWERCONTROL 24/7



PowerSecure's Field Service Group is made up of a diversified group of technicians and field engineers that are the most experienced in the distributed generation industry...period.

Each PowerSecure field service technician is intimately familiar with our microgrid and mission critical solutions and fully understands both engine generator and switchgear control functionality. This gives us a huge advantage over our competitors.

Our Field Service technicians are involved from the start-up and commissioning of projects to assure full system understandability.

Our Field Service Group is another key component to our life-cycle approach to microgrid and mission critical power.

We perform preventive maintenance and proactively address potential issues identified by our PowerControl® 24/7 remote monitoring of critical system parameters. This enables PowerSecure to resolve system problems before they actually become a problem for our customers.

In addition to our strong technical competencies, the PowerSecure Field Service Group has a strong focus on customer service and satisfaction resulting in industry best-in-class performance.

Microgrid Logistics Operations Approach

Crowley offers upfront engineering and commissioning support scope to assist customers in pre-FEED (Front End Engineering Design) and FEED, equipment consultation and commissioning of LNG storage and regasification equipment:

- Crowley offers support for value engineering various storage options along with two different vaporization options designed to operate with minimum human operation tailored to the Governments requirement.
- Evaluation of specifications and arrangement to assure the safe and reliable LNG offload process, NFPA-59A compliance and Emergency Shutdown System evaluation.
- Participation in project meetings to educate and ensure system is designed and delivered correctly. Crowley will validate the system and ensure it is designed to meet NFPA-59A requirements. HAZID and HAZOP sessions may be conducted and lead by Crowley engineers.
- Factory Acceptance Tests with the Government to assure that the system has correct functionality prior to installation, and to confirm that the system and designed and will meet the Government and Crowley's standards.
- Participation and provision of input on preliminary and on-going design reviews.
- Odorization options and implementation tools to ensure maximum facility safety.

The Crowley engineering team is also experienced in tailoring ISO tank, vertical storage tank, and regasification specifications to individual customer needs.



As an experienced LNG provider to Puerto Rico through the use of a growing fleet of ISO Tanks, Crowley possesses a high level of technical expertise gained from lessons learned and involvement in all areas of the LNG supply chain. From tank specifications to remote monitoring, and from vertical tank storage to regasification systems, our team is ready and able to apply this expertise to any Government fuel supply project.

Crowley remotely monitors our fleet of tanks through an online asset tracking tool which provides real-time data, including tank GPS location, tank weight/liquid level, pressure, and load/offload history. This knowledge is invaluable in successfully executing supply chain movements and First-In/First-Out tank deliveries.

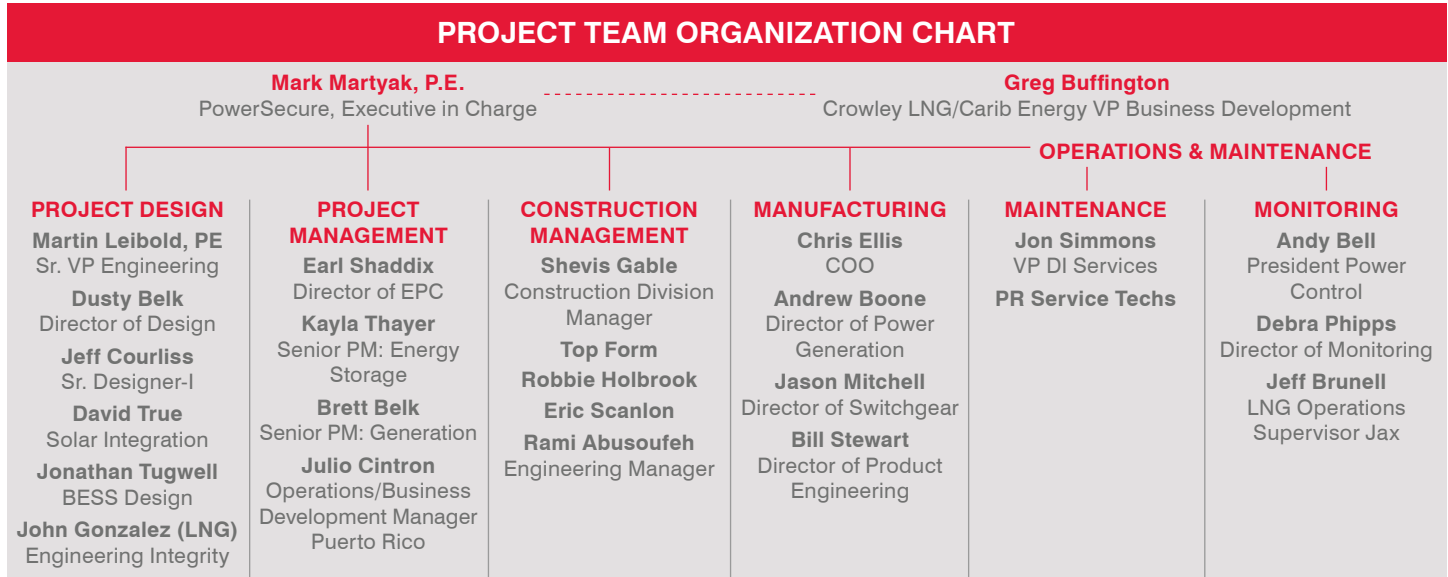


Remote Monitoring including Online Asset GPS Tracking, Online Asset Data Tracking, HMI Offload Tracking, and HMI Storage Tracking



Customer Solutions Team

The Crowley/PowerSecure Team will provide the highest level of microgrid innovation and prowess in the industry. We engineer, manufacture, construct, 24/7 monitor and maintain our microgrids using 100% internal resources. We will supplement these resources with strategic local engineering and construction resources, where appropriate.



- Mark Martyak, P.E. & Martin Leibold, P.E. have developed and designed 2.5GWs of Microgrids which PowerSecure has provided on a Turnkey Basis. Martin Leibold will be the certifying engineer. He is currently licensed in 31 states including Florida (58668) with application pending in Puerto Rico.
- Greg Buffington, Crowley's LNG's Vice President of Business Development for the Caribbean market. Mr. Buffington is the original founder of Carib Energy which was acquired by Crowley Maritime in 2013. Greg has been involved in the international gas industry for 38 years and has been active in doing business in Puerto Rico since 1987, starting with the LPG/Propane business. Greg has dedicated himself to helping all of Puerto Rico to bring an end to end solution that allows for a cost effective alternative energy solution to the Caribbean market and especially in Puerto Rico. Mr. Buffington attended The Ohio State University as an Economics major, served in the US Navy as an Air Traffic Controller and was founder of EFG Industry an international LPG Equipment and gas plant building company. Greg has served on Florida International University Master of International business board and NAFTA gas board.
- Chris Ellis is the lead inventor of our PowerBlocks and has managed the operation & maintenance of our microgrids for 14 years. Chris is now the Chief Operating Officer of our Distributed Infrastructure Division and will drive overall quality and reliability of this project.
- Rob Harris, our Chief Technology Officer will oversee the BESS/Existing Solar integration. Rob arguably has more experience integrating multiple microgrid energy resources than anyone in the industry
- Earl Shaddix and Shevis Gable have Project Managed 1GW of Microgrid installations.
- David True has more than 180MWs of Commercial and Utility Scale Solar Power experience. He will provide additional expertise to support the development and integration of the solar power assets into this project.
- Julio Cintron is Crowley LNG's Operations Manager and Business Development representative in Puerto Rico, responsible for the safe and reliable operation of LNG supply in the island. Mr. Cintron has over 25 years of experience in cryogenics and product supply including commissioning, operations and supervision of distribution supply chains in the US, Mexico and the Caribbean. Julio will act as the commercial and technical liaison with Crowley, and provide operations management support for the projects.
- Jason Kitchel is PowerSecure's Sales Manager in Puerto Rico. He has served the microgrid needs of utilities, large energy users and temporary/emergency rental power partners for the past 14 years. Jason holds an undergraduate degree in Management from Purdue University and later received a MBA in International Business with a concentration on Latin America from the University of South Carolina Moore School of Business. Jason specializes in delivering the correct Electric Power and Distributed Infrastructure solutions quickly and correctly. He has served in the recovery efforts of Hurricane Katrina, Maria and many other named storms and spent time in Japan in the wake of the tsunami to facilitate over 200MW of distributed power restoration. Jason's experience includes an emphasis on Latin America where he has assisted in many countries to improve the response time and capabilities of Electric Power product, parts and product support solutions.

Corporate Campus Microgrids

PowerSecure integrated the most advanced microgrid in the world; 41 MW Connected Load

Onsite Energy Management

- Battery Storage 4MWH (12MW for 90 Sec)
- Custom switchgear technology to manage bi-directional load of entire facility

Additional Services

- Building Automation and Lighting Control Systems
- 1000 electric vehicle chargers

Onsite Generation

- Solar - 16MW
- Fuel Cell – 4MW
- Backup Generation – 6MW

Utility Interaction

- Two 20MW bi-directional utility feeds



Acushnet Cogeneration Plant

New Bedford, MA

Design-Build-Maintain

- 2MW Cogeneration System
- Integrated into Existing 24/7 Operation
- \$4.65M Investment
- Received Maximum Allowed Utility Rebate Based on Merit
- Resulted in 1.8 Year Simple Payback



Houston County Green Energy Plant

Macon, GA

Design-Build-Own-Operate

- 4MW Waste Fuel Recovery System
- Produces 22,400,000
- \$3.9M Investment
- Received National Recognition
- After Eight Years, you can still eat off the floor

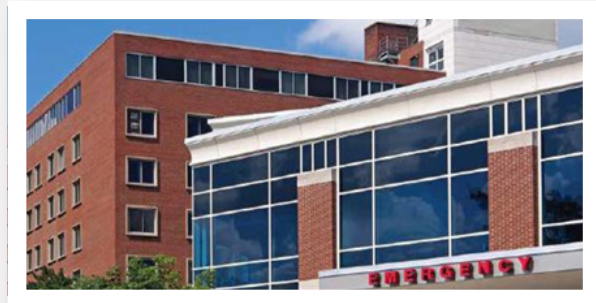


Arnot Ogden Medical Center Bio-Mass Plant

Elmira, NY

Design-Build

- Wood Chip Gasification Plant
- 650BHP; 125Lb Steam
- \$3.9M Investment
- Integrated into Existing Plant with Zero Interruption to the Medical Center

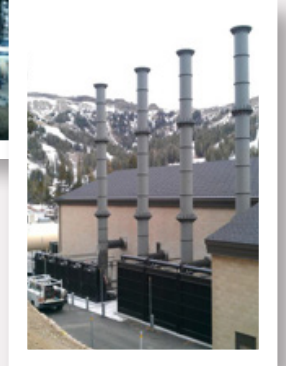
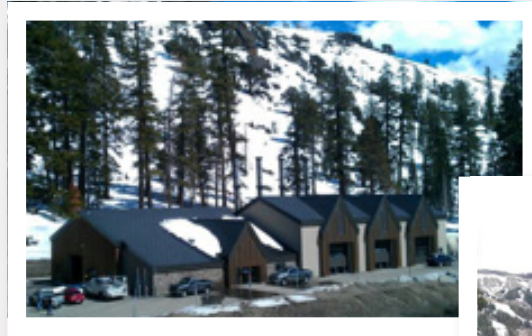


City of Kirkwood Central Energy Plant

Kirkwood, CA

Design-Build-Maintain

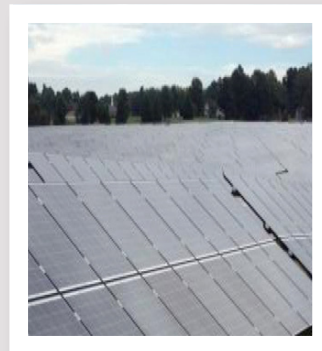
- Completed in 2012
- \$4.5M Investment
- 5MW Capacity; 17,280,000kWh/Yr
- Operated Islanded for 2.5 Years Without a Failure
- Aesthetically Integrated into High End Resort Community



Progress Solar One

- 4.52 MW, Polycrystalline PV, fixed-tilt Ground Mount

PowerSecure designed and constructed this array of 18,816 REC Modules on Schletter FS Fixed-Tilt Racking. This 25-acre project utilized land adjoining a correction facility which was not otherwise a candidate for development. The system is interconnected to the Utility Distribution System.



Montgomery Solar Farm

- 28 MW, Ground Mount

PowerSecure designed and engineered this array for O2 Energies. The 28 megawatt system sits on the grounds of 123 acre farm and features 106,056 Hanwha solar modules. Racking system provided by RBI solar and a great amount of attention went into minimizing land disturbance and following the terrain with the racking system.



PowerSecure

Crowley LNG has designed, engineered, implemented, commissioned and now manages regular LNG deliveries at three customer sites in Puerto Rico:

CROWLEY PERFORMANCE QUALIFICATIONS

Coca Cola Bottlers

Cayey, Puerto Rico

Storage Size

- 15,000 Gallons

Commissioning Date

- September 2014

Gallons Delivered to Date:

- 1,558,000 +

Features:

- Allen-Bradley PLC with non-volatile memory storage; Integration to existing plant SCADA system; Redundant vaporization design; Scalable for future power generating capacity; Secure VPN access for optional 24x7 remote support; Completely automated LNG offload; Pressure controlled storage; HMI interface including process graphics; Fail-safe emergency shut-down and sub-system fault recovery; Strategic Flame & Gas Detection Instrumentation; Alarm & Event Notifications to Email and SMS



Coca Cola Bottlers/Club Caribe Distillers

Cidra, Puerto Rico

Storage Size

- 15,000 Gallons

Commissioning Date

- September 2014

Gallons Delivered to Date:

- 1,175,000 +

Features:

- Allen-Bradley PLC with non-volatile memory storage; Integration to existing plant SCADA system; Redundant vaporization design; Scalable for future power generating capacity; Secure VPN access for optional 24x7 remote support; Completely automated LNG offload; Pressure controlled storage; HMI interface including process graphics; Fail-safe emergency shut-down and sub-system fault recovery; Strategic Flame & Gas Detection Instrumentation; Alarm & Event Notifications to Email and SMS



Large Pharmaceutical Customer #1

Barceloneta, Puerto Rico

Storage Size

- 36,000 Gallons expanding to 240,000 Gallons North and South

Commissioning Date

- December 2015

Gallons Delivered to Date:

- 2,560,000 +

Features:

- Allen-Bradley PLC with non-volatile memory storage; Integration to existing plant SCADA system; Redundant vaporization design; Scalable for future power generating capacity; Secure VPN access for optional 24x7 remote support; Completely automated LNG offload; Pressure controlled storage; HMI interface including process graphics; Fail-safe emergency shut-down and sub-system fault recovery; Strategic Flame & Gas Detection Instrumentation; Alarm & Event Notifications to Email and SMS



UNDER DEVELOPMENT

Large Pharmaceutical Customer #2

Canovanas, Puerto Rico

Storage Size

- 40,000 Gallons

Commissioning Date

- April 2018

Gallons Delivered to Date:

- 50,000+

Features:

- Allen-Bradley PLC with non-volatile memory storage; Integration to existing plant SCADA system; Redundant vaporization design; Scalable for future power generating capacity; Secure VPN access for optional 24x7 remote support; Completely automated LNG offload; Pressure controlled storage; HMI interface including process graphics; Fail-safe emergency shut-down and sub-system fault recovery; Strategic Flame & Gas Detection Instrumentation; Alarm & Event Notifications to Email and SMS

Large Pharmaceutical Customer #1 (Expansion)

Barceloneta, Puerto Rico

Storage Size

- 240,000 Gallons

Commissioning Date

- September 2018

Gallons Delivered to Date:

- 2,560,000 +

Features:

- Allen-Bradley PLC with non-volatile memory storage; Integration to existing plant SCADA system; Redundant vaporization design; Scalable for future power generating capacity; Secure VPN access for optional 24x7 remote support; Completely automated LNG offload; Pressure controlled storage; HMI interface including process graphics; Fail-safe emergency shut-down and sub-system fault recovery; Strategic Flame & Gas Detection Instrumentation; Alarm & Event Notifications to Email and SMS