POWER
GENERATION
COMPREHENSIVE CAPABILITIES
McDermott is a leading provider of integrated and innovative solutions for the power industry. By performing every phase of a project, from start to finish, our integrated approach translates into short project schedules, lower costs and improved quality control while creating a platform for significant local content opportunities. With experience in both traditional and emerging power technologies, we are helping our customers meet today's demands for power generation while preparing for the future.

McDermott offers premier engineering, procurement and construction services to the fossil electric generating industry, including both coal-fired and gas-fired facilities. From building new, state-of-the-art plants, retrofitting existing plants, providing air quality control systems and offering comprehensive maintenance services, McDermott has comprehensive power capabilities and expertise.

Our experience ranges from the use of combustion turbines for equipment drives or peak/emergency power generation in simple cycle arrangements to sophisticated combined cycle applications for power and chemical process systems. Over the last two decades, our simple and combined cycle (CCGT) experience is more than 20,000 megawatts (MW) using various combustion turbine technologies, including:

- GE 7FA
- GE 7FA.04
- GE 7FA.05
- MHPSA 501GAC
- Siemens 501G
NET POWER

NET Power, a company owned by Exelon Generation, McDermott, 8 Rivers Capital and Oxy Low Carbon Ventures, has developed a new natural gas power generation technology that produces low-cost electricity while eliminating all air emissions.

A NEW ERA OF ENERGY

NET Power has developed a novel power system that produces low-cost, reliable and flexible electricity from natural gas, while generating no atmospheric emissions, including full CO\(_2\) capture and no NO\(_x\) production. As the world moves towards lower carbon energy sources, NET Power has the potential to provide carbon-free, affordable, and flexible power from natural gas.

BENEFITS

- Produces low cost electricity from natural gas
- When using air cooling, operates water-free
- Eliminates virtually all carbon emissions, with full capture of CO\(_2\) and no production of nitrogen oxides
- Generates an additional revenue stream from sale of co-produced CO\(_2\), nitrogen and argon industrial byproduct

DEMONSTRATION PLANT

NET Power has built a 50 MWth facility that demonstrates a full Allam Cycle power process. The plant achieved first-fire in May and is currently undergoing a rigorous testing program. The plant will provide the data necessary to commence detailed engineering of 300 MWe commercial scale plants for major power, oil, gas and industrial customers around the world.

ZERO EMISSIONS, LOW COST. INNOVATION FOR TOMORROW.
Our goal is to deliver safe, efficiently managed and cost-effective solutions that meet client requirements.

**Engineering Experts**

McDermott offers engineering services from conceptual design to fully integrated operations for the power generation market. Our global organization can readily adapt to codes, standards and site-specific requirements for any location. We approach each project with seamless processes that link engineering, procurement, fabrication, material management, construction, commissioning and operations as required.

McDermott's full range of engineering services includes the following:

- Front-end engineering
- Detailed engineering
- Engineering management
- Related services

**Strategic Supply Chain**

Effective supply chain management is critical to cost and schedule certainty. The best procurement strategies are based on global experience and long-term relationships. An in-depth understanding of international markets and strategic rather than transactional relationships with our key suppliers, along with our ability to construct and manage logistics of all equipment and materials, allow McDermott to obtain the best equipment, materials, services and pricing for each project.
CAPABILITIES

VALUE-ADDED PROJECT MANAGEMENT
Providing a single-point of responsibility for the duration of a project controls costs, shortens project schedules, minimizes customer risk and ensures the finished product meets our quality standards. We believe this approach allows our customers to focus on their core business instead of managing multiple contractors.

TAking THE LEAD WITH SAFETY
Our strong safety culture reflects the company’s commitment to the wellbeing of our employees. Taking the Lead with QHSES is a company-wide initiative designed to incorporate and elevate safety as an integral value within our corporate culture. Our goal is to set a winning example in QHSES and we encourage our partners, subcontractors and clients to work with us in the pursuit of outstanding QHSES performance.

ONE MCDERMOTT WAY
McDermott employees have embraced one culture – in all areas of our business and across our global footprint – in the way we execute projects. We deliver certainty for the most complex projects through company-wide consistency in systems, processes and execution.

CORPORATE SOCIAL RESPONSIBILITY
McDermott is committed to respecting people, the environment and communities where we operate.

PROJECT EXPERIENCE

MONTGOMERY COUNTY POWER PLANT
Engineering, procurement, construction and commissioning of 2x1 980 MW CCGT combined cycle power plant utilizing natural gas as the single fuel.

Location: Willis, TX
Customer: Entergy
CTG Technology: Mitsubishi 501GAC GTs
Expected Completion: 2021

ASHEVILLE COMBINED CYCLE PROJECT
Engineering, procurement, construction and commissioning of 560 MW combined cycle, dual-fuel power station configured as two independent 280 MW power blocks, each arranged in a 1x1 configuration

Location: Asheville, NC
Customer: Large U.S. Regulated Utility
CTG Technology: GE 7FA.04
Expected Completion: 2020

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PROJECT EXPERIENCE

EAGLE VALLEY GENERATION STATION
Engineering, procurement and construction of nominal 2x2x1 671 MW combined cycle power plant.

Location: Martinsville, IN
Customer: Indianapolis Power & Light
CTG Technology: GE 7FA.05 GT
Completion: April 2018

NINEMILE 6 POWER PLANT
Engineering, procurement, construction and startup/commissioning of nominal 2x2x1 559 MW dual-fuel combined cycle power plant

Location: Westwego, LA
Customer: Entergy Louisiana LLC
CTG Technology: GE 7FA.04 GT
Completion: December 2014 (two months early)

DAN RIVER POWER STATION
Engineering, procurement, construction and startup of nominal 2x2x1 620 MW combined cycle power plant

Location: Eden, NC
Customer: Large U.S. Regulated Utility
CTG Technology: GE 7FA GT
Completion: November 2012

CURRANT CREEK POWER PLANT
Engineering, procurement, construction and startup of 2x2x1 525 MW GTCC with air-cooled condensers.

Location: Mona, UT
Customer: PacifiCorp
CTG Technology: GE 7FA GT
Completion: March 2006
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