



Executive Summary

INTRODUCTION

Burns & McDonnell appreciates this opportunity to present our qualifications to perform professional services for your company. Burns & McDonnell has a long, impressive history of providing responsive, high-quality power delivery and communication design and construction services to clients worldwide. Our primary goal for the past 100 years has been to satisfy our clients by giving them the best, most cost-effective professional service in the world, and our vision for the future is no different: **Satisfied clients for another one hundred years.**

A LEADER IN MEETING TODAY'S CHALLENGES

Burns & McDonnell has performed engineering services for hundreds of clients on a wide variety of transmission, distribution, substation, and communication related projects. Our project management, design and construction management experience ranges from fiber optic networks in cities to complex international transmission projects. Meeting the challenge of diverse project scopes requires Burns & McDonnell engineers to understand the planning and design of overhead and underground systems, substations and communications/SCADA systems from the earliest siting meetings through the final phases of construction and energized testing. Burns & McDonnell meets project challenges and exceeds customer expectations with years of experience and a creative, team-oriented approach to design. We have successfully applied our proven approach to project design, construction and management for a diverse group of clients and projects around the world, from remote, hostile deserts and dense rain forests to rural America and crowded city streets.



QUALITY ENGINEERING: PART OF THE CULTURE

Quality service to our clients has always been an important part of the corporate culture at Burns & McDonnell, and quality services begin with quality people. We recruit highly motivated, talented engineers and support staff. More importantly, we provide the necessary training and professional development to allow each employee-owner to become skilled and productive members of the Burns & McDonnell team. Each Burns & McDonnell designer has field and construction management experience. Our senior engineers strive to develop expertise in special design disciplines and often are involved in IEEE or ASCE working groups or committees as participants, presenters or committee chairs. Equipped with valuable field and design experience, Burns & McDonnell's project team transforms state-of-the-art design concepts into practical field solutions. Burns & McDonnell meets the challenges of the project and saves your company time and money.



RESPONSIVE SERVICE WITH EMPLOYEE OWNERSHIP

As an integral part of a 100 percent employee-owned firm, each Burns & McDonnell employee has a very personal stake in the success of every project. Employee ownership reinforces our belief that hard work, professionalism and dedication to excellence are the keys to our success. Burns & McDonnell is committed to providing your company with the extra degree of personal attention and customer service that you would expect from the owner of any business.



FORMULA FOR CLIENT SUCCESS

At Burns & McDonnell our proven approach to projects, our industry experience and our talented employee-owners add measurable value to our client's projects, contributing to successful projects that are completed on time and within budget. Our full-service, team-oriented structure allows us to offer your company specific solutions for large or small projects. Building upon our strengths in transmission and distribution, substations, communications, civil/structural, system studies, design/build and RCM services, Burns & McDonnell can



deliver responsive, high-quality professional service to your company. With our services, your company will successfully meet the challenges faced in today's increasingly competitive power markets.

TRANSMISSION

The Transmission Department of Burns & McDonnell has successfully completed hundreds of transmission line projects from conceptual planning and design through construction and start-up. Our years of experience include every type of wood, steel and concrete structure design, solid dielectric and HPFF underground design, lightning analysis to improve system reliability, conductor selection studies, construction management, structure spotting methods that balance cost with customer sensitivity and the environment, and a creative, team-oriented approach to design that meets project challenges.



UNDERGROUND TRANSMISSION

Burns & McDonnell combines top-flight engineering and construction services to take your high-voltage transmission line underground. By providing turnkey solutions, we can help you provide power to the people who need it while preserving the beauty and history of your parks, beaches and downtown business districts.



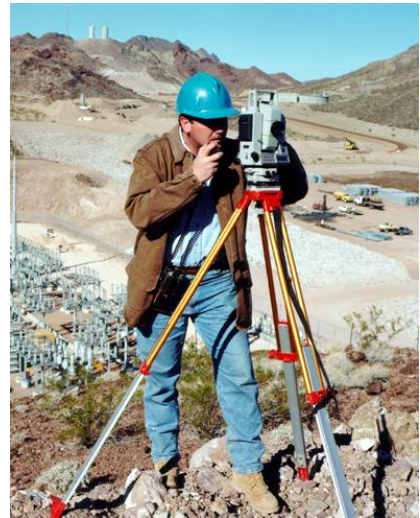
SUBSTATIONS

Burns & McDonnell's substation projects include large and complex generating plant substations, distribution substations, line terminal or equipment additions, and upgrades to existing substations, in locations across the country and the world. Designs have included single bus, main and transfer arrangements, ring bus arrangements, breaker-and-a-half and double-breaker arrangements. Our staff specializes in physical substation design and system protection and control, with most having extensive experience in substation and utility construction. Each team member attends Burns & McDonnell supplemental training courses to keep abreast of current technologies and advancements.



CIVIL/STRUCTURAL

Burns & McDonnell's civil-structural department provides design support for the majority of our substation, transmission and distribution projects. Whether designing a control building elevated above grade, standardizing a client's equipment supports or routing underground cables through some of the most challenging conditions, our civil and structural engineers use teamwork and experience to provide practical, cost-effective solutions. Burns & McDonnell civil/structural engineers offer a diverse design background to your company for other services such as road design, drainage analysis, building design, geotechnical evaluations, underbridge support systems and underground civil permitting and design.



TELECOMMUNICATIONS

Burns & McDonnell offers a full range of telecommunications engineering services. Our knowledge of telecommunications in combination with our electric utility experience makes us uniquely qualified to provide the service and expertise not found in most traditional telecommunications consultants. Our telecommunications services includes feasibility studies, business planning and complete system design, including turnkey. Our staff has extensive expertise in all forms of telecommunications technology, including fiber optics, analog and digital microwave radio, broadband systems, land mobile radio, and telephony. Our clients include municipal utilities, investor-owned utilities, rural electric cooperatives, industrial companies, and state and federal governments.



DESIGN/BUILD

Design/Build, Turnkey, Engineer/Procure/Construct (EPC), Engineer/Furnish/Install (EFI) . . . no matter what you call it, it is fast becoming the most popular method to perform work. In fact, according to Engineering Times, 50% of all construction contracts after the year 2000 will be Design/Build contracts. Burns & McDonnell has an excellent record of performance using the Design/Build method. Design/Build reduces risk to the owner; shortens project cycle times; provides a convenient and efficient single-point-of-contact; increases cooperation among engineers, equipment suppliers and construction contractor; reduces owner staffing; and provides an opportunity to introduce new design and construction concepts.



ENVIRONMENTAL STUDIES & PERMITTING

The Environmental Studies and Permitting group has provided professional environmental services since the early 1970s, performing environmental and planning studies across the United States and internationally. We maintain a multidisciplinary staff to satisfy your present and future needs. Our environmental scientists work as a team with our engineering staff to find practical and cost-effective solutions for our clients. To best serve your interests, we know and understand the most current versions of the environmental regulations that affect your projects. Additionally, we build solid working relationships with regulatory agencies, which improve agency response and facilitate the environmental review process. In an ever-changing environmental world, these characteristics enable us to stay on The Environmental Edge.



DISTRIBUTION

Burns & McDonnell provides a full range of services to support electric utilities in the planning, analysis, design and construction of their distribution systems. We tailor our approach to meet each project's specific requirements and to meet each client's unique needs. With this flexibility, we can provide a full range of planning services if warranted by the project. In addition, we can help your company develop their own planning capabilities through in-house consultation and staff training in computer modeling techniques and computer-aided design and drafting to maximize efficiency and accuracy.



INDUSTRIAL POWER SYSTEMS SOLUTIONS

Safe, reliable electric power can be a critical component of your industry's successful operation. But getting your facilities the power they need requires professional planning and innovative design to overcome site and budget constraints, short schedules and rapidly changing needs. You need comprehensive services from your engineering consultant to install safe, dependable and cost-efficient electric power systems and facilities. Drawing on more than 90 years of electric power transmission and distribution experience with industry and electric utilities, Burns & McDonnell's engineers, economists, scientists, construction managers and technicians collaborate to guide your project from conceptual planning to energization.



ELECTRICAL SERVICES

Burns & McDonnell's experienced professionals provide electrical systems planning and design services to improve the safety and the reliability of electric power systems. The planning, design and operation of each power system requires comprehensive analyses that assess current performance as well as examine the effectiveness of alternatives for system improvement and expansion. The Electrical System Studies Department offers systems modeling, short circuit analysis, power flow analysis, harmonic analysis, reliability analysis, dynamic and transient analysis, motor starting/acceleration studies, protective device coordination and power factor correction. Our approach and experience provide value-added engineering services beyond traditional power systems analysis and design.

