



WE PROVIDE PROFESSIONAL SERVICES

Supporting Infrastructure Projects GAS UTILITIES

The Spear Group and Southern Cross' involvement in the natural gas sector dates back to its inception in 1981. We assist our clients to prioritize their investments, make project-related decisions, and add efficient, repeatable processes to virtually any area of their operations. We are active in multiple projects in the gas utility sector. Our long history, and combined experience has enabled us to gain extensive experience in project and process management in the gas utility industry. This enables us to deliver results for our customers every single time.

In this way, The Spear Group promotes a culture of continuous improvement as projects are completed and new programs are launched.

We support construction inspection and management, start-up engineering, maintenance, material inspection, material quality control and management of delivery, project controls services for project scheduling, tracking, and performance evaluation analytics, asset management and reliability centered maintenance, vegetation management, engineering services and various other functions.

WE DELIVER RESULTS TO OUR CUSTOMERS EVERY SINGLE TIME.

As the gas utilities continue to drive infrastructure investments fueled by the need to replace aging infrastructure, environmental pressures and public safety concerns, they are continuing to face constant change and challenges - both from internal and external sources. With these changes come many challenges for the industry in general. Leaders in the industry are constantly trying to find solutions to these challenges if they are to succeed.



GAS UTILITY INDUSTRY CHALLENGES

STRATEGIC

- Population growth/challenges of building new infrastructure to meet that growth
- Aging workforce
- Aging infrastructure and modernization programs
- Evolving business models

OPERATIONAL

- Integrity management challenges (DIMP, EFVs, OQ)
- Integrity of mains and service lines
- Prioritization of hazardous leaks
- Reduction of repair backlog
- Minimization of construction costs

REGULATORY

- Rate case preparation (cost recovery)
- Environmental pressures and regulations
- Public safety and methane emission reduction programs
- Compliance (mandatory and voluntary policies)

68.5% of natural gas is used for heating industrial processes, homes and businesses. 2.8% is used in transportation. The remaining 28.6% is burned in power plants to make electricity.

• **Complex Projects:** Utility Infrastructure projects today are becoming more and more complex. Most of these projects span multiple states and most certainly require teams located in different areas all around the globe. Thus, tracking of projects in realtime across multiple locations and between various project teams is becomes the key to ensuring project success and completion on time and within the budget. This is no easy or small feat with annual capital budgets into the billions and thousands of projects delivered each year.

• **Changing Regulatory Framework:** With regulatory compliance requirements becoming rigid and complex with stringent outage requirements, there is now more than before an increasing need to have infrastructure build projects completed on time and an ever-increasing need to keep within the allocated budget.

• **Upgrade of Aging Pipe Infrastructure:** A key challenge for Gas Utilities is the upgrade of an aging infrastructure required to meet the ever-increasing energy demands and the concerns over public safety and environmental methane emissions. With billions of dollars in spend and hundreds of projects, the need for proactive capital program management to structure long-range plans and maximize performance during project execution becomes even more crucial. The Spear Group is involved in many such projects across the nation.

• **Constrained and Aging Workforce:** With many in the industry retiring, most of the institutional knowledge is disappearing and finding younger employees with experience is more challenging than ever. As a result, there is an increasing need to manage these large projects effectively across the lifecycle in order to prevent costly errors that could result from lack of knowledge and expertise. Many utilities require additional outside support to manage and work on new capital projects, and these projects are increasingly complex.

• **Budget and Schedule Overruns:** Overspending and overruns on big infrastructure projects is very common when projects are not managed carefully with best industry practices. In many cases, the gap between projections and performance can be significant. Per EY, the average megaproject is delivered 35% over budget and two years behind schedule. Since upgrades to aging infrastructure and new builds are designed to meet our future energy needs, stimulate economies, create societal benefits and support long-term growth, it is crucial that these infrastructure projects are managed to succeed.



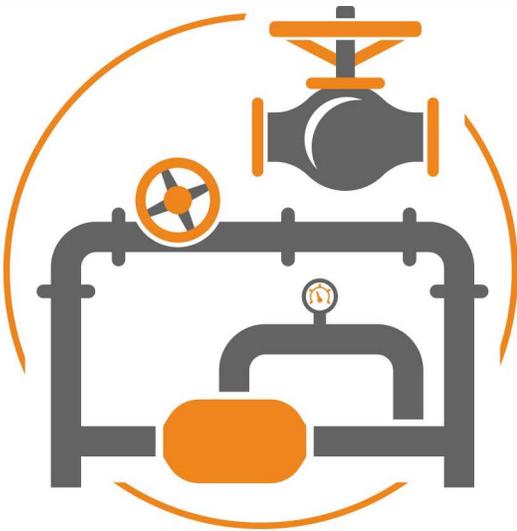
So.. How can the Spear Group assist Gas Utilities?

Things we must consider when executing large infrastructure projects:

- How do the various teams in the field collaborate with the engineering department?
- How are the material, right of way, permitting, and other construction challenges and changes communicated back to the design and project management teams?
- Do the field teams have access to the latest documents? How are the various field updates handled?
- How sophisticated is your project control and project management system?
- How do you track actual spend vs. budgeted spend?



Fast Fact: Natural Gas is the cleanest fossil fuel!



These challenges mentioned above are creating a perfect storm that utility leadership must navigate carefully. To supplement their internal expertise, extend their capabilities and stay ahead of market needs, utilities will need to enlist trusted external service providers for needed support and industry knowledge.

We can assist our clients to prioritize their investments, make project-related decisions, and add efficient, repeatable processes to virtually any area of their operations.

We are active in multiple projects in the leak detection, locate, cathodic protection, metering, and gas construction. Our long history, experience and expertise in project and process management in the gas utility industry enables us to deliver results for our customers every single time. In this way, the Spear Group promotes a culture of continuous improvement as projects are completed and new programs are launched.

The Spear Group is a firm believer in integrating innovation and technology into everything it does. We use technology to drive capabilities and effectiveness. Our employees are sharing innovative ideas, developing problem-solving skills, learning and applying new technology and integrating this into day-to-day tasks. It is with this mindset that we come and intentionally build lasting partnerships and with our clients. In this respect, The Spear Group is leading the way in the industry with best practice project management and controls.

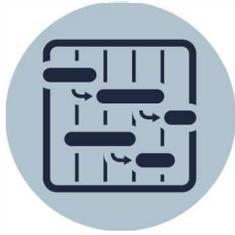
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We can assist in the following areas:



Navigating Multiple Infrastructure Projects

The Spear Group can help you meet the challenges of managing multiple projects. Most large projects involve many entities with many areas of expertise. We can assist in the project management role while also bringing knowledge of new technologies, their uses, and related vendors. We can help you finish your projects on time and within budget by monitoring the project during detailed design and construction, while at the same time providing functional direction when necessary.

Acting as Project Leaders and Liaison for the project team and the client's Senior Management and Contractors, The Spear Group is able to set expectations with stakeholders; manage and escalate risks appropriately while at the same time ensuring that all projects follow the delivery process, so results meet industry and client standards in support of revenue goals.



Project Analysis

The Spear Group has considerable expertise in reviewing, verifying and analyzing information related to one or more Project Control support areas (cost, schedule, estimating and earned value). Our experts will measure the effect of such information on the performance of the functional area.



Contract Management and Administration

The Spear Group can provide you with full service contract administration, including Contract preparation, Facilitation of pre-bid meetings, Bid letting, Evaluation, Recommendations, and Coordination of contract execution for all your capital construction projects. Our employees have considerable expertise in the preparation of construction labor bid packages utilizing contracts, as well as other related RUS documents. In addition, The Spear Group works closely with your staff to ensure that a complete and comprehensive contract is prepared for your projects. Acting as the owner's advocate / agent / representative managing subcontractors, Architect and Engineer (AE) agencies and Construction Management (CM) firms, we have the right expertise to oversee and coordinate project initiatives and field construction activities



Planning and Scheduling

Our experts can work with you to perform schedule development, maintenance, monitoring, and control activities, prepare plans and schedules, performance reports, analysis of supporting data, variance reporting, and other special studies as required.



Cost Engineering and Estimating

The Spear Group can develop, set-up and perform cost forecasting, Preparation of cost, performance and productivity reports, set-up and perform estimating activities and prepare and review of estimates.



Construction Management and Inspection

From the on-site pre-construction meeting with the multiple contractors all the way through final inspection and project closeout, The Spear Group has solid experience to assist you with construction management. We can provide on-site representation and inspection services throughout the project to ensure that the final deliverables are completed on time, on budget, and in accordance with your specifications. We can also provide as-built documentation, labor invoice approvals, and final project closeout documents as required.



Project Controls

The Spear Group can work with you to develop, set-up and perform cost forecasting, planning and scheduling, monitoring and control activities. Our employees have broad expertise in the preparation of cost, schedule, performance and productivity reports, analysis of supporting data, variance reporting and special studies.



Document Control Administration

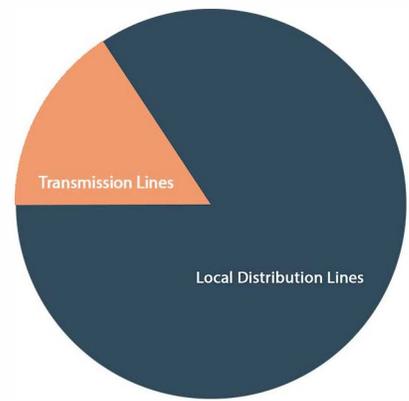
The Spear Group has considerable expertise in document control administration. Our experts can recommend and implement Document Control Systems and provide direction and expertise in the processing, release, reproduction and retention of design documents, vendor documents and turn-over packages. Our on-site personnel quickly become knowledgeable of department / corporate policies and procedures essential to prompt resolution of queries and conflicts.



Permitting, Licenses and Right of Way Acquisition

The Spear Group has the right expertise to assist you in one of the most critical aspects of any major overhead or underground line construction project. We review and obtain all the necessary right-of-way (R/W), utility easements, various permits, and licenses (including environmental, state, county, township, railroad, etc.) for construction of your facilities.

Fast Fact: Currently in the United States there are **2.5 million** miles of underground natural gas pipeline. **2.2 million** of those miles are local distribution lines, while **300k** miles are transmission lines.



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About The Spear Group

The Spear Group is a Project Management and Professional Services Company that provides state-of-art project delivery solutions such as project management, construction management, and project control services. Combining proven practices and methods with current technology, The Spear Group can provide customers with cost-savings control and decision-making tools and solutions that ensure success – so customers can focus on running their business.

www.speargroup.com

About Southern Cross

Since 1946, Southern Cross has been an industry leader in providing Pipeline Safety and other Field Services. Today, Southern Cross continues to provide Field Service solutions to the Gas, Electric, Water, & Energy/Oil Industries. Our services include traditional leak survey and inspections, meter deployments including AMI/AMR, locating, professional services such as project management and project controls, and much more. Southern Cross is dedicated to remaining at the forefront of our industry's technological advancements and we are constantly innovating our solutions and methods. Proud of our rich history, confident about our current offerings, and excited for what's next, Southern Cross upholds our reputation as a "Trusted Partner of Utilities Everywhere".

www.southerncrossinc.com