



As the electric power industry evolves, so do the needs of our clients. You need efficient, cost effective and thorough methods of project delivery. That demands a practiced team of experts capable of managing and providing optimal solutions for every type of electrical construction project, no matter its size, scope and complexity. Our extensive experience in successful project execution, combined with industry-leading safety performance, vast labor and equipment resources and financial stability, are reasons why clients place their trust in us time and time again.

An Owner's Perspective

Owners are concerned with project success from planning to closeout, and need to count on timely implementation in a safe and effective manner. To support the owner's ultimate goals, our team-oriented approach prompts us to examine all aspects of project delivery as seen through the owner's eyes and promotes understanding of the inter-relations of people and systems in the context of the overall project. Playbook, MYR Group's Project Management System, provides a unified methodology integrating every aspect of the entire project delivery process. Status and projections developed through our progress and financial reporting processes are communicated regularly throughout the life of the project.

Pre-Construction Services

Well executed pre-construction services pave the road for successful projects. MYR Group understands that cost effective projects are the result of thorough planning, and the anticipation and quick resolution of potential issues before construction begins. Our expertise in pre-construction services is based on years of industry experience, and the skills and knowledge of our pre-construction team. We offer the following services from the earliest project planning stages through project completion:

Conceptual Budgeting/Estimating

With the benefit of our extensive historical database and experienced, skilled personnel, we produce extremely accurate conceptual cost estimates early in the design process, as well as accurate forecasts of cash flow and costs.

Multiple Cost Estimates at Various Stages of Design

We have the capability of providing detailed cost estimates at every stage of the design process. This information enables the project design team to evaluate costs and modify the design, if necessary. We anticipate pricing adjustments throughout the design process and provide clients with updated pricing, including the specific cost impact of each design modification and detailed justification.

Constructability Reviews

Our pre-construction team will review every phase of project design to ensure that the most efficient means and methods are used in the design and reflected in the cost estimates. Our constructability reviews analyze and provide feedback on the proposed technical design and specifications prepared by the owner, including the following components:

- Geotechnical information
- Optimal access

- Right-of-way
- Installation of foundations and anchors
- Structure assembly and erection
- Structure attachments and working requirements
- Helicopter services (tower erection and wire stringing)

Our review process also addresses construction requirements, access roads and environmental compliance measures.

Construction Schedule

Our pre-construction team initiates the preparation of the resource-loaded construction schedule, identifying and analyzing critical dates and durations of job tasks and deliveries with respect to major project milestone dates. Beginning in the pre-construction phase, we will provide updates, including projected cash flows, throughout the entire project.

Advance Purchase of Long Lead Items

We assist the project team in identifying materials with long lead times, and purchasing these items in advance to meet the construction schedule.

Constructability Reviews and Value Engineering

Our pre-construction and construction teams will engage in value engineering and/or analysis from project inception through final completion. Our team will review plans and specifications in search of excessive costs and opportunities for design improvements. In the process of value engineering, we will identify the design and/or construction methodology that improves the economics of the project and make appropriate recommendations to the project team; and verify that materials and construction methods will enhance the economics of the project and maintain the budget.

On previous projects, our input in constructability and value engineering has provided significant cost savings for clients. Our clients realize the maximum return when we are involved early in the planning and design processes, and we will continue to offer cost-saving ideas throughout the life of the project. A long-term contract enhances these cost-saving opportunities due to consistency of the work force, replication of project activities and improved employee system knowledge.

Efficient Pricing Models to Maximize Value

MYR Group performs work under seven different pricing models, and work closely with each client to develop an optimum pricing solution. These include: Unit Price; Lump Sum Price; Target Price with Split Savings; Time and Equipment with Benchmarked Cost Containment; Time and Equipment with Performance-Based Fee; Time and Equipment Rates; and Cost Plus Fee. Our experience has demonstrated that in most cases the greatest value for our clients comes from a compensation basis that falls in the middle range of the price-risk spectrum.

Pre-Project Planning

Early project planning that involves the entire team is essential to align goals among all project players. It is critical to identify key project milestones that will drive the project and follow up with detailed planning of events to support those milestones.

Our goal is to add value to every function of a project by first establishing consistency across the project, enabling collection and analysis of meaningful data and effective implementation of corrective actions. With everyone

working to the same procedures, project managers will easily and quickly be able to identify the root cause of any error or delay. Similarly, common procedures make it possible to roll out a program-wide corrective action and ensure the effects of any corrective action provide a return to every project.

Prior to any construction, a kick-off meeting is held to introduce team members and review key objectives, the overall schedule, schedule milestones and the communication plan. Safety, cultural and environmental issues are also discussed, and pre-requisite training needs and training schedules are identified. This meeting allows the project manager to clarify the project plan and schedule objectives and allows the team to raise any questions or issues that may affect the plan. Participants include: district/project managers, estimators, field supervision, fleet personnel, safety personnel, subcontractors and client project team representatives.

Project Controls

The right combination of software management tools, proper initial project set-up, timely and accurate data input, continuous tracking of progress, a meaningful reporting structure, strong information management and corrective action plans are all integral elements in delivering a successful project controls system to our clients.

Project-Specific Work and Cost Management Plans

Every project presents its own unique set of characteristics, therefore, predictability of cost and schedule throughout a project's entirety is imperative for success. The ability to quantify the effects of schedule deviations and present alternative solutions result in minimal impact to project milestones. With our client and subcontractors, we develop an overall project work plan that contains a master budget and schedule long before mobilization of manpower and equipment.

Earned Value Analysis

Earned Value analysis (EVA) provides a comprehensive project analysis that combines elements of scope, schedule and cost, and gives us the ability to forecast cost or schedule overruns at both the early stages and throughout the duration of a project. A portion of our EVA tools are embedded within our accounting platform, providing real-time costs without additional interfaces. EVA also requires the cost of work in progress to be quantified, which differs from a usual budget versus actual-cost-incurred model. This allows for the comparison of how much work has been completed against how much was expected to be completed at a certain point. We also use cost performance index (CPI) and schedule performance index (SPI) methods to measure the actual cost and schedule efficiencies of projects.

Schedule and Budgeting

A master schedule is developed that defines resources and responsibilities; reports progress and status throughout the project; and incorporates all considerations related to engineering, document review, materials procurement, materials delivery, acquisition of permits, construction, anticipated outage requirements, commissioning, testing and final document delivery. The schedule is updated regularly to show actual activity starts and percentage complete for each activity. A monthly schedule status analysis tied to bid/budget production data takes place and steps are taken to address project constraints, correct deficiencies and mitigate delays.

Our scheduling system provides the flexibility and reporting capability to evaluate and analyze project progress in terms of critical path impacts. We maintain a cost-loaded schedule, and at a minimum, perform a monthly critical path analysis. Project segments are segregated per the WBS (Work Breakdown Structure) established for the project, which logically divides the scope by individual segment.

Our approach is construction driven; or based on the premise that construction is the major cost driver on any major project and therefore other activities should be scheduled in a manner that facilitates the progress of construction work. The project plan will be reflected in the project schedule.

This approach establishes the project schedule baseline predicated on the scope of work requirements and the approved Project Execution Plan. The baseline schedule developed during the planning phase is maintained intact as the target against which project progress is measured. The critical path(s), or any chain of activities leading to certain milestones or target dates, will be analyzed to determine any deviations from the baseline completion date for the project. Variances to the schedule baseline are the basis for project management action, as required. The schedule is updated monthly, at a minimum. Any needed adjustments to the schedule are incorporated monthly to reflect changes to the plan to complete the work, but the original baseline schedule will always remain intact and can only be modified by approved change orders.

Our cost reporting system provides current data that projects cost trends and allows us to develop and integrate recovery plans for under-performing work, while also providing trends and projections for areas that are over-performing. Our system contains various modules that are all integrated, for example accounting, fixed assets, safety, financial reporting and job cost tracking; thereby ensuring that all costs are recorded and reported once processed in the system.

We provide structured, predictable, trackable and cost-conscious construction for clients by performing the following activities throughout the project:

Utilize the Job Cost Tracking Module in our accounting system

Input budget (Estimates)

- Labor Dollars
- Labor Hours
- Labor Units
- Subcontractors
- Materials
- Equipment and Tools
- All associated project costs (fuel, etc.)

Record actual cost against budget

- Labor Dollars
- Labor Hours
- Labor Units
- Subcontractors
- Materials
- Equipment and Tools
- All associated project costs (fuel, etc.)

Utilize weekly Job Cost Reports from our accounting system to analyze the following:

- Budget vs. Actual Dollars
- Budget vs. Actual Hours
- Budget vs. Actual Units
- Monitor budget vs. actual man-hours per unit
- Percent Complete
- Projected Gains/Losses

Weekly Job Cost Reports are generated and used to analyze budget vs. actual information on dollars, hours, units, actual man hours per unit, material, direct job expenses, equipment, tools, percent complete and projected gains and losses. These items can be broken down further to cost code categories for more in-depth tracking and analysis.

Projected cost over-run information can then be used to pinpoint and mitigate issues with supervision, labor, processes, etc. before they become significant impediments.

Staffing Plan

Project Management Team

Our project management professionals possess significant experience in effectively managing and executing complex and difficult projects in electrical transmission, distribution and substation major markets and geographical areas across the United States. Most long term team members have worked together on previous projects, helping to ensure uniformity of company policies, operating procedures, and safety management so each project is executed from beginning to end with a unified, proven approach. The management team selected for your project will be carefully chosen based on its combination of experience and familiarity with the project scope and geographical considerations.

Accepting complete accountability for your project outcome, our project managers are responsible for all coordination required throughout the life of the project. They plan, lead, organize and control every aspect to meet/exceed client and company benchmarks for safety, quality, schedule and cost.

Our project managers and district management personnel possess an average of 10 years of industry or related-industry management experience. Most have participated in the MYR Group Leadership Development Program which provides instruction in effective performance management, communication skills, essential thinking skills, negotiating skills and team building. Many of our project management professionals have obtained additional credentials such as Project Management Professional (PMP) certification through The Project Management Institute, the profession's most globally recognized and respected certification credential.

Our comprehensive approach to employee development allows our people to refine, improve and increase their skills over time in order to advance personal growth and career advancement within the Company. This approach enhances employee retention, providing greater consistencies to clients. In addition to our Leadership Development Program, we have also developed several, customized training and educational program for the following field managers that emphasize in-depth instruction in all aspects and varying degrees of project management:

- Project Management I: Contracts and Contract Administration, The Contracting Environment, Scope of Work and Contract Selection, Risk Management, Entitlement Theory, Supplier Performance and Close-Out, Problem Resolution
- Project Management II: Supplier Relationships, Cooperative Negotiating, Negotiating Tactics, Change Order Management and Documentation, Conflict Resolution
- Project Engineer: Decision Making, Task Planning, Documentation, Materials Management, Cost Control, Effective Listening, Effective Speaking and Writing, Change Order Management, Safety Administration
- Foreman: Leadership, Motivation, Time Management, Planning and Scheduling, Meeting Management, Value-Based Ethical Decision Making

Field Personnel

Staffing needs are evaluated based on productivity data and schedule performance throughout project performance; and a staffing plan that is tied to the master schedule is developed during the proposal phase. Most personnel are obtained primarily from internal sources, and peak requirements are fulfilled through local labor markets. MYR Group's union subsidiaries have agreements with Local Unions throughout the United States; and these workers have been technically trained by the IBEW through its apprenticeship training programs (NJATC) and have also received our internally required training and certification programs.

MYR Group is signatory contractors with the International Brotherhood of Electrical Workers and work hand in hand with local union halls to achieve the portability necessary to keep your project sufficiently

staffed. Our non-union subsidiary, Great Southwestern Construction, Inc., recruits most of its entry-level apprentices from various line training schools across the country. These recruits are enrolled in Department of Labor-approved apprenticeship programs and progress through the necessary steps until they reach journeyman status.

Skilled line positions for your project will be filled utilizing significant numbers of existing company personnel. In an effort related to fulfilling manpower needs, we have also established a minority recruiting program that targets the hiring of minority and local residents within the project area for craft positions within the field. We advertise locally and establish temporary recruiting facilities in the area to achieve maximum exposure and solicit local participation. These practices provide meaningful employment for disadvantaged individuals and local residents and are a means to gather required personnel.

Labor performance is monitored by our custom J.D. Edwards Labor Log report. The Labor Log report is initially loaded with budgeted man hours and quantities, and throughout the construction phase each crew reports man hours and installed quantities for every budgeted activity on a weekly basis. This installation rate is then compared to the budgeted installation rate to develop the estimated cost to complete. We monitor cost and man hours worked to determine variances in order to identify projects that have a potential overrun based on dollars spent versus dollars estimated.

Health and Safety Plan

A project-specific Health and Safety Plan is developed in conjunction with MYR Group Safety and the client to address all aspects of health and safety on the project. At a minimum, the following elements are included:

- Responsibilities and Accountability of MYR Group Personnel
- Safety Goals and Expectations
- MYR Group Safety Rules
- MYR Group Disciplinary Program
- Hazardous Communication Program
- Employee Training Requirements
- New-Hire Orientation Procedure
- Accident Reporting Requirements
- Accident / Incident Investigation Procedure
- Safety Committee Guide
- Pre-Planning Guidelines
- Specific Procedures and Practices
- Jobsite Safety Audit Requirements
- Subcontractor Safety Management Requirements
- Safety Incentive Programs
- Drug and Alcohol Policy
- Forms

Subcontracting Plan

On the construction side, we always self-perform our core competencies of structure erection and wire stringing. When necessary, we subcontract civil work, foundations, testing, fiber optic splicing, hauling, right-of-way access and restoration work, large crane work, and traffic control. On major projects, outsourcing a significant portion of the project preserves highly skilled line construction resources for those tasks that truly require that level of specialized skill. An added benefit of this outsourcing is that it provides an opportunity for local and regional businesses to actively participate in the projects, which makes the

projects more desirable to the local population. We regularly select minority and disadvantaged businesses as subcontractors, partners and suppliers.

We currently have a strong, established network of leading firms we can team with for major projects. Our efforts to identify additional subcontractors include requests for proposals and negotiations with all potential subcontractors to ensure a full commitment to the project. As part of this process, we communicate opportunities and establish qualifications of subcontractors and suppliers.

Equipment Plan

An equipment plan is developed during the proposal phase and integrated into the MYR Group Fleet Equipment Reservation System. MYR Group Fleet identifies all required needs and determines pieces that can be sourced through our own fleet and whether any rented pieces are required. A committed cost (sum total of purchase orders issued by cost code) is then accumulated and tracked against the corresponding cost code. Additionally, any cost-to-complete estimates are posted as "cost to go" to develop true projections of all costs including projected cost against any budget category or cost code at all times.

Procurement Plan

Permanent and/or consumable items that must be purchased are identified during the proposal phase. Quotations are then requested from our procurement partners to obtain the best value in terms of price, specification and lead times.

We offer flexible materials management capabilities to best meet the needs and preferences of our clients. We have provided complete materials management on various projects and have outsourced materials management on others. Our ability to plan and control material disbursements significantly increases schedule adherence and cost-effectiveness.

Materials management includes procurement, expediting, receipt inspection, storage, and tracking of any lost or damaged equipment or materials. Our Quality Control team is involved with these efforts to ensure compliance with engineering/client standards and schedule/cost control for accurate reporting.

Complete Materials Management

Our ability to plan and execute material disbursement to our projects significantly boosts cost and schedule efficiency. We have the ability to source material from regional and national suppliers with whom we have close relationships, or in the case of major requirements, on a more leveraged basis through corporate-wide alliances with material vendors who offer preferred pricing and service.

Many clients also request that we purchase through their existing strategic sourcing agreements or preferred vendors. In these cases, we provide cut sheets for all materials to be procured.

A dedicated Material Manager is responsible for making commitments on delivery schedules that are incorporated into the project schedule. Close involvement with engineering during the design/pre-construction phase allows approval and release of long-lead items, helping to maintain schedule integrity and prevent costly delays. They also work with engineering to review all materials for compliance with applicable standards and specifications. They manage an electronic system that tracks incoming and outgoing material and has the capability to input units and calculate material needs. The system tracks the following:

- Vendor information submittal schedules
- Production schedules
- Quality control compliance
- Delivery methods and schedules
- Receiving information

The majority of material is inventoried and logged into our system within 48 hours of receipt. Discrepancies are immediately brought to the attention of the Project Manager or designated material expediter.

Materials are received at designated marshalling yards or locations along the right-of-way. Material is inspected as received and accepted from the supplier only when determined to be acceptable and in good condition. Quantities received are checked against packing lists and tracked against total quantities required.

Prior to installation, material is stored in a manner that prevents damage, deterioration or theft. Dedicated crews deliver materials to sites, and the Material Manager maintains records of materials taken from material location sites to dedicated sites. All material will be transported, handled and installed properly and in accordance with supplier recommendations and client specifications to prevent any unacceptable stress, damage to protective coatings, or breakage.

Owner-Furnished Materials

For owner-furnished materials, we work closely with clients and suppliers to arrange shipping dates, coordinate delivery of all materials to the job site, and work with vendors to correct any reported material shortages or damage. Our Material Manager implements a tracking and expediting program and routinely reviews reports on material status and shipping dates. If requested, we will review all client material orders to ensure they meet specifications and constructability requirements; and verify that quantities are accurate to meet project needs and that production, shipment and delivery dates support the project schedule.

Quality Assurance/Quality Control Program

Our Quality Assurance/Quality Control (QA/QC) Program encompasses all project-related activities, including where applicable: constructability reviews, materials management and procurement, manufacture, installation and construction, testing, and commissioning, as required. We ensure our program is compatible with contract requirements and provides for effective measures to ensure that all construction work and materials are in strict compliance with all applicable specifications and requirements.

Program Elements:

Procurement: Where applicable, we establish necessary procedures to verify that all design requirements are included or referenced in procurement documents. Procurement documents will require suppliers to provide a quality control program consistent with our requirements or owner specifications, whichever are most stringent.

Document Control: We establish and document measures to control the issuance and revision of guiding documents, such as instructions, procedures, and drawings that prescribe activities affecting quality. Such measures will ensure that documents are reviewed for adequacy and accuracy, and approved by authorized personnel.

Procurement Performance: We establish measures, procedures, inspections, and other necessary guidance to assure that purchased items and services conform to procurement specifications. Such measures will include provisions, as appropriate, for source evaluation and selection, objective evidence of quality, inspection at the source, and examination of items upon delivery.

Installation and Construction: We establish a program for inspection of material installation and construction activities as required. Inspections are performed to verify conformance to the instruction, procedures, and drawings related to the activity.

Testing and Commissioning: We perform testing and commissioning on equipment and civil materials such as concrete, compaction, gradation, etc. We establish a program to ensure that all testing needs are identified and documented and that testing is performed in accordance with written test procedures that incorporate the requirements and acceptance limits outlined in design documents. The test program will cover all required tests to demonstrate that the item will perform satisfactorily in service, including, as appropriate:

- Type qualification tests
- Pre-installation manufacturer tests
- Pre-operational tests
- Operational tests to verify continued satisfactory performance during operation.

We establish and ensure that adequate operating instructions, training materials, and troubleshooting guides are followed and that individual component operational tests and complete integral system tests are performed to assure quality and proper function. We ensure that all such documents and tests conform to specified parameters, and that results of commissioning tests are properly and completely documented.

We use a formal preventive and corrective action system to prevent recurring defects. In addition to dedicated quality control personnel, quality is monitored by our Superintendents, General Foremen and Foremen on a daily basis. The quality of our work is also assured through post-job testing and evaluation to investigate problems and corrective action taken. Our daily organizational meeting identifies any lapse in quality and requires that corrective action take place immediately. If retraining is required, it is provided.

Our management committee meets regularly to identify issues and systems in need of improvement. All defective work, accidents, and failures are thoroughly investigated for root cause, and corrective actions are identified.

Employees plan their work daily and complete pre-job, post-job, and other general checklists as required by the client and MYR Group procedures. Post-job testing and documentation of vendor and client checklists also provide additional quality checks.

Project-Specific Communications Plan

We have acted in a number of different roles on projects throughout the U.S. including general contractor, prime contractor in EPC contracts, joint-venture partner, constructor, procurement contractor, subcontractor and staff augmentation manager. Through experience gained in assuming these various roles and interacting at multiple and multi-faceted levels, we understand the value that communication and cooperation among all stakeholders plays in the successful execution of a project. From initial constructability reviews, comprehensive project/segment kickoff meetings, detailed weekly progress meetings, to management reviews, all of these communication methods are employed on our projects and contribute to their success.

Technical Systems and Networks

We provide a technical framework and support for communications and coordination that enables client oversight and decision-making. Computer-based technology and automation provides opportunities for increased productivity throughout the project. Internet-based systems are used that allow access to shared files and information by remote users, and customized, secured project-specific websites, FTP sites and VPNs (virtual private networks) are examples of mechanisms that are regularly created and used to protect and facilitate the sharing of real-time information among all project stakeholders.

Communication with Clients

Regular communication among all project stakeholders is critical to the success of the project. Because every project is unique in size and scope, our project managers work with client teams to ultimately establish mutually-agreed upon parameters for the frequency and format of communications and reporting on project activities and progress. At a minimum, the following should occur on every project:

Weekly Project Progress Review Meetings: On a weekly basis, our project management team will meet with the client to discuss the project schedule, progress of engineering tasks, material ordering/receiving activities, construction in-progress or completed during the week, highlights of environmental monitoring activities and any compliance issues, any safety incidents or accidents and any jobsite/project issues.

Management Review/Project Close-Out Meeting: At the project's completion, we will meet with the client and key project participants to provide the client/owner with all warranties, emergency contact information, and information related to subcontractors for maintenance and repair. A discussion of project successes, challenges and lessons learned will also take place. In addition, we may also conduct monthly or quarterly project review meetings, depending on the nature of the project and the requirements of clients.

Communication with Team Members, Suppliers and Subcontractors

Daily Job Briefings: Each day, our project management team will conduct a Daily Job Briefing with all crewmembers and subcontractors prior to the start of work. Discussions will include: work to be performed that day, hazards of the job, work procedures, special procedures, energy source and hot work, Personal Protective Equipment, and client concerns. Our safety team will discuss safety topics related to the current work or seasonal conditions.

Constructability Reviews: Constructability reviews are performed throughout the project to identify any additional cost savings through the course of construction.

Monthly General Foremen Meetings: Monthly meetings are held to determine solutions for improved performance and quality assurances.

Types/Frequency of Reporting

Although we will accommodate any type or frequencies of reporting desired; or provide recommendations of reports applicable to a project, the following information illustrates a typical account of the type and frequency of reports that are provided on any given project:

Weekly summary reports will be prepared that include a brief overview of:

- Progress of engineering tasks
- Material ordering/receiving activities
- Construction in-progress or completed during the week
- Highlights of environmental monitoring activities and any compliance issues
- Any safety incidents or accidents
- Any jobsite/project issues
- Cost reporting when applicable

On a monthly basis or more frequently if required, the project schedule will be updated to indicate the status of all activities. This will be included with the monthly progress report, along with a discussion of progress – highlighting any tasks that have changed from the scheduled dates and their impacts to the overall project. A cash flow showing planned and actual expenditures will be included, along with a report of planned vs. actual commitment of funds against the project spend plan. The monthly report will also

provide a summary of activities planned for the coming month. Our monthly reports project cash flow by month, annually and in aggregate specifically by project.

Types of reports we provide under the appropriate contract terms:

Sample Reports

- Primavera/MS Project Schedules (Examples include High-Level Primavera and Microsoft Project Schedules and a Detailed Microsoft Project Schedule)
- Cash Flow/Cash Forecasts (Examples include High-Level Primavera Schedule with Graphical, Cost Projection and Tabular Cash Flow, Cash Flow Forecast for Project Requiring and Guaranteed Maximum Spend Per Month)
- Schedule of Values with Milestone Dates
- Earned Value Report
- Internal Cost Reports (575 Report, Labor Log) Safety Performance Reports
- Detailed Work Progress Reports (Typical Meeting Agenda, Job Progress Report, Detailed Job Progress Report and a Primavera Project Status/Forecast Report)
- Executive Summary Reports