

Outsourcing Key to Quick, Conscientious, and Cost-Effective MR Programs

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Several public utility commissions in the United States have approved programs allowing local gas distribution companies to recover the cost of replacing and repairing pipeline infrastructure. Now the rush is on to design and construct the resulting main replacement (MR) programs. With limited resources and an urgent need to improve their pipeline safety, a number of local distribution companies (LDCs) are outsourcing some or all of their MR needs. Selecting the right team to perform outsourced services can lead to lower costs, accelerated ramp-up schedules, and experts to manage program scale. This article provides tips on selecting the appropriate outsourced firm and the benefits, through customer case studies, of identifying MR experts.

A Need for Speed

Design and execution of accelerated main replacement programs often require rapid deployment of resources. But few utilities have experienced personnel available to execute rapid deployment. The process of hiring and training staff can take months or even years. Utilities located in less populated regions of the country may also find it difficult to compete for a limited number of qualified job applicants. Outsourcing your MR program can free up internal resources, eliminate the need to hire and train personnel, and keep payroll and benefits expenses in check.

Beyond the human resources delays, outsourcing can greatly reduce the design and development time of a main replacement program. Engineering and design contractors can commit to a short ramp-up time and can adjust to varying workload levels. With an outsourced team dedicated to main replacement, some local distribution companies also benefit from “on-the-shelf” main replacement designs for the future.

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It is not uncommon for consulting teams to design for MR projects for the subsequent year that are then put on the shelf. Permits are obtained when the projects are ready for construction. Occasionally “on-the-shelf” designs can offer distribution companies the flexibility to allocate unused capital budget dollars to additional miles of main replacement, when conditions are right.

Value Planning

There are other benefits to long-term planning which can easily translate into cost reductions. Coordinating main replacement projects with public works projects promotes better relations with public officials and can help reduce resurfacing costs, for example, by sharing those costs with public improvement projects. Municipalities appreciate advance notice regarding MR programs, and are often willing to work with the distribution companies to minimize project disruption and enhance coordination. Choosing an outsourced partner experienced in preparing for, and meeting with, public works officials to discuss coordination, permitting, and restoration requirements can be beneficial. At EN Engineering, we often see MR programs ranging from 10 to 20 years and annual planned replacement footage between 50 and 100 miles. Coordinating the details associated with MR programs on this scale is more efficient and streamlined in the hands of outsourced teams who are completely focused on such details.

Eight Key Considerations When Selecting Your MR Program Outsourced Partner

1. Range of services
2. Level of participation
3. Geographic reach
4. Breadth of experience
5. Years of experience
6. Access to new technology
7. Remote capabilities
8. Remote access

Selecting the Outsourced Partner That's Right For You

There are in excess of 100,000 miles of cast iron, bare steel, and older vintage plastic pipe in service, much of it in need of replacement. And there are countless local gas distribution companies--all with varying levels of MR needs, budgets, scope, and scale--ultimately responsible for the replacement of these mains and services.

Choosing the best outsourced partner to meet your specific needs requires some diligence. Here are several criteria to consider.

- 1. Range of services.** Depending on your internal resources, you may need some, or all, of your MR program outsourced. So consider what tasks you will need outsourced. Choose a firm that can perform the following: estimating, drafting services, execution and coordination planning, GIS implementation, mapping services, material list development, permitting services, replacement plan, and system design/modeling.
- 2. Level of participation.** While several firms can perform some aspects of MR services, fewer firms are able to provide all the key elements of an accelerated MR program. If your company desires to outsource the program development of your MR program, be sure your outsourced team is adept at this. Beyond just program development, a few firms will provide design, inspection, construction field support, and field documentation. At EN Engineering, we are finding that more of our customers are moving toward one inspector for each field crew. Your outsourced partner should have the resources to meet this need.
- 3. Geographic reach.** It may not be necessary for your outsourced partner to be located in your backyard. In fact, firms with a national service area are more likely to have faced similar local jurisdictional requirements or geographical challenges as those in your area. Selecting a firm with a national scope also ensures that personnel can be quickly assigned to your MR program regardless of location.
- 4. Breadth of experience.** Firms with an extensive resume of MR programs are more likely to recommend industry leading best practices, not just during the design and permitting process but from program development through to field inspections and documentation as well.
- 5. Years of experience.** Again, the more experience the outsourced firm has in designing and managing MR programs, the more value you will derive from that team's expertise. Every firm has to have their “first” main replacement program client. But you don't want that client to be you.
- 6. Access to new technology.** Utilities have a range of technology at their fingertips. But not all distribution companies use the same platforms, systems, or procedures. Be sure to ask your outsourced partner upfront what systems their team is trained and experienced in using. You may want to ask specifically about work & asset management systems, real time as-built capabilities, GIS design, GPS documentation,

and bar coding, for example. Select a firm whose skills and systems are compatible with your own. At EN Engineering, we have worked in so many different platforms and systems, that we established an in-house training program to easily bring team members up-to-speed with a client's system.

- 7. Remote Capabilities.** It may seem counter-intuitive, but more and more clients are opting to have their main replacement programs designed remotely. This requires a more adept outsourced team with enhanced technological capabilities. In fact, we have found that some of our most cost-effective main replacement programs are those designed remotely. In some cases, we will deploy personnel to perform field notes for short periods of time. But most all of the design and engineering work is done at one of our regional offices.
- 8. Remote Access.** Utilizing new technology enables the outsourced firm to access client, municipal, and other utility infrastructure information remotely and to reduce the need for on-site records retrieval. Water, sewer, telecom, and electric details and location information most often can be obtained remotely as well. LDC service record cards, GIS, maintenance records, and work management systems may also be accessible remotely, which can lead to reduced design costs and travel expenses. In order to successfully integrate an outsourced firm, you should take steps early to determine internal security requirements, protocols, etc. so that this capability does not delay your project ramp-up.

Key Elements of a Successful MR Program

- Identify Conditions & Threats
- Ranking & Prioritization
- Program Timeline
- Jurisdictional Collaboration
- Design & Construction Standards
- Work Management System
- Program Resources
- Program Communication
- Organization Structure & Governance

Whether you are looking to reduce costs, accelerate ramp-up, avoid hiring and training, or create a more streamlined process, outsourcing your MR program is a viable solution to these and many other challenges. Taking care to thoroughly review and select your outsourced partner will help you secure a team of MR experts for your specific needs now and into the future.

Resources

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