

funds for outsourcing, there can be significant and costly risks if a utility lacks a robust construction management program and it can impact all areas of operations.

» **Key Takeaway:** A lack of focus on the construction management phase can result in delays, rework, and additional expenses, ultimately leading a project to go over budget and increase overall costs to the utility. [2016 report from the Project Management Institute](#), for every \$1 billion spent on projects in the U.S. there was a waste of roughly \$122 million due to poor management, counterproductive behaviors, and bad decision making.

» **Key Takeaway:** Ineffective construction management can contribute to substandard work and reduced project quality, which if corrected can be managed effectively.

Whether insufficiencies stem from a lack of dedicated or skilled resources or are a result of not wanting to spend additional



required can lead to additional costs, delays, and potential safety issues. [Research shows](#) that construction project rework can cost 5-9% of the total contract value. That means a utility undertaking a \$10 million project could potential spend \$500,000– \$900,000 on construction rework costs. Prioritizing construction management best practices can help prevent costly quality problems.

» [Construction Safety](#) : Protecting worker and public safety is essential during complex and dangerous utility construction projects. But without proper management of this phase, accidents, injuries, and even fatalities can occur resulting in legal, financial, and reputational consequences. An [article from KPA](#) explains that the average cost of one lost-time injury on a construction job is \$35,000 and that 6-9% of construction project costs are related to workplace injuries. Preventing accidents with sound construction management practices can save billions in financial losses from workers' compensation claims, insurance costs, and reduced profit margins.

» [Construction Delays](#) : Any delays that may occur during the construction phase can impact a utility's ability to meet regulatory requirements and hinder the delivery of reliable services to customers. Failing to meet regulatory requirements can lead to fines and penalties but can also damage a company's reputation in the community particularly if a project causes significant disruptions or safety incidents. Failure to implement system changes to meet the requirements of NERC standards can result in violations of mandatory NERC standard requirements. NERC fines for standards violations can be extensive. Today the upper limit is around \$1.4 million per day per violation, although in aggregate settlements are usually less costly, depending on the severity of the violation and the violation risk factor.

It is clear that a lack of dedicated construction management resources can have significant costs and risks. Prioritizing effective construction management is essential to ensure that projects are completed safely, on time, and within budget.

[Construction Management Best Practices](#)

The complexity of today's utility initiatives to address grid modernization, decarbonization, and reliability, combined with ongoing workforce challenges and the high operational risks of



specialist can understand if and how it will come together successfully in practice. Utilities should look for support from construction management teams that have built a culture of safety and bring that with them to the job as a top priority.

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When utilities outsource, they often turn to an Engineering,



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