Maximising Process Plant Engineering Efficiency Through Effective Vendor Data Management

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ABSTRACT

Ineffective vendor data management significantly erodes project value for clients through delayed project schedules and increased engineering and construction costs. This issue is often discussed within projects, but solutions are rarely published to allow improvement.

A range of project issues can develop from poorly defined and managed vendor data practices throughout the project lifecycle. These include changes to scope, commercial variations, delay in supply of certified data, multi-disciplinary engineering rework, field engineering and site modifications to plant or equipment, inefficient labour manning profiles, and delayed commissioning and project ramp-up. The cost of these issues to clients is considerable but the root causes and mitigation methods are not always recognised and addressed.

Engineers and project managers should aspire to optimise vendor engagement and streamline vendor data strategies, then actively manage Vendor Data and Document Requirements (VDDR) throughout the project. Early, continual and proactive discussion of the issues that impact on engineering progress and project delivery with both the engineering team and vendors greatly improves efficiency (reducing engineering and design manhours), schedule, and effectiveness of design. Strategies include customising the procurement processes, VDDR, communication methods and team composition to suit the scope, complexity, technical risk and project requirements.

This paper expands on the above topics, examines the impact of vendor data management on engineering and project delivery and provides recommended methods for improving vendor data management practices. Examples are considered from past projects that range in both size and delivery model.