Megaprojects: Mega Disasters or Disaster Preventers?

Megaprojects were historically considered construction projects that cost more than \$1 billion. However, recent megaprojects, particularly largescale public works and infrastructure projects, often exceed \$10 billion. Megaproject owners, as well as associated engineers and contractors, are using innovative project delivery strategies to contain costs, mitigate risk, manage delays and reduce disputes. A variable delivery strategy is being used to balance risks with contract compensation. While not new to the construction industry, this concept can be particularly useful in reducing claims and disputes on modern megaprojects.

Historically, owners mandated fixedprice turnkey construction contracts. However, as projects began to exceed \$1 billion in cost, fewer contractors could bear the increased financial risks. It also became more difficult to pass certain risks to subcontractors and suppliers, who were often smaller and less capable of managing that risk. With megaproject owners experiencing dwindling interest from EPC firms whose knowledge and resources were vitally needed, owners chose to reduce the requirement of fixed-price contracting.

Megaprojects are now using variable, or hybrid, compensation provisions with elements of fixed pricing, unit pricing and cost-reimbursable compensation contract formats. Construction contracts can thus allocate risk to the party best able to manage that risk. For example, some contracts use lump sum for engineering and construction management services, while the direct cost of construction subcontracts may be cost reimbursable or unit rate if the contractor has sufficient information at bid to properly estimate construction costs. Additionally, when material or

labor pricing is highly volatile, an owner may use a cost-reimbursable contract structure rather than ask for lumpsum bids that may contain excessive contingency to cover that risk. Hybrid compensation structures allow for a wider participation of contractors who otherwise might decline to bid due to the perceived high risk associated with fixed lump-sum pricing.

Megaprojects may experience significant cost increases and schedule delays over initial estimates, but when variable compensation and proper risk allocation are the basis of construction, the projects are less likely to result in large claims and costly disputes. When disputes do arise, the variable compensation alternatives provide a framework for resolution, preventing a megaproject from becoming a mega disaster.

To learn more, contact Frank Adams at fgadams@interface-consulting.com. •

