

Capital Project Execution in an Operating Environment by Dennis A. Schroeder

Project execution in an operating environment is a challenge. Things like production requirements, time of operations people, personal agendas (*“This may be my only opportunity to get what I want”*), and a lack of understanding of corporate goals by operations people can get in the way of success.

Most project financial returns are based on staying within budget, executing in a defined timeframe, and achieving a smooth startup to expedite the return on capital.

Many large companies—and some mid-size companies—have their own engineering teams and substantial maintenance forces. Sometimes those maintenance forces are composed of direct hire personal; sometimes they are created with a subcontracted workforce. The thought process of many companies in the past was to utilize that workforce as a base for a construction workforce to execute projects. The idea then was, first, to save money by not hiring a contractor with all of the attached overhead and, second, to have control of that workforce. In almost all cases, the result was poor project execution, extended schedules, and most important of all, degradation of internal maintenance requirements.

Good project execution requires the following:

- **A stand-alone project team.** The team should be formed by separating an individual or individuals from the operations staff to lead the efforts on behalf of the owner. The key point is they need to be separated from daily operations. This could also be handled from within the company by a project hire or from the outside by industry experts.
- **Do not use internal engineering to do your work.** Internal engineering already has enough to do. There was a time when large companies (like a DuPont or a Dow) had stand-alone project execution staffs to manage and execute their work. Today, not many companies have the staff available to do this.
- **A fatal flaw is to use operations maintenance teams to do capital work by boosting the size of the organization for the project duration.** Essentials for good execution include project scheduling, project cost management, and different core skillsets. There are companies who do this for a living and have solid track records.

In summary, capital is precious and needs to have the best execution team possible, a team whose only agenda is to meet the project goals.

About the author: Dennis A. Schroeder is the retired president of BE&K. He was inducted into the National Academy of Construction in 2008.