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Schedule Delay Analysis







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CHAPTER 1 INTRODUCTION

Critical path method (CPM) schedules, properly prepared and maintained, make it possible to demonstrate, with reasonable certainty, the impact that can occur as a result of delays on a project. Delays can be reasonably identified, isolated, and quantified, and concurrent delays segregated. CPM networking techniques can be of evidential value to demonstrate causation and liability and also to apportion delays when concurrent delays occur.

It is important for project participants to understand not only the techniques of scheduling but also that a project schedule can serve as a basis for delineating the respective rights, obligations, and warranties flowing from the schedule. A number of key issues are associated with a project schedule that have legal implications.

Also, it is important to keep the project schedule properly updated and the contract completion date timely adjusted for excusable delays. It is equally important for all parties to settle any delays and cost issues associated with changes contemporaneously. The project schedule should be revised to reflect actual performance, major changes, and delays as they occur. The contract completion date also should be adjusted for contemporaneous time extensions. A number of schedule delay analysis methods are used in the industry. Any method used should follow the industry guidelines identified in this standard.

The 35 guidelines included in this standard generally reflect best engineering principles associated with schedule delay analysis and reflect standard of practice in the United States construction industry. However, individual cases may not follow the general standard. Parties should check the construction contract carefully for notice provisions, exculpatory clauses, and requirements for proof of delays. Less preferred risk-averse contracts attempt to shift the risk of delays and time extensions to one party, which can lead to disputes in contrast to the equitable and fair risk allocation.

This standard should be used in accordance with the schedule practitioner's professional experience and knowledge, along with facts specific to the reference project. Any legal cases referenced in this standard are for additional information only, and their relevance or application to a specific project or jurisdiction requires consultation of a duly licensed legal professional.

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CHAPTER 2 SCOPE

The 35 guidelines in this standard allow for segmentation of responsibility for delay to intermediary milestones and to the project completion date. They also enable delay damages or liquidated damages to be calculated by utilizing critical path method schedule techniques and preparing a schedule delay analysis. The guidelines in this standard are based on principles of schedule delay analysis in the following categories:

- Critical path,
- Float,
- Early completion,
- · Chronology of delay,

- Concurrent delay,
- Responsibility for delay,
- Changing schedules after the fact, and
- Acceleration.

The application of such principles should be based on the terms of the contract, contract administration, consistency in application, and legal precedent.

These standard guidelines provide commentary, support for, and explanations of this ASCE standard committee's list of guidelines. The definitions of terms is included for reference as used within the context of this standard.