





AACE® International Recommended Practice No. 45R-08

# SCHEDULING CLAIMS PROJECTION METHODS

TCM Framework: 6.4 – Forensic Performance Assessment
7.1 – Project Scope and Exacution Strategy Development
7.2 – Schedule Phoning and Development
8.1 – Project Composition Plan Implementation

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Any terms found A. Recomme ded Practice 10S-90, Cost Engineering Terminology, supersede terms defined in other AACE work coducts adding but not limited to, other recommended practices, the Total Cost Management Framework, and Skills & Knowledge of Cost Engineering.

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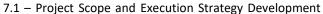
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## SCHEDULING CLAIMS PROTECTION METHODS





7.2 – Schedule Planning and Development

8.1 – Project Control Plan Implementation



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#### 1. INTRODUCTION

#### 1.1. Purpose

This recommended practice (RP) is intended to serve as a guideline, not establish a standard for schedule claims protection. The RP is intended to provide the scheduling practitioner with an overview of topics related to schedule delays as well as the various schedule practices and procedures that should be considered when developing and managing the project schedule. This RP will explain items to consider when creating and maintaining a critical path method (CPM) schedule in order to be prepared for potential delay claims. This RP begins by describing schedule delay terminology and outlining potential causes and required actions related to schedule delays. The sections following are related to some of the planning considerations recommended when developing a project schedule, plus good practices related to the management and control of the schedule throughout the project.

#### 2. RECOMMENDED PRACTICE

Projects are supposed to be completed on time. Despite the best efforts, thay situations arise that often result in a condition not anticipated in the original contract. Schedule delay claims are the acceptable processes for requesting adjustments for impacts to the project schedule. Prompt resolution of these delay is desired is key to the continued harmonious execution of the project. By implementing the appropriate processes are procedures, the scheduler can help facilitate the early resolution of schedule-related dispute and times. The accuracy and completeness of the project schedule are important to the early and successful esolution of the project documentation, it is a vital element for successfully resolving delay claims. The project Start schedule is a multi-functioning management tool that serves several purposes:

- For project planning and communication of the input of hat project plan
- To monitor project progress and all project team to deviations from the plan
- To evaluate project time impacts and the later of the alternatives for timely completion
- To forecast the time require to complete the project and to alert the project to the possible need to accelerate or develop schedule record by places.
- To provide a historical time reproject what happened on the project

There are two groups of schedule delay topics that need to be considered by the planning and scheduling professional. In the first groupe the topics that will help the scheduler understand the potential issues related to schedule delays: Why is schedule claims protection required? What are the causes of project delays? The definitions of important terms scated to schedule delay are included in that group of topics. Secondly, are the schedule protection processes and prevention measures: How should the CPM schedule be designed (modeled) and developed? How will the activities be structured and what will be the level of detail for monitoring and progress reporting? What processes should be considered for schedule management and control during the various phases of the project? Do any scheduling considerations change if alternate project delivery methods are employed?

## 2.1. Schedule Delay Claims

In the introduction to their 5<sup>th</sup> edition book *CPM in Construction Management* [1], authors Jim O'Brien and Fred Plotnick unequivocally state, "There are NO WINNERS in delay." Both the project owner and the contractors suffer when there is a project delay: the loss of productive use of the project facility or product, increased finance costs both direct and indirect, extended staffing costs, contractor overheads, etc. If the project is delayed to the stage of dispute resolution, there are the costs for attorneys, claims consultants, depositions, discovery, mediation, arbitration, and litigation. Very rarely will anyone recover the full costs for those time impacts, and none of these dispute resolution costs will bring back the project time that was lost. Therefore, professional schedulers need to be

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more effective in developing and using the CPM schedule as a tool not only to get the project completed on time, but also to communicate to all the project stakeholders the delay issues.

The scheduler should consider the potential for claims when developing and maintaining the project schedule. By taking appropriate actions, the scheduler can help to minimize the potential of the project incurring unanticipated schedule-related claims. During schedule development, as well as by diligently performing specific actions during the project execution phase, the scheduler enables the project to provide an as-built schedule that can be validated to the project records to be an effective tool to facilitate the preparation for and/or defense of a schedule-related claim.

### 2.2. What Should the Scheduler Know About Schedule Delays?

Schedulers need to understand the potential contract issues that are related to delay issues when developing, managing, and controlling the project schedule. It is not enough to just creat a "good working schedule", the scheduler should also consider potential claims when building and maintaining the project schedule. Schedulers must understand the important terms and definitions in relation to the conflict excusable; compensable; concurrent or serial; non-excusable; cure notice; and liquidated damages, well as differentiate between such terms as delay and disruption, which are not synonymous.

The scheduler should read and fully understand the project contract, we control is the "rule book" for the project and contains a variety of time (schedule) related topics in the contract to support in damage for delay" clauses; ownership of schedule float; treatment of concurrent felays; when notification requirements; definitions and categories of delays; schedule change management and accept of methods of demonstrating time impact analysis (TIA) issues. When reviewing the contract, there are usakey and elements to consider related to the schedule:

- Risk allocation (sharing) in construction contincts.
- Responsibly for mitigation of delay
- Format for dispute resolution
- Timely written notice
- Project (schedule) document tion

#### 2.3. Causes of Schedule Plays

Schedulers need to know the probability causes of construction delays and extra work. There are only a handful of major delay categories. However, repending on the type of contract agreement, many delay issues are possible from these sources: owner-caused delays and changes, claims relating to the design professional, contractor-caused delays and changes, differing site conditions, and *force majeure* events.

The owner is defined as the public or private entity ultimately responsible for the proper execution of the project. Examples of owner-caused delays include:

- Late notice to proceed.
- Lack of site access.
- Administrative delays.
- Extended submittal reviews.
- Funding changes.
- Owner enhancements.
- Change directives/orders.
- Directed suspension of work.
- Delayed owner-furnished equipment.
- Delayed installation (or performance) by the owner's contractors.