PINNACLEONE
The cornerstone of confidence™

February 2004

The following is a five-part article addressing concurrent delay.

Article 4 of 5

SEMINARS
PinnacleOne Institute

P1/Lorman Seminars

SERVICES
Program & Project Management

Dispute Avoidance & Resolution

Real Property Advisory Services

Headquartered in Phoenix, PinnacleOne regional operations are located in Irvine, Los Angeles, Sacramento, and Hartford.

To view a specific back-issue of this newsletter, please <Click Here>

DISSECTING THE DOCTRINE OF CONCURRENT DELAY

The concept of *Concurrent Delay* is one of the most hotly contested topics in the industry. Both Owners and Contractors invariably use Concurrent Delay as an excuse to avoid responsibility for claims of extended overhead claims or liquidated damages assessments. Unfortunately, there is no uniform application of the Doctrine of Concurrent Delay. Contracts seldom address it. Courts can't seem to agree on what it is or how it is measured. This five part discussion of Concurrent Delay is intended to help provide you with an understanding of the confusion and controversies arising from Concurrent Delay and ways you can proactively address Concurrent Delay to avoid costly disputes of uncertain outcome.

Concurrent Delay - Finding Equitable Settlement Solutions

While it is common for project participants on a delayed project to toss the term "*Concurrent Delay*" about freely, it is rare that the construction contract actually defines what it means. Furthermore, there is a divergence of opinion on the net effect of concurrent Excusable, Non-Excusable and Compensable delay events when the contract is silent on the topic [1]. If this issue is not addressed clearly in the contract documents, it is virtually certain that the parties will disagree over who should bear the cost of time during the Concurrent Delay periods. Because consistent outcomes amongst litigants claiming Concurrent Delay have been elusive, it is difficult to draw any consistent definitive direction from the case law analyzing Concurrent Delay [2].

Due to the often inconsistent judicial holdings concerning Concurrent Delay, we have found the following two concepts can help in the determination of an equitable settlement option. Consider first, the concept of Equitable

Mr. Tom Peters, P.E., is a Sr. Claims Analyst for PinnacleOne's Los Angeles operations.

With 23 years of experience in construction claims assessment, dispute resolution, program and project controls, CPM scheduling, cost control, construction and program management, document management, general contracting and design engineering. He is a registered civil engineer in the State of California. Mr. Peters' experience is both domestic and international and includes the design and construction management of commercial, industrial, petrochemical, institutional, off-shore & sub-sea, water and wastewater facilities.

Adjustment.

> *"The Theory of Equitable Adjustment basically states that when a contract is changed, the contractor is entitled to be put back in the same position it would have been had it not been for the change. This means that the contractor is neither entitled to improve its position nor expected to be put in a worse position. Thus, a contractor that was making a profit on the job is entitled to maintain that position, while a contractor that was losing money is not entitled to be made whole by the change [4]."*

Think also of *Pareto Optimality:*

> *"... a Pareto Optimization is a solution which, when it's applied, leaves nobody any worse off* [5]*."*

Given the confusion and controversy surrounding the Doctrine of Concurrent Delay, both Equitable Adjustment and Pareto Optimality should bear heavily on any settlement solution. When scored in this manner, how do owners and contractors fare under the two prevailing definitions of critically and equity? As you might expect, it depends on your perspective.

Longest Path Theory of Criticality

Advocates of the longest Path Theory argue that only delays to the project's Longest Path matter because only those delays ultimately delayed the Project [3]. They would further argue that delays on subordinate paths were non-critical and only consumed project float. Consider the following scenarios:

> **Owner on the Longest Path:** Assume that the project's longest path delay is through an Owner-caused Compensable Delay. Under the longest Path Theory of Criticality, it would be permissible in this situation for the Contractor to consume negative float (thereby causing a Non-Excusable Delay) on a Subordinate Path by pacing his work to the longer, more driving Compensable Delay. For example, if a Contractor recognized that his subordinate path was

late relative to the current contract completion date, but not critical relative to the Owner's longest path delay, the Contractor could still reallocate labor to other projects and not incur additional time-related costs as long as the Contractor's subordinate path finished earlier than the Owner's longest path.

Under this circumstance, the longest Path theorists would argue that the Contractor could make a legitimate claim for Extended Overhead for the entire delay period despite concurrent offset! Is this solution equitable? Perhaps. Perhaps not. One could argue that the Owner (owning the longest path delay) caused the Contractor to be on site anyway. A court could determine that causation could never be shown between the Contractor's delay to the subordinate path and the ultimate project completion date (recall that the intent of CPM Scheduling is to calculate the *Longest Path* through the network).

In this scenario, the Owner's condition remains unchanged and the Contractor's condition is improved. Why? Because the Owner's delay would have determined the project's longest path regardless of a lesser delay by the Contractor. Conversely, the Contractor is improved not only because he is afforded greater flexibility in how he utilizes his resources, but also because he is arguably able to seek recovery of Extended Overhead expenses for the entire length of the longest path delay.

Contractor on the Longest Path: Now, assume that the project's longest path delay is driven by a Contractor-caused Non-Excusable delay. Under the Longest Path Theory of Criticality, it would be permissible for the Owner to consume negative float on a subordinate path as long as the Owner's total delay was less than the Non-Excusable Contractor Delay on the project's longest path. An Owner could recognize that his subordinate path was late (as signaled by negative total float), issue change orders to that path and still not incur additional time-related costs as long as the Owner's subordinate path finished earlier than the Contractor's longest path.

In this scenario, proponents of the Longest Path Theory would assert

that the Owner could also assess Liquidated Damages for the entire period despite his concurrent delay on a path shorter than the Longest Path! In this situation, they argue the Contractor's delay would have determined the longest path regardless of the lesser delay by the owner and therefore, the Contractor would have had to be on site anyway. They also assert that the Owner can assess Liquidated Damages for the entire duration of the longest path delay and take advantage of float created by the contractor-caused delay to make decisions and issue change orders. In this case, the Contractor's position remains unchanged and the Owner's position is improved.

Negative Float Theory of Criticality

Most projects that are late have subordinate work paths that have activities with negative float values [3]. Advocates of the Negative Float Theory argue that all paths with negative float are critical because but-for the delay on the longest path, any path with negative float would have arguably delayed the project completion date. Consider the following scenarios:

Owner on the Longest Path: Assume that the project's longest path is through an Owner-caused Compensable Delay. A subordinate path containing a Non-Excusable Contractor-caused delay is also late (i.e., has negative float) but not as late as the Owner's longest Path. In this scenario, proponents of the negative Float Theory of Criticality would argue that the Contractor should only be granted time for the duration of the concurrent delay. During the concurrent delay period, the Owner loses the right to assess Liquidated Damages and the Contractor waives the right to Extended Overhead. The Contractor is however granted both time and money (in the form of Extended Overhead) for the remaining Owner-caused delay period on the project's longest path.

In this scenario, the Contractor's condition remains unchanged and the Owner's situation is improved. Why? Because the Contractor was responsible for delay that arguably would have delayed project completion if the Owner-caused delay had not occurred.

Conversely, the Owner receives the benefit of a relief from exposure to Contractor Extended Overhead costs for the concurrent portion of his total delay period because this theory does not require the owner to compensate the Contractor for Extended Overhead costs for the entire duration of the longest path delay period even though the Owner's delay governed.

Contractor on the longest Path: Now, assume the project's longest path delay is through a Contractor-caused Non-Excusable Delay. Further, assume that a subordinate work path exists containing Compensable Owner-caused delay, which is also late (i.e., has negative float), but not as late as the Contractor's longest path. Advocates of the negative Float Theory of Criticality would argue that the Contractor should be granted a time extension for the concurrent portion of the total delay period resulting in the Owner only being entitled to assess Liquidated Damages for the remaining Contractor delay on the project's longest path.

Similarly, can the Contractor clearly demonstrate that his Non-Excusable delay to a subordinate path with negative float was merely a result of his decision to pace his work to the Owner's longest path delay? Or conversely, does the record show that delays on subordinate paths (by either the Owner or the Contractor) were independent of longest path delay and would have occurred regardless?

In the absence of specific contract language providing the project participants with Equitable and/or Pareto Optimal solutions to disputes associated with Concurrent Delay and Criticality, the foregoing questions be asked and answered to find an equitable solution to the problem. Thus, it is extremely important for both Contractor and Owner to remain acutely aware during the project of any work they are impacting on any work path that is already late. If you plan to delay an activity that is on a secondary path with negative float, keep it as short as possible and notify the other party that you are claiming time made available by their longest path delay. At all times, recognize that without proper documentation these decisions can be mischaracterized and very risky. Most important, remember that in dispute situations, a silent contract and a lack of

documentation are usually a dangerous and costly combination!

References

1. Peters, Thomas F., *Concurrent Delay - What is It and Why is It so Important, Dissecting the Doctrine of Concurrent Delay, Part 1 of 5,* PinnacleOne E-Newsletter, November 2003 @ http://www.pinnacleone.com/

2. Peters, Thomas F., *Criticality - What Do the Courts Say?, Dissecting the Doctrine of Concurrent Delay, Part 3 of 5,* PinnacleOne E-Newsletter, January 2004 @ http://www.pinnacleone.com/

3. Peters, Thomas F., *Criticality and Multiple Work Paths, Dissecting the Doctrine of Concurrent Delay, Part 2 of 5,* PinnacleOne E-Newsletter, December 2003 @ http://www.pinnacleone.com/

4. Jentzen, P.E., Gary H., Spittler, Philip and Dr. Ponce de Leon P.E., Gui, *Responsibility for Delays After the Expiration of the Contract Time,* 1994 AACE Transactions

5. Pareto, Vilfredo (1848 - 1923), www.bbc.co.uk/dna/h2g2/A240661

To remove your name from this mailing, please e-mail DAR@PinnacleOne.com with "Remove" in the subject line.