Analysis of Concurrent/ Pacing Delays

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1. INTRODUCTION

Basic chemistry has taught us that "gas expands to fill available space." In the construction industry, this fundamental principle has transformed into the adage that "work expands to fill available time." Therefore, it is not unusual for an owner-caused critical path delay to extend the performance of other concurrent contractor work activities. When a contractor seeks compensation for the owner delay, an owner's typical assessment is that the delays to the other work are concurrent delays caused by the contractor, and therefore, no extended general conditions or home office overhead damages are compensable.

Owners are typically not liable to pay for delay costs that they have caused if contractor-caused concurrent delays exist, but they are often liable to provide a time extension, either through express contract language or implied through industry practice. To counter the owner's argument regarding concurrent delay being noncompensable, contractors proclaim that the alleged concurrent delays were really not independent delays but instead were dependent delays that were the result of work keeping pace with the delays caused by the owner. The contractor's rationale is, "Why should I hurry up and then wait?" Hence, an excuse called "pacing" emerged.

Many contractors, however, fail to adequately prove that contractor "pacing" was the sole reason behind intentional, concurrent delays that were directly caused by the owner's critical path delays. Also, courts have been inconsistent in their treatment of this particular concurrent delay issue. This article attempts to define, research, and analyze the concept called "pacing" relative to owner-caused delays as well as explain the necessary steps to adequately demonstrate that "pacing" is not a concurrent contractor-caused delay.

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2. CONCURRENT/PACING DELAY CONCEPTS DEFINED

The concepts of concurrent delays and "pacing" delays are similar. Concurrent delays are generally defined two or more parallel and independent delays to the critical path on a project. Some people argue that a concurrent delay must be on the same critical path. Others argue that a concurrent delay may exist on a parallel critical path. Even further, some argue that the concurrent delay has to start on the same day, because otherwise, the first delay creates float in the schedule that the second delay merely absorbs. By using a But-For test for concurrent delay, if one of the concurrent delays is absent, the argument is that the other concurrent delay would still have extended the project finish.

As for any type of delay, the key aspect to concurrent delays is determining which party is responsible for the delay. Generally, case rulings have acknowledged that two simultaneous, independent, concurrent critical path delays, one caused by the owner and the other caused by the contractor, have provided the contractor with only entitlement to a time extension to the project finish.[1] This issue was discussed in a decision by the Veteran's Administration Board of Contract Appeals, as follows:

> *The general rule is that, where both parties contribute to the delay, neither can recover damages, unless there is in the proof a clear apportionment of the delay and expense attributable to each party. Courts will deny recovery where the delays are concurrent and the contractor has not established its delay apart from that attributable to the government.*[2]

Under certain conditions, however, some case rulings have allowed contractors to receive both a time extension and recovery of delay-related costs when an owner caused a delay to the critical path and the contractor has a simultaneous delay. A contractor can be merely "pacing" the work by utilizing the available float caused by the owner delay.[3] These cases are few and, needless to say, the "pacing" argument may be highly questionable.

Contractors have argued that the reason for a concurrent contractor-caused delay, or "pacing" delay, was the result of a management decision not to "hurry up and then wait" because the owner-caused delay was driving the project completion. Simply said, "pacing" has emerged as an excuse to explain why a contractor decided to stretch-out its work to keep pace to the cadence of other work that is more critical.

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1 *Cogefar-Ipresit U.S.A., Inc.*, DOTBCA No. 2721, 97-2 BCA ¶ 29,188 at 145,207; *Freeman-Darling*, 89-2 BCA ¶ 21,882 at 110,100.

2 *Coffey Construction Company, Inc.*, VABCA No. 3361, 93-2 BCA 25, 788 (1993).

3 *Tyger Constr. Co. v. United States*, 31 Fed. Cl. 177 (Fed. Cl. 1994); *Jay P. Altmayer*, GSBCA No. 12639. 95-1 BCA ¶ 27,515 at 137,122-23; *H&S Corp.*, ASBCA No. 29,688. 89-3 BCA ¶ 22,209 at 111,720-21.

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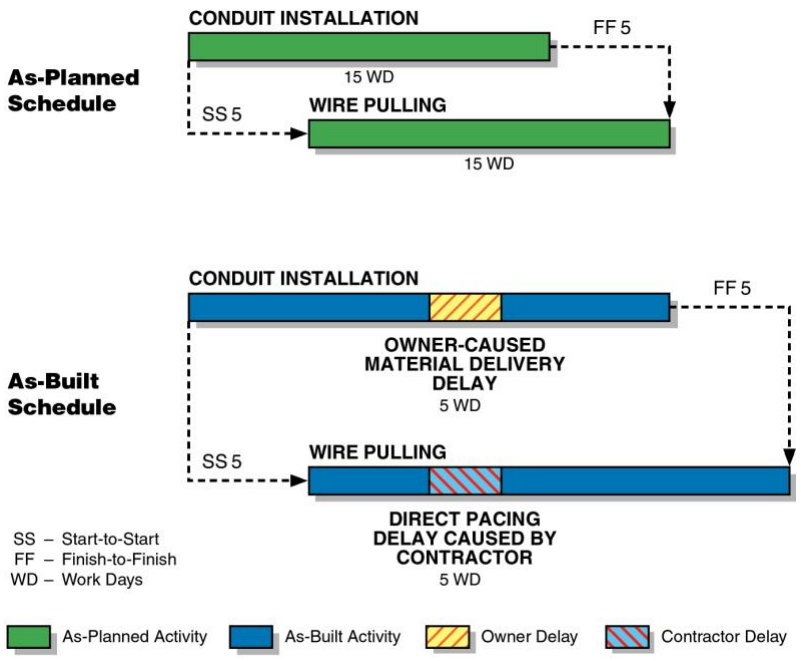
Pacing delay occurs when the delay in one activity occurs, and a conscious and contemporaneous decision is made by the contractor to pace progress in a second and independent activity, or several activities. Thus, the contractor deliberately slowed down its work in the second activity because of the delay to the first activity. However, concurrent delay results when the work in a second and independent activity, or several activities, is involuntarily delayed by factors independent of any problems arising from the delay in another activity.

Pacing is typically manifested in two distinct circumstances.

1. One situation, called direct pacing, is where the duration of a successor schedule activity is extended due to a delay in a predecessor activity on which the progress of the successor activity is directly dependent. As shown in Figure 1, the duration of the wire pulling work is extended in duration because the installation of conduit work is taking longer due to the lack of conduit material. While this is pacing, it is not considered a concurrent delay – the cause of one delay is the result of the other delay. Examination of activity relationships in the schedule, usually in the form of finish-to-finish ties, will provide the information to determine if direct pacing has occurred.

Figure 1
Direct Pacing



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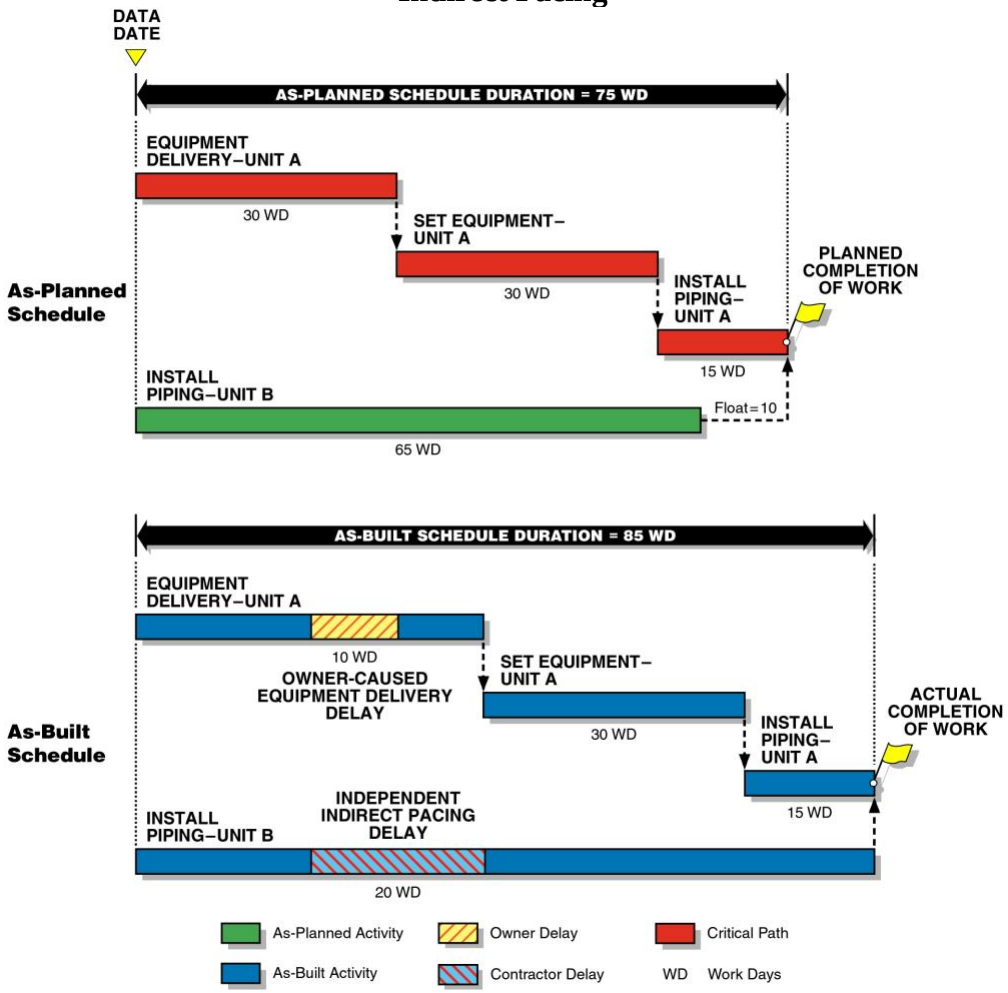
2. In the second situation, called indirect pacing, the paced activity has no dependency on the other activity. As shown in Figure 2, the contractor deliberately slows down its piping installation work in Unit B because of the owner's delay in equipment delivery in Unit A. The equipment delivery delay creates[4] available float to be consumed by the piping installation in Unit B activity.

Figure 2
Indirect Pacing



[4] The term 'creation' should not be interpreted to mean that total float is increased. In fact, the opposite is true. The parent delay adversely impacts the overall critical path of the project, thereby decreasing total float. What it creates (increases) is relative total float on the path of the paced activity relative to the total float on the path carrying the parent delay.

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Pacing can be a defense to a potential concurrent delay and it is not a distinct delay event. Therefore, the pacing issue is relevant only to the extent that concurrency of delays is an issue.

Unless contractually stipulated otherwise, on most projects the contractor's right to pace its work is accepted along with the view that float is a shared resource that is to be used by the party who first needs the float. However, lack of resources which should have been provided by the contractor, or poor productivity that was caused by the contractor and which caused other independent activities to be delayed, are not considered pacing delays. These are contractor-caused problems, and the contractor is responsible for the delay and disruption that are caused by these problems.

Pacing may alter the net effect of the compensability of a concurrent delay situation, as shown in Table 1 below:

Table 1
Net Effect of Pacing Delays

Delay Event	Concurrent With	Net Effect
Owner Delay	Contractor Pacing	Compensable to Contractor, Non-excusable to Owner
Owner Pacing	Another Contractor Delay or Nothing	Non-Excusable to Contractor, Compensable to Owner

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3. AN OWNER'S PERSPECTIVE

For an owner, the inability to timely utilize a project for its intended purposes could have costly affects to an owner's operation. Delays may cause owners to incur unanticipated costs such as:

- Governmental fines and penalties
- Additional rental expenses
- Interest charges
- Third party claims
- Missed market penetration
- Loss of revenue from operations
- Reduction of shareholder equity
- Loss of key resources (staffing & equipment)

Normally, owner contracts attempt to allocate many of the above risks by including provisions for liquidated damages to be assessed against the contractor for not completing the work in accordance with contract's completion date.

When an owner delays the critical path, and other work is also delayed based on a contractor's excuse that it is "pacing" its work, the owner should be highly skeptical. The "pacing" argument is easy to assert, but it can be difficult to defend. It is not uncommon for contractors to use the "pacing" argument as a vague excuse to cover problems it has caused. However, in many cases the contractor's contention may, in fact, be valid. In many situations, owners are usually not informed or they were told after the fact that a contractor had decided to "pace" its work.

Therefore, owners should be circumspect and proactively investigate the project records to determine the validity of a contractor's "pacing" excuse before agreeing to pay a contractor for its extended project costs. A review of most of the common contemporaneous project records should give the owner a relatively good indication of potential contractor-caused problems that are not inclusive of "pacing" as defined above. Documents such as jobsite correspondence, emails, internal contractor memos, schedule updates, area release forms, monthly progress reports, submittal logs, meeting minutes, labor productivity reports, welding progress reports, third party inspection reports, system turnover packages, contractor job cost reports, material receiving reports, subcontractor correspondence, equipment utilization reports, time sheets for field labor, and daily foremen reports are excellent sources of information that may record contractor-caused problems.

Contractors have a hard time defending a "pacing" argument when it is uncovered that the contractor is responsible for independent concurrent delays. Some of the most common types of contractor-caused problems gleaned from contemporaneous project records are the following:

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- Bid error
- Subcontractor default and replacement
- Pipe fabrication errors
- Lack of qualified supervision
- Scaffolding mismanagement
- Productivity loss due to a contractor's extended use of overtime
- Access problems due to muddy conditions
- Field labor absenteeism and tardiness
- Lack of small tools
- Strikes
- Holiday slowdowns
- Crane and lifting equipment breakdowns
- Construction sequencing changes by the contractor
- Rework caused by the contractor
- Late contractor submittals
- Lack of needed materials due to material handling mismanagement
- System turnover noncompliance
- Late delivery of contractor-provided equipment
- Contractor-provided equipment defects
- Custom clearance problems
- Defective contractor scheduling

If one or more of these contractor-caused problems are documented and if they are concurrent with an owner-caused delay to the critical path, then the validity of a contractor's "pacing" argument is potentially flawed. Further, the owner should thoroughly investigate the contractor's schedule updates to determine whether the contractor-caused problems are also affecting the critical path or near critical paths.

In nearly all cases, an owner is not required to pay for the contractor's extended project costs if the contractor is responsible for independent concurrent delays. Moreover, if a contractor's "pacing" delay excuse appears to be legitimate, the owner should further demand that the contractor demonstrate that it had the capability in terms of supervision, labor, materials, and equipment to perform the paced work as it had planned absent the owner-caused delays.

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4. A CONTRACTOR'S PERSPECTIVE

The dictionary defines "pacing" as an act of stretching or spreading out, and in the construction industry, pacing one's work is quite common. In fact, nearly all construction contracts provide an implied warranty that allows a contractor to enjoy a least cost performance. Thus, contractors are driven to maximize profits by keeping costs down. The saying "time is money" is the most pervasive and underlying reality throughout the construction industry. Therefore, it is no surprise that delays are the most common causes of construction disputes.

Construction delays nearly always lead to undesirable consequences to a contractor's bottom line. Delays increase a contractor's project overhead and other project-related costs as well as potentially leave the contractor liable for liquidated damages by the owner. In addition, delays may postpone the timely start of succeeding projects.

The reasons behind a contractor's decision to "pace" other work can vary. For example, issues such as optimizing labor and equipment resources be means of leveling, access to work areas, available on-site material storage, holding the delivery of weather sensitive equipment, working in overly congested areas, and subcontractor availability are some reasons why contractor's may decide to "pace" other work. Therefore, when an owner delay impacts the critical path, a contractor must take appropriate measures to inform an owner that the project is being delayed, and it is taking actions to minimize costs.

Typical types of owner-caused delays that may create the need by a contractor to "pace" other work include the following:

- Numerous and late owner change orders
- Untimely approval of owner change orders
- Late mobilization and lack of the owner's commissioning staff
- Impacts from the owner's other contractors
- Continuous owner changes to system definitions
- Late equipment and material deliveries by the owner
- Shortages of owner-supplied materials
- Late owner responses to contractor's requests for information (RFIs)
- Impacts from owner changes to turnover package boundaries
- Untimely owner approval of the contractor's submittals
- Late owner-supplied engineering
- Owner's unauthorized and undocumented removal of materials from one area to another area
- Overzealous and continuous changes to inspection standards by the owner

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- Lack of owner-supplied welding inspectors
- Never ending punch lists caused by multiple and uncoordinated owner field representatives

When a contractor makes the decision to "pace" other work as a result of an owner-caused delay to the critical path, the contractor must provide the owner with prompt written notice. The contractor should be ready to discuss its decision openly and demonstrate to the extent possible the rational for "pacing" other work. A contractor should remove contractor-caused problems from its "pacing" argument. If a contractor fails to appropriately apportion concurrent delays for which it has responsibility, a contractor's ability to recover extended project costs can be nullified.

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5. INDUSTRY PRACTICE

In an evaluation of potential concurrent delay vs. a pacing delay, generally accepted international construction industry guidelines[5] are typically adopted in review of the documentation, in order of importance, as follows:

1. A predecessor dependent delay must precede a pacing delay;
2. Documentation that the contractor could resume progress at an un-paced rate; and
3. Evidence that a conscious and deliberate decision was made at the time to pace the work as a result of the other delay.

Pacing can be contentious because it can be used to excuse delay which is otherwise unaffected by a change in scope or variation. Thus, it can be said that:

> *Pacing arguments are most often made at the end of a project, when an as-built programme analysis reveals that activities which were not affected by any employer instructed variations or other excusable events appear to have been delayed. When pacing is argued with hindsight, it should be treated with both caution and skepticism, especially when the assertion is unsupported by contemporaneous records."*[6]

If no documentation is made available to justify a pacing delay, then consistent with the AACE International recommended practice, concurrent delays by the contractor should not be regarded as pacing delays, and instead are delays for which the contractor is responsible.

However, the concept of "pacing" one's work is real and its usage has been confirmed based on Long International's project management and construction claims experience over the last several decades. A contractor's decision to "pace" its work was a recurring action, and in many situations, Long International found that "pacing" was the most appropriate and practical action by a contractor in order to reduce the financial risks caused by an owner-caused delay to the critical path.

Unfortunately, Long International observed that many contractors failed to diligently inform the owner or adequately document in the contemporaneous project records its decision to "pace" other work. Contractors usually inform the owners after the fact, and thus owners are not given the opportunity to understand the implications of the contractor's action. As a consequence, an atmosphere of distrust and animosity between the parties can adversely influence the ability of the parties reaching an amicable resolution regarding a delay claim.

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[5] AACE International Recommended Practice No. 29R-03 Forensic Schedule Analysis, 25 April 2011, Section 4.2.G, pp. 112-113.

[6] See Keane, P.J. and A.F. Caletka, Delay Analysis in Construction Contracts, Wiley-Blackwell, 2008, Section 5.3.7, p. 213.

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6. ANALYSIS OF COMMON CONTRACT REQUIREMENTS

The contract is the key document for determining delay requirements. Most construction contracts allow a contractor to receive a time extension for delays that are beyond the control and without fault or negligence by the contractor (excusable delays). Construction contracts usually limit a contractor's right for extended project costs only for the delays caused by the owner to the critical path (compensable delays). If the contractor is responsible for delaying the critical path, then the contractor receives no time extensions and no compensation (non-compensable delays), and the contractor may be liable for liquidated damages or actual delay damages.

Most construction contracts require the contractor to demonstrate that delays (excusable or compensable) are in fact impacting the project completion date. Owner contracts typically require contractors to utilize the contemporaneous project schedule updates to prove delay as well as calculate the number of days of extension to the contractually-required completion date. The key elements for a contractor to recover extended project cost due to an owner-caused delay to the critical path are to prove that the work was delayed or hindered, the contractor suffered damages because of the delay or hindrance, and the owner, its agents or other contractors were responsible for the act or omission that caused the delay or hindrance.

It is common for construction contracts to not address or define concurrent delays let alone "pacing." Most construction contracts contain specific language such as, "time is of the essence" or "a contractor shall diligently perform the work" which requires a contractor to expedite the completion of the work. Consequently, most construction contracts do not inherently sanction a contractor to "pace" its work when delayed by an owner-caused impact to the critical path.

However, nearly all construction contracts include an implied warranty that requires the contracting parties not to delay, hinder, or interfere with the performance of the other party.[7] A contractor is allowed to enjoy a least cost performance based on implied warranty. When an owner delays the critical path, the contractor is permitted to mitigate costs to the benefit of the contractor thereby providing a basis for "pacing."

Case rulings have acknowledged that the project schedule can change from month to month, and project delays can create float in the schedule. And, under certain conditions, a contractor is not required to "hurry up and wait."[8] Generally, courts and boards have deemed float as an available time-based resource to be utilized by all parties in "good faith."[9] In fact, many contracts include a specific provision specifying this concept.

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7 Theory of Implied Warranty.

8 *Harry & Keith Mertz Constr., Inc.*, ASBCA Nos. 94-165-1, et al., 97-1 BCA ¶ 28,802; *Bechtel Envtl., Inc.* ENGBCA No. 6137 et. al., 97-1 BCA ¶ 28,640 at 143,021-22, recon. Denied. 97-1 BCA ¶ 28,851; *John Driggs Co.*, ENGBCA No. 4926, 87-1 BCA ¶ 19,833 at 100,388; *Cogefar-impresit*, 97-2 BCA at 145,207.

9 *Williams Enter. V. Strait Mfg. & Welding, Inc.*, 728 F. Supp. 12 (D.D.C. 1990); *Weaver-Bailey Constructors, Inc. v. United States*, 19 Cl. Ct. 474, 475, 481-82 (Cl. Ct. 19990); *Ealahan Elec. Co.*, DOTBCA No. 1959, 90-3

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Construction contracts almost always have strict notice provisions that the contractor must follow when encountering an impact or delay. Notice provisions are intended to provide the owner with the opportunity to mitigate the potential adverse effects from an impacting event. If contractors fail to provide prompt written notice to the owner, it is likely that the courts and boards will rule unfavorably.[10] Legitimate and well-supported contractor claims have been rendered null and void due to a contractor's lack of timely notice to the owner.

Therefore, it is important for both an owner and contractor to know what the specific contract requirements are before assuming the risk that one party may or may not be responsible for delay as it pertains to a "pacing" argument. Case rulings have shown that the contractor's delay damages claims are dependent on specific contract language. Further, the success or failure of a contractor's delay damages claim is even more heavily based on the facts underlying the various causes of delay.

BCA ¶ 23,177; *Titan Pacific Constr. Corp.*, ASBCA Nos. 24,148, et al., 87-1 BCA ¶ 19,626, aff'd 17 Cl. Ct. 630 (Cl. Ct. 1989); *Dawson Constr. Co.*, GSBCA No. 3998, 75-2 BCA ¶ 11,563.

[10] Common arguments made by contractors in an attempt to justify the lack of formal notice include but are not limited to 1) the owner constructively knew about the delay because it received a copy of the schedule updates which showed that the project performance would be extended, 2) the owner was provided the delay notices in the form of meetings or other discussions where the issues were discussed, and 3) the owner was not prejudiced by the lack of formal notice and would not have been able to do anything different than what was actually done.

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7. ANALYSIS OF RELEVANT CASE LAW

Confusion and controversy usually results from the complexity of project delays, and case decisions can vary widely based on the underlying contract terms and the facts of the case. The critical element is for a contractor to prove the causal link between the owner-caused delay to the critical path and the contractor's decision to "pace" its work. The proof of causation can be complicated, and numerous other variables may obscure and invalidate a contractor's proof of causation.

As a result, a contractor may not automatically be entitled to recover extended project overhead costs due to an owner-cased delay. Furthermore, a contractor must evaluate potential critical path delays that it may have caused before a delay claim for extended project overhead costs is valid. The following are some key case rulings relative to the "pacing" argument:

7.1 FAVORABLE CONTRACTOR RULINGS

1. ***A Contractor May Relax its Performance*** – In a 1985 case, the General Services Board of Contract Appeals agreed with the contractor's right to slow down its work. The GSBCA stated:

   "When a significant owner-caused construction delay, such as the RW 11 design conflict occurs, the contractor is not necessarily required to conduct all of his other construction activities exactly according to the pre-delay schedule, and without regard to the changed circumstances resulting from the delay…. The occurrence of a significant delay generally will affect related work, as the contractor's attention turns to overcoming the delay rather than slavishly following the now meaningless schedule."[11]

2. ***A Contractor Has No Duty to Hurry Up and Wait During an Owner-Caused Delay*** – In a 1995 case, the Armed Services Board of Contract Appeals (ASBCA) rejected a concurrent delay argument presented by the government in a case involving a three-month delay to the start of renovation work. Essentially, the Board found that the contractor had no duty to "hurry up and wait" on the procurement of its bonds during the delay to the start of work caused by the government's delay in provided access to the work area. In its decision, the court cited the fact that even though the contractor did not secure certain bonds per its original schedule, the late submission of these bonds did not delay its mobilization to the site. Thus, the contractor was ready to begin

[11] *Utley-James, Inc.*, (1985) GSBCA No. 5370, 85-1 BCA 17,816, aff'd, *Utley-James, Inc. v. United States*, 14 Cl. Ct. 804 (1988).

excavation work immediately following the delay to its site access caused solely by the owner.[12]

3. ***Concurrent Delays Must Impact Critical Path to Offset an Owner-Caused Delay*** **–** During the construction of a subway station, the owner's allegations of concurrent delays were dismissed because such delays were found to be merely a side effect of the owner's predominant critical path delay. The contractor successfully proved that owner-caused design defects directly caused a delay to the excavation support system which was on the project's critical path. The owner failed to prove that the contractor contributed to concurrent delay of the excavation support system. At the heart of the court's decision was the fact that even though the contractor did not adhere precisely to its schedule for certain non-critical tasks, the owner failed to show that the contractor could not have accomplished those non-critical tasks earlier had the project's critical path not been delayed by the owner. The court opined that when a significant owner-caused delay occurs, the contractor is not necessarily required to conduct all of its other construction activities exactly according to its pre-delay schedule, and without regard to the changed circumstances resulting from the delay. The contractor's efforts to mitigate the effects of the owner-caused delay were also persuasive in the court's favorable decision for the contractor.[13]

4. ***A Court Refused to Apportion Concurrent Delays When the Owner Substantially Contributed to the Delay*** – In a rare case, the completion of a water treatment plant was delayed by six months. The owner argued that liquidated damages should be apportioned between the owner and the contractor because both were responsible for certain delays during the project. The court disagreed with any apportionment of liquidated damages against the contractor because the court found that the owner "substantially contributed" to the delay making it practically impossible for the contractor to complete the work as scheduled. The rationale behind the court's ruling was that delay substantially altered the terms of the contract. In addition, a key point to the court's decision was the fact that the contractor presented evidence to demonstrate that the owner contributed to delays in completion of the work, and the owner presented no evidence that contradicted the contractor's presentation. It should be noted that this decision is somewhat unusual when considering that most courts in recent years have preferred apportionment of delay damages when both parties have contributed to the delay.[14]

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[12] *CER, Inc.*, 96-1 BCA ¶ 28,029 (1995).
[13] *John Driggs Co.*, ENGBCA Nos. 4926, 5061 & 5081, 87-2 BCA ¶ 19,833 1987.
[14] *Calumet Constr. Corp. v. Metropolitan Sanitary Dist.*, 178 Ill. App. 3d 415, 533 N.E.2d 453 (1988).

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7.2 FAVORABLE OWNER RULINGS

1. ***A Contractor Must Mitigate the Delaying Effect of Owner-Caused Delay*** – In 1996, the court ruled that a contractor was denied delay damages for a two-month owner-caused delay, because the contractor failed to mitigate the delaying effect of the unforeseen condition. Although the owner's foundation design was not appropriate for the soil conditions encountered at the site, some of the contractor's delays were caused by difficulties it had in obtaining a subcontractor to design the replacement foundations. In addition, the contractor's soils engineer failed to discover the soil problem for two weeks after being on site. The contractor's unfavorable outcome was also due to its failure to produce a project schedule prior to discovering the differing site condition. Thus, the court stated it was hindered in its ability to determine the true effect of the condition. As a result, the court found that the sum of the subsequent contractor-caused delays equaled the total two-month delay that was incurred on the project.[15]

2. ***A Contractor Must Prove the Owner's Delays Impacted the Critical Path and Critical Path Delays Must be Segregated from other Contractor-Caused Delays*** – In a 1996 case, a contractor's delay claim was rejected because it failed to set apart the effects of its own delays from the owner-caused delays. A critical error in support of the contractor's case was that it failed to provide any critical path schedule to demonstrate the affects from owner specific impacts to the project's completion. Specifically, the contractor failed to produce any construction schedule (let alone a critical path schedule), demonstrate what work was delayed by a specific owner action, quantify the delay attributable to the owner, and prove that owner delay was the sole delay that caused the project end to slip. The court opined that "the mere allegation that delays caused work to be disrupted or performed out of sequence, or caused costs to be increased, will not satisfy the plaintiff's burden of proof." As a result, the court ruled that the contractor was unable to show that it would have completed the project any earlier if the owner had not delayed performance.[16]

[15] *Amelco Electric,* VABCA No. 3785, 96-2 BCA ¶ 28,381 (1996).
[16] *Green v. General Services Administration,* GSBCA No. 12,621, 96-2 BCA ¶ 28,306 (1996).

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3. ***A Court Denied All Delay Damages When the Contractor Did Not Attempt to Apportion Concurrent Delays Between Itself and the Owner*** – In 1995, a court denied all contractor delay damages due to the contractor's failure to even attempt to apportion the concurrent delays. The court opined that the burden is on the contractor claiming delay damages to distinguish the portion of the delay caused by the owner from the portion caused by its own conduct.[17]

[17] *Smith v. U.S.*, 34 Fed. Cl. 313 (1995).

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8. EFFECTS OF CONCURRENT PACING DELAYS

There are certain effects that arise from a contractor's decision to deaccelerate or slow down its work.

The obvious effect is that the contractor's action to pace its work is a deliberate decision on its part to cause a delay to the planned schedule of its work activities. By not maintaining the schedule for which it has control and responsibility, the contractor then risks being delayed on other work at some later point in time. In essence, the contractor may use up some of its float.

The contractor will now have to demonstrate that its "pacing" delay was directly dependent on the Owner's delay, or risk a retrospective analysis that shows that the contractor has caused a noncompensable concurrent delay to the same critical path or a parallel critical path. The burden of proof is on the contractor to demonstrate that it could have performed its work on schedule but-for the owner's delay.

If the contractor takes certain actions to slow down its work due to the owner's delay, such as releasing labor or equipment, and the owner-caused delay is mitigated more quickly than previously contemplated, the contractor may now be in a position of being the sole cause of delay.

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9. STEPS REQUIRED TO PROVE CONCURRENT/PACING DELAYS

A contractor's decision to "pace" its work when encountering an owner-caused delay to the critical path can be a prudent business decision. But, an owner is usually unwilling to accept this argument when a "pacing" delay can be construed as concurrent delay. Therefore, it is the contractor's responsibility to take necessary steps to prove that its decision to "pace" its other work was proper and its decision does not constitute a parallel independent concurrent delay. The following steps are intended to provide contractors with guidance relative to proving a "pacing" delay argument during the execution of the project. They are not, however, a substitute for professional representation in any specific situation.

1. **Know your contract.** A contractor must thoroughly understand its contractual responsibilities and requirements in terms of excusable, compensable, and non-compensable delays. The contract terms may dictate or limit a contractor's ability to recover extended overhead costs. If the terms are vague and ambiguous, then the contractor should seek the advice from legal counsel regarding interpretation.

2. **Seek clarification.** If the contract is silent in defining concurrent delay, a contractor should obtain clarification from the owner as early as possible. The contractor should reach a mutual agreement with the owner on precisely what is covered or not covered in a concurrent delay. This will help alleviate the confusion and controversy if and when these issues arise during the execution of the project.

3. **Open a dialogue.** As is true for all disputes, the chance for a successful resolution begins with straightforward and honest communication. At the beginning of the project, explain to the owner the situations where it may be necessary for a contractor to "pace" the work.

4. **Notify the owner.** Most construction contracts require the contractor to provide prompt written notice when encountering an impact or delay. If a contractor decides to "pace" other work, then contractor notification of a "pacing" delay is even more crucial. After-the-fact discussions by the contractor often lead to a loss of credibility and mistrust. Moreover, failure by a contractor to timely notify the owner may contractually nullify a contractor's claim.

5. **Provide information.** When a contractor makes the decision to "pace" other work, the contractor should be ready to discuss its decision openly and immediately. A contractor should be able to provide the necessary facts and details (e.g., cost/benefit analysis, CPM schedule delay analysis, resource

leveling studies, and projected cost overrun analysis) that support the decision to "pace" other work.

6. **Keep your team informed.** A contractor's core team members such as foreman, general foreman, superintendent, field engineer, construction manager, site manager, cost engineer, scheduler, and project manager should be well informed about all delays as well as management's decision to "pace." The team members should be able communicate the results from these issues effectively to the field.

7. **Record all actions contemporaneously.** A contractor must ensure that the project records reflect owner-caused delays to the critical path and the resulting contractor's decision to "pace" other work. Key contractor documents such as letters, emails, monthly reports, meeting minutes, schedule updates, and daily reports are vital fact documents. They also demonstrate proof of notification to the owner. A contractor's core team leaders should oversee that key events are is being properly and consistently recorded.

8. **Nobody is perfect.** A contractor must take responsibility and remove contractor-caused impacts from the "pacing" argument. If an owner can demonstrate that one or more independent contractor-caused problems are also affecting the critical or near critical paths, then a contractor's "pacing" argument may be in doubt. If issues are so intertwined that it is impractical to accurately calculate the impact, then a contractor should provide a reasonable estimate that apportions the delays between the owner and contractor.

9. **Formalize all agreements.** Undocumented side agreements and under the table concessions usually muddle the project record, and the true facts surrounding the issues are lost. If owner and contractor reach settlement on the issues, then immediately formalize the agreement through the formal change order process within the contract.

A "pacing" argument can be a tough sell. By following the above steps, however, a contractor can help minimize the confusion and controversy, and thereby maximize its chances for proving a "pacing" delay. Additionally, a contractor must give high priority to proper contract management such as scheduling, record keeping, communication, and monitoring the performance of subcontractors for the project to be successful.

Analysis of Concurrent/Pacing Delays

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