

TIME RELATED CLAIMS

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- A. **Categories of Time Related Claims.** Time related claims fall in the following categories:
- a. **Delays**
 - i. **Concurrent delays**
 - ii. **Parallel delay**
 - b. **Suspensions**
 - c. **Acceleration**
 - d. **Work Flow**
 - e. **Compensable and Non-Compensable: In every situation, the determination of compensability must be evaluated.**
 - f. **A Mixture**
- B. **There are Three Elements of Every Claim: *Entitlement* (that is, the owner did something it had a contractual obligation to refrain from doing, or failed to do something it had a contractual obligation to do, and that this act or inaction is compensable under the law or the contract); *causation* (that is, the contractor's claimed cost is a result of the entitlement issue), and *reasonably incurred cost*.**
- a. The **equation** for time related claims then is:
 - i. **Contract provisions** which establish areas of liability . . .plus
 - ii. **Facts** which show those contract provisions were not complied with . . .plus
 - iii. **Schedule** which shows effect on the project's durations, logic, and work flow (causal relationship)
 - iv. **Daily records** which show impact to field resources (labor, equipment and general conditions) due to the entitlement issue.

Delay Claims:

1. **Techniques** of scheduling and updating are presented in a different section.

2. **Entitlement to a time extension.** A contractor is entitled to a time extension when **the critical path of** the project has been affected due to a reason that is **excusable** under the contract. The delay may be **compensable or non-compensable**.
 - a. Note that there are time related claims which do not involve an extension of time; work flow changes, interference with work or access, acceleration for example
 - b. Note also that **float**, as discussed in the section on Scheduling, Planning and Coordinating, is often a nemesis to the contractor. Some specifications state that the Owner owns float exclusively. Others provide that the project owns float, first come first served concept. As discussed in the referenced article, the contractor has means and methods responsibility and the schedule, including float, is a means and methods. For the owner to usurp the contractor's freedom in how the project time is used seems to be a violation of the contractor's means and methods responsibility.

3. **Excusable Delays:** The first threshold is to review the contract and determine which delays are excusable. Both AIA and Federal Contracts are similar and set forth the reasons for a justifiable delay listed below. However, each contract must be examined as owners often insert language which attempts to modify the standard excusable delay clauses. Generally the delay is excusable under the following circumstances:

- a. Delays caused by **change orders**; time spent attempting to comply with defective specifications or design
- b. Delays caused by **differing site conditions**
- c. **Unforeseeable weather delays** (contracts often spell out the number of foreseeable weather days that the contractor should take into consideration)
- d. **Unforeseeable strikes** (including those affecting subcontractors and suppliers)
- e. Acts of the government in its **sovereign capacity**.
- F. **Acts of God** such as floods, earthquake,
- g. **Unreasonable delays and interferences caused by the Owner** (decision-making, access, inspections, etc)
- h. Fires
- i. Transportation delays over which the contractor has no control

But just because a subcontractor or supplier is late performing its work is not excusable to the general contractor unless the reason for the delayed performance is excusable under the general contractor; i.e. fits within one of the foregoing categories.

4. **Critical Path.** In addition to the delay being excusable, it must be a **delay to the critical path of the project.** (However, having said that, there have been some exceptions, to be discussed at a later time). A short review of the critical path method of scheduling is in order:

- A critical path schedule is made up of activities to be performed, the duration of those activities, and the relationship of the activities.
- It is often called a logic diagram because it lays out a sequential approach to building a project. Certain activities must be completed before others begin; some can be done on a concurrent basis. A simple

way of looking at it is a line of dominoes. If one falls, and the rest of them fall in sequence, the critical path has been affected.

- If an activity is delayed which does not delay the balance of the project, it is not critical. It is probably a float activity. If a float activity is delayed and it does not delay other activities which will extend the end date of the project, by definition it is not a critical path activity.
- So, for there to be a justified extension to the schedule of a project, a critical activity must be delayed. Of course, it could be that a float activity could be so delayed that it could eventually become a critical activity.
- Let's look at some caveats along the way:
 - First, we need to start with a baseline schedule which hopefully has been approved by the owner. The baseline schedule should meet the contractual scheduling specification, should be a complete schedule, with dates for approvals, deliveries, tests, TAB, Commissioning.
 - It should be coordinated with craft contractors and key suppliers.
 - Obviously, it should also be coordinated with the owner's representatives as they will have duties to respond to submittals within specified time periods and they should be able to make input regarding those response times.
 - It should be realistic.
 - It should be updated with the same level of objectivity and realism as the baseline schedule.
 - Hopefully, it has been used as a real management tool.
 - **It should NEVER be manipulated**
 - **The point is: how can a schedule be realistically updated and time extension requests be made if there is not a proper baseline to impact for events that have occurred along the way. If you have a claim based on schedule impact, the first thing the opposing consultant will do is to test the validity of the baseline and the updated schedules. If this is a federal claim, you can bet with certainty that the Hearing Officer will test the validity of the baseline schedule and its updates. If games were played with them or if they were not properly done, then the house of**

cards will fall. There are two reasons for this: one is that there needs to be a realistic baseline schedule from which to evaluate variances. Second is that if the contractor is playing games with the schedule, it reflects on his credibility and his ability to properly manage a project.

- **Early completion schedules.** If a contractor has submitted an early completion schedule (that is, a schedule showing it would complete ahead of the contractual completion date) and if its performance is delayed by the Owner, the contractor may still be entitled to a compensable delay even though the project was completed within the contract schedule. You need legal advice on this one.
 - **The importance of reading the contract:** Some contracts address the issue of early completion: the contract may forbid early completion schedules. Others may deny extended overhead for delays from the early completion date caused by the owner. Others provide that the Owner can assess LDs from the early completion date if the delay is the responsibility of the contractor.

5. Concurrent Delays: A concurrent (or overlapping) delay occurs when there are two or more separate events occurring in the same time period. If the actions of the owner and the contractor both occur in the same duration, the delay is the concurrent responsibility of both parties. Even though the contractor is at fault, if the owner is also, a time extension for the period of the delay is still warranted, assuming the critical path has been affected. It is probably not a compensable time extension, but the contractor still is entitled to the additional time, which would then remove Liquidated Damages from the

period of concurrency. In other words, a concurrent delay results in a Net Zero. Neither party is entitled to additional compensation or damages.

- There are several categories of concurrent delays. One is a **parallel delay**. Let's assume the third floor elevated slab is a critical activity but the contractor's crew is outsourced and it doesn't come to the project for 14 work days. That is a non-excusable critical path delay. But what if the owner has issued a stop work on the entire project during that same 14 work days due to having found hazardous material on the project. So the owner has delayed the same 14 days as the contractor: this is known **as a parallel or a simultaneous concurrent delay**) What if the owner only stopped the work for 7 of those 14 days? In that instance, there is concurrency of only that amount for which the owner is responsible; i.e., 7 days. Now, assume a **consecutive concurrent** delay. In the case of the steel package, the owner unreasonably delays the approval of the submittal package and subsequently the contractor delays the erection of the steel. If both of these activities are on the critical path, then each is identified and evaluated separately and each will bear responsibility for its contribution to the delay of the overall project. Now, what if the owner's delay only consumed float and was not on the critical path? In general, the rule seems to be that for a delay to be considered concurrent, it must be on the critical path.

6. Compensable and Non-Compensable Delays. Check your contract to determine which delays are compensable and those which are non-compensable. The following are guidelines which must be validated within the context of each individual contract and your construction attorney's guidance.

- a. Compensable Delays** are delays caused by **acts of the owner** such as:
 - i.** Change Orders
 - ii.** Differing Site Conditions
 - iii.** Suspensions of work
 - iv.** Interferences and disruptions to the performance of work

- v. Breach of contract (This could include contract abandonment; multiplicity of changes)
 - vi. Denial of access
 - vii. Time spent attempting to comply with a defective design
- b. Non-compensable Delays** are those that are **caused by others** or events beyond the control of the Owner:
- i. Acts of God, such as weather, earthquakes
 - ii. Strikes
 - iii. Concurrent delays (delays caused by the contractor and the owner in same time frame) may not be compensable, but these and parallel delays will be discussed separately below.
- c. Non-compensable delays are also those for which compensation is **barred by a contract provision**, such as a No Damages for Delay clause (to be discussed in detail further on)
- d. Non-compensable delays which can **morph into a compensable** claim. If the contractor is entitled to a time extension due to a non-compensable delay and the owner unreasonably denies the contractor's request for additional time, resulting in a constructive acceleration, then the contractor is entitled to the cost associated with the acceleration. Or a compensable delay may push your work into the winter time or rainy season which is normally not compensable; but if you had reasonably anticipated that this work would have been performed in temperate weather and a compensable change pushes you into a more onerous environment, you are entitled to be recompensed. At a Homeland Security project on the Canadian border, the contractor had scheduled all earth, structural and roofing work to be completed by early fall when the temperatures were normally above freezing. The government unreasonably delayed a number of submittals and issued numerous changes which pushed the work into the December through March time zone. The temperatures and winds were so severe that it would sometimes take two to three hours to

be able to start up equipment and for five months the temperature never rose above freezing. Obviously, because the delay was a compensable excusable delay for which the government was responsible which pushed the project into such an intemperate time zone, the contractor was properly compensated. (And a burden of proof of the contractor was to demonstrate from its bid schedule the time frames it had intended to perform the weather sensitive work activities.)

7. Written Notice Whether compensable or non-compensable, all contracts require timely written notice as to the delay. At the time a cause of a delay occurs, the contractor may not be able to fully demonstrate its impact on the schedule or the critical path, but give notice as to the cause as soon as it occurs and not later than the contract specifies. The delay should be further documented in:

- a. Planning meeting minutes
- b. Daily Reports
- c. Input to schedule updates
- d. Separate cost codes where applicable

However, do not rely on those documents to protect you as to timely notice. **Read the contract and adhere to it.** This is emphasized because indeed there are many examples of contractors failing to provide written notice pursuant to the contract but nevertheless recovered because of the fact that the owner should have known through the schedule update or minutes of a meeting that the schedule was being delayed. And at seminars I will be told: “Yeah, but I just told the resident engineer that we weren’t going to be able to meet the schedule because they hadn’t done those inspections when they were supposed to. And we didn’t get assessed liquidated damages and we went over a month or more.” And that is true in some cases, although most of these cases were decided in court. If you want to stay out of court, give notice pursuant to the contract. These articles are not written for the contractor who is looking for legal battles. There are plenty of legal cases and excellent lawyers to prosecute them. These articles are written for the contractor who is committed to best practices in every aspect of managing a project. That category of contractor also knows that by providing timely notice and properly

updating schedules and plans, the probability of the train running off the track has been reduced.

- 8. Method of Proof of Delay to Critical Path.** The contractor has the burden of demonstrating that the critical path has been affected and the end date of the contract has been extended. There are several methods that are recognized, some being better than others. But no matter which of the following methods proving impact to the schedule, the following step is essential:

DOCUMENT

1. The description of the event which caused the delay
2. The date and time the event occurred
3. The CPM activity (ies) affected by the event
4. Possibly must add new activity
5. The time it took for the event to be resolved
6. The time it took for other affected activities to be resolved. (for example, an RFI might be answered and a Change Order Issued, but afterwards it may take additional time for procurement and mobilization.)
7. The revised duration for actually performing the affected work (for example, it could be that the planned duration for installing that AHU was 20 calendar days, but due to the changes and impact on the work area, it will take 25 days)
8. A copy of the documentation should be separately maintained, such as:
 - a. The updated schedule at the time of the event which caused the delay (**NOTE:** To impact a schedule, it is important that the schedule be valid, that it is being properly updated, and that logic or activities are not being manipulated.)
 - b. Logs

- c. Daily Reports
- d. Meeting Minutes
- e. Schedule input
- f. Schedule narrative
- g. Correspondence
- h. Pictures

*****This information is vital in any of the various methods used to update the schedule to demonstrate impact to the critical path. If a contractor cannot perform this simple function, its chances of being successful have been greatly diminished. I personally believe owners and triers of disputes are growing weary of contractors who are sloppy, or not diligent in maintaining such information who do not provide timely written notices. By so doing, the contractor is not being “claims happy” but simply complying with the requirements of a contract written by the other party. Further, without such information, the schedule will not be timely and effectively updated and therefore, the project will not have the benefit of what was supposed to be a management tool, a GPS for successfully navigating through a complex maze to the required goal. **And it is detrimental to the project for owners to become upset when a contractor provides a notice of an event which is causing an impact to the project. This concept of intimidation seems to be a tactic which is too often used. And then owners become upset when the contractor does not submit a delay or impact claim until the end of the project.*******

*****Often a general contractor will continue to push subcontractors to meet the original completion date even after a justified time extension has been approved by the owner. Or sometimes the general will not provide the subcontractor a schedule adjustment showing the full amount of time that is due, in attempt to have a cushion of time in case something else goes awry. The general contractor has a duty of fairness to subcontractors and an obligation to extend the contract in the same amount of time as granted by the Owner.*****

a. **“Total Time” or Planned versus Actual Approach.** This is like a total cost claim. The contractor simply sets forth the planned schedule and compares with the actual schedule, and requests the difference in time between the two. The contract duration was 300 calendar days and the actual duration was 330 calendar days: the contractor requests an additional 30 days time extension. This approach is only valid if the contractor can demonstrate that it was “clean”; that is it performed all of its functions properly. But it involves no evaluation and is simply an oversimplistic way of trying to get a compensable time extension without any effort to demonstrate the reasons for the delay. It normally assumes that the contractor causes no delays, and that the reason for any delay to the project is excusable. This is the bottom of the food chain of methods of demonstrating a delay to a project. Like total cost, for it to have any validity, the contractor must defend its ability to meet the original schedule and that it performed all of its functions on a proper and timely basis. But because it is performed after the project is complete, it has no value in managing the project. Often a subcontractor, not having access to all of the factors affecting the project and just knowing that it has been delayed in its performance, will use this approach. But ultimately the reasons and the liability therefor must be determined.

b. **The impacted as planned schedule.** In this case, the contractor simply identifies which delays it considers are the key owner caused events and introduces them into the as planned schedule to show the impact such an event(s) will have on the outcome of the project. This is often used but its drawbacks are that it is generally not done in real time and therefore does not reflect the true conditions of the project at the time of the delaying event, and does not truly evaluate the impact on the critical path. Again, often subcontractors use this technique because they do not have access to the general contractor’s electronic schedule and do not have all the information and events from other contractors which may affect the schedule.

c. **Collapsed Schedule.** In this approach, the contractor determines which events the Owner is responsible for and then removes those activities from the as-built schedule. If the result of removing these events the resultant (collapsed) schedule is equal to the originally planned schedule, then the owner is responsible for the delay. In a simplified version: assume the as planned schedule

is 330 calendar days and the as-built was 390 days, and the owner was responsible for delaying the approval of the foundations due to a differing site condition and that delay is 60 days, by taking out the 60 days, it shows that the project could have been completed on time, and therefore the contractor is entitled to a time extension of that duration. However, if the differing site condition activity was only of 30 days duration, when the schedule is collapsed it shows that the project would still have overrun by 30 days and the owner would not be responsible for this duration. The collapsed schedule can also begin by showing the delay events for which the contractor is responsible (assume 30 days due to completion of the conditioned air per the schedule) and subcontracting from the as built schedule. (Say the project completion is 60 days late) As the as built still shows completion 30 days after the date adjusted for the contractor's delay, the contractor may then argue that the net delay between the actual completion and the date adjusted for the contractor's contribution to the project delay is the responsibility of the owner. The collapsed schedule may come relatively close to demonstrating responsibility for delays but it is after the fact, not a management tool, and does not reflect either the impact to the critical path or the work flow of the project.

1) As-Built But-For Schedule Delay Analysis (ABBF): This is a method for determining the earliest date the contractor could have completed the project *but for* owner caused (or other force majeure) caused delays during the construction of the project. The detailed process for calculating the ASBF is best described in an excellent article you can retrieve on your web, entitled ***As-Built But-For Schedule Delay Analysis*** written by Richard J. Long of Long International. Mr. Long has authored highly regard articles on construction management and claims.

d. Windows Analysis This approach begins with the analysis of events which may have delayed the critical path; then the time period or "window" of that event(s) becomes the baseline for determining how later events impact the end date of the project. Window one is the first domino for the succeeding window, which becomes the domino for the next succeeding window, and so on.

e. **Time Impact Analysis (TIA)** The Corps of Engineers has pushed for this method of updating for over a half a century. I call it the “Rolling Thunder” approach. The gold standard of guidelines for the use of the Time Impact Analysis is the *AACE International Time Impact Analysis – As Applied in Construction* which is available on AACE’s web site. A detailed article on Time Impact Analysis is entitled *Implementing Time Impact Analysis on Large, Complicated EPC Projects* by *Long International*. (As soon as the project manager decides to wait until a project is complete to update a schedule and show the impact of intervening events, the schedule becomes a meaningless tool.) Here is how it works:

1. Start with a valid schedule. If the delaying event occurs after the baseline schedule, make sure you are dealing with a true, accurate updated schedule. In the article on Scheduling, we saw that the schedule should include the entire procurement process, as well as the three step Quality process, inspections, access requirements, et al – and not just the installation activities.) In an updated schedule, make sure it has not been manipulated for self-serving purposes. Otherwise you are simply continuing to try to manage a project off an invalid tool. Our rule is to always update with accuracy and to never attempt to manipulate the logic of a schedule. If you do, someone is going to figure it out and you have lost a claim and credibility. This is the reason delay and impact cases are often so difficult to prove: the baseline schedule is sometimes not valid, and updates are not realistic because of manipulation for whatever benefit the contractor mistakenly believes he will gain. And how many subcontractors actually know how to evaluate and use a CPM?

2. And to be a valid updated schedule, it should set forth all impacts of significance, including those the responsibility of the contractor. The schedule, to be a management tool, should be prepared without regard to liability; otherwise it is illusory. So if equipment deliveries are late, or the building is not dried in per schedule, that information should also be included. **Thus all items of concurrency are identified.** One of the reasons TIAs are not effective is the philosophy of the parties as to the use of a CPM in the first place. If

the philosophy is that it is to be simply a billing document or a claims document, then the schedule is used and updated in a manner following that concept. If the concept is to use the schedule as a meaningful tool to effectively manage the project, then the schedule is maintained and updated in a manner consistent with that concept.

3. Record the information which was set forth above. This also includes a **full analysis of the scope of the delaying issue** (whether a change order, differing site condition or otherwise) to **determine all the activities it may affect.**

- i. Prepare a **fragnet (or a snapshot)** of the information, such as shown in the article on Scheduling.
- ii. Now use the **fragnet** or the information above for calculating the effect on the critical path, the project logic, and the new end date of the project. At the same time, the effect on the **work sequence** can also be shown.
 1. The fragnet should identify the first notice of the event, the activity affected, the sequence of events before and after the resolution of the event.
- iii. Using the TIA approach, you can determine when the delay occurred for purposes of computing time extensions due and because it is prepared in real time, it is an excellent tool for managing the project and future progress.
- iv. The TIA approach also gives visibility to **work sequence changes**. A compensable delay claim entitles the contractor to general condition costs and damages; however, often the facts which give rise to a delay also have changed the sequence of the project, and a

work flow change will impact labor as well as general conditions.

- v. **A word to the Subcontractor:** Of course, it is the general contractor or the construction manager who prepares and updates the overall schedule and of course you do not have all the information which affects other trades. **However, you can do a fragment of the activities affecting your work.** You can record the information as set forth above. And it is essential that you do and to provide to the general contractor to use in the schedule updating process.

Other Methods There are other methods as well, but those will be discussed in the detailed article on Scheduling. The foregoing are listed to emphasize that:

- vi. The contractor has the burden of demonstrating that a delay has caused an impact to the schedule (critical path)
- vii. The contractor has a duty to prove that impact through the use field data.
- viii. That it is important to update the schedule so it can be used as a management tool, not just for purposes of a claim. In fact, the more the schedule and job site planning and coordinating are effectively used as management tools, the less likelihood of claims and greater probability of project success.

- 1. **A note to Owners:** Often Owners themselves curry claims in that they fail to grant justified time extensions or make decisions on a timely basis. They deny payment requests if the billing schedule does not match the baseline

schedule even though there have been impacts to the schedule. In these situations where the owner is failing to comply with its own obligations, then the contractor should do all that is necessary to protect its position and I have little sympathy for the owner.

Suspensions of Work

1. There are two types of suspensions:

A. **Formal Suspensions.** If an authorized representative of the Owner directs a stop work or suspension, the contractor has the duty to comply. However, a formal suspension, like a delay, may be excusable or non-excusable. If the suspension results from some improper failure on the part of the contractor, then the responsibility for any delay is due the contractor and no time extension is due. However, if the cause is due to the owner, then the contractor is entitled to a time extension if the critical path is affected. You go through the same drill as above.

➤ **Note that in federal contracts, profit is not allowed on suspension of work claims.**

B. **Constructive Suspensions.** If the owner takes an unreasonable period of time to perform a function, such as reviewing submittals or issuing change orders or responding to RFIs or performing any of its functions on the projects, and the effect is to suspend a work activity, this would be a “constructive suspension”. It is the amount of time that it takes to respond, not the cause of the issue in the first place, which is at issue. How is an unreasonable period of time determined?

➤ Obviously from the schedule (another reason to have a valid schedule with realistic and complete updates. And the reason that the schedule should be a “procurement schedule, meaning it shows the supply chain cycle from purchase order through submittals and delivery. It should also set forth access

and inspection dates as well, all of which should be well coordinated with the owner and all the parties involved).

- When the contractor submits a request for a decision or an answer to an RFI, included in that request should be a reference to the CPM activity affected and the point at which the activity will be affected by a failure to provide the decision. When a contractor is requesting access to a site or work area, he should be able to point to the schedule which sets forth the dates for that area to be made available.
- Now, what is unreasonable?
 - Any delay which affects the critical path by definition would be unreasonable
 - The contractor may have an argument if the delay does not affect project duration but does cause significant damage to the contractor due to a sequence change which resulted.
 - **Note to Owner:** It is not uncommon these days to see contract durations which are very tight; some are almost what I call “negative float” schedules day one. When an owner does not get the design and start of a project going on a timely basis, providing adequate construction time or includes very tight durations in the contracts, it must expect that the timeliness of its duties must be consistent with the tightness of that schedule.
- What is not unreasonable? The contractor should realize that it will take a reasonable period of time for the owner and its representatives to perform their duties, such as responding to RFIs or issuing change orders, or conducting inspections and the representatives are according a reasonable time to perform these functions. This is the reason the baseline schedule should set forth these functions and dates or durations which establish when they must be performed with having a negative impact on the project. And when the contractor requests a decision or action from the owner, a

turnaround date tied to the CPM should be established on all such requests.

Accelerations

1. There are two types of Accelerations

A. **Formal acceleration** The owner directs the contractor to accelerate all or a part of the project. If the contractor's progress is contributing to delays, it has the responsibility and the financial liability to attempt to catch up. So an acceleration directive to a non-performing contractor is obviously non-compensable. However, if the contractor is not responsible for dilatory progress or being late, then an acceleration directive would be compensable.

➤ **A note to subcontractors.** Your subcontract may contain a clause that you may be directed to work overtime if you get behind. First, you should address that in your scope letter but stating that you have no obligation to work premium time unless you are either behind due to your own responsibility or if you are reimbursed. Even without that protection, if you receive a directive to work overtime and you are not at fault, see your lawyer. You may have a duty to follow the directive but you do so under protest. Again a reason for the subcontractors to develop and update their own schedules, give timely written notice of variances which are beyond their control.

f. **Constructive Acceleration** To be absolutely pure, the following are the elements of a constructive acceleration:

- a. A delay which is excusable under the contract occurs (whether or not compensable)
- b. The contractor requests additional time and substantiates its request.

- c. The owner denies the request and holds the contractor to the original schedule.
- d. The contractor objects in writing and notifies the owner that it will be requesting additional compensation to attempt to meet the original schedule
- e. The contractor actually expends additional resources in attempting to accelerate and meet the original date.

Obviously, the same steps are followed in a constructive acceleration as a delay or suspension. The same information is collected, a fragnet is prepared, and the daily reports document the effect of crews such as the effect of working overtime, shift work, overcrowding, stacking, etc. However, in an acceleration, often there is more than just a contraction of durations. **Frequently as the work is being contracted, there is an impact on the work flow of the project, so the schedule should be carefully updated to identify how work sequence is being altered. Further, it is not unusual for the phenomenon of a project delay occurring when there is an acceleration.** This is because often the impact to productivity is more severe that managers and supervisors are aware, and decreased productivity has its effect on time and schedule. So **earned value** is a good tool for measuring how much bang for the buck you are getting – or not - in an acceleration mode.

Work Flow:

(A separate article on work flow is available) Crews move. The CPM itself reflects the movement of the work activities (meaning the crews which perform the activities). Productivity is a function of the sequence and duration of movements. If a crew is scheduled to perform layout on the first elevation in five (work days), then the following is anticipated:

- A crew is selected based on the nature and quantity of work to be performed
- The supervisor reviews plans and specifications to determine what needs to be performed, tools and equipment, and materials required
- A material handling plan is developed
- The supervisor communicates to the crew what their responsibilities are

- Earned value is established so productivity can be monitored
- The plan for this area anticipates that the crew will demobilize on the fifth worth day and begin this same process on the second elevation.

Now, assume that on the second day, the owner issues a change to the demising walls on the first floor. What happens:

- The crew stops
- It picks up its tools and equipment
 - It must properly store its material; protect work that has been installed)
- It moves to the second floor
- It waits for it to be pre-loaded with the material required for installation (there is a different layout for the second floor from the first)
- The supervisor reviews the plans to determine what must be done
- The supervisor then communicates the plan to the crew
- The crew is about halfway complete with the second floor when it is redirected to complete the first floor. What happens?
- The same drill only now there is a new plan for the first floor demising walls, some of the previously completed work must be torn out and re-installed. And so on and so on and then the crew finishes and returns to the second floor and the merry go around keeps going around.

If the change or the action or inaction by the owner causing this merry go around is compensable, then the contractor is entitled to recover all of the cost (assuming no clauses which would not permit certain cost) associated with the action. As we have seen, both the changed and the unchanged work. And basically, what the owner will be paying for is time, the inefficient and non productive use of time. The activities impacted must be included on a schedule update showing the sequence changes, as well as in field documentation. Owners and even general contractors are often simply not aware of the impact to a contractor of affecting the work flow, or sequence of performance of the work. There is a system, a process in construction the same as in manufacturing, and when that process goes awry, so does the contractor's cost, schedule and often budget.

THE NO DAMAGES FOR DELAY CLAUSE

A No Damages for Delay clause is just that: that even though the contractor or subcontractor may have been delayed and the delay was excusable, the only remedy the contractor or subcontractor has is a time extension, and has no right to a claim for any direct job site or other expenses associated with the delay. This is a major risk shifting clause, basically stating that the party which caused the delay (the Owner, or perhaps the General Contractor) cannot be held accountable for its failures. Owners (not the Federal Government, by the way) often use this clause in general contracts, then general contractors pass it down to the subcontractors which pass it down to their subcontractors.

Unfortunately, the No Damages for Delay Clause is often deemed by the Courts to be valid and enforceable although a few states have legislated that it is not enforceable because it is so unfair. **Basically the clause is a waiver by the contractor any damages due to a delay caused by the owner (or the general contractor as the case may be). However, some of the clauses go beyond delay damages and provide that loss of productivity is also unrecoverable. Some clauses include impact from sequence change and acceleration or work flow.** As stated previously, there are exceptions to the clause and these may differ by state, or by the terms of the contract itself. And the exceptions are very fact driven, so it is important to have that experienced construction attorney on your side that I keep talking about. And in this case, not only one who understands the law concerning the No Damages Clause, but understands project management and scheduling so he/she (again let me emphasize that there are some really good female construction attorneys out there) can apply the law and its exceptions to what may be some very complex factual situations involving complicated CPM analysis.

Obviously, the first and foremost advice as a contractor or subcontractor is to object to such a clause and not accept a contract which contains the clause. There are some contractors this courageous who will turn down otherwise profitable projects because they absolutely refuse to accept such a clause. There are several reasons for their position. First, the potential financial liability is too great. Second, and sometimes foremost, they feel that if the owner (or general contractor as the case may be) is not willing to accept accountability for its own problems, including the impact of change orders and differing site conditions, that this is such a reflection on the character of the owner or general character that it

is not prudent to do business with such a class of people. How can one argue with that?

Nevertheless, the NDD clauses are becoming almost universal, making the kitchen much hotter than previously. If one is unfortunate enough to have such a clause included in its contract, then be aware that there are exceptions to the clause. Be aware that the following list is a universal one and may not apply to your state or your circumstances.

- ❖ **Bad faith (for example, concealment, misrepresentations, intentional interference with the contractor's prosecution of the work)**
- ❖ **Willful, malicious or grossly negligent conduct.**
- ❖ **Delays so unreasonable that they constitute an abandonment of the contract**
- ❖ **Delays resulting from the owner's breach of a fundamental obligation of the contract**
- ❖ **Unforeseeable delays (this is not universally accepted. For it to apply, it would seem that it must rise to the level of a breach of contract. A technique by some contractors is to include a contingency for perhaps a 30 day delay and even some labor impact in the estimate, showing it as a line item. That is the contractor's definition of "foreseeable". Anything beyond that would be "unforeseeable". It is a technique which has borne success in many negotiations and mediations.)**

One of the variations to the No Damages for Delay Clause is a clause which sets forth a null zone, of say thirty days, in which neither Liquidated Damages will be assessed or delay damages will be permitted. In other words, no matter which party is at fault, the first thirty days of a delay to the critical path is a "free zone", the risk of which is non compensable to either party.

SUMMARY

- 1. Time related claims are often the most impactful to a project. When a project is delayed, it is a "lose/lose" situation. The contractors are seldom going to get whole in a claim situation, the owner's use of the**

completed project is delayed and often liquidated damages are inadequate to cover the total losses. For example, in a manufacturing facility, the owner must get its product to market or perhaps lose market share; a hotel may lose a season; a school district must find another facility to house the students.

2. Successful time related claims are the children of good construction schedules, timely and effective updating, and field documentation and a collaborative relationship of the parties. All of these are endemic weaknesses in the construction industry.
3. The contract documents are vital in determining compensability of a time related claim. Did the contractor prepare a valid CPM schedule in accordance with the contract documents? Per the contract documents, was it updated timely and effectively? Was notice given per the contract documents? Are the delays excusable? Are they compensable? Are there cost limitations in the contract documents, such as the no damage for delay clause, or not permitting home office overhead as an allowable cost?
4. Did the contractor perform its work on time, with the required resources? To what extent is the contractor responsible for delays or the need to accelerate? Did the contractor do an effective job of managing outsourced employees.
5. Does field documentation support the claim, both as to time and cost?
6. Most contractors in their initial conversation with the construction attorney or consultant say: "Well, of course, we didn't do everything right either." Are you one of those?

