

Guidelines for Recovering Home Office Overhead Costs with Emphasis on the Eichleay Formula

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Abstract: Home office overhead (HOOH) is the cost associated with higher-level management and other related resources needed to indirectly support a construction project. It is often not tracked in direct relationship to a particular project because that type of support is needed to support more than one individual project. Over the past several decades, numerous disputes have led to court trials where the Eichleay formula was applied as the method for calculating unabsorbed HOOH resulting from project delays. Eichleay has been a point of controversy ever since its inception in 1970, so much so that not all courts have accepted the formula and some have created their own. Court cases have a definite theme attributable to when one may apply and what needs to be proven to recover using this formula. This paper develops and discusses those criteria so that parties involved can better influence the outcome of such a dispute. It is based on a case review of court and board decisions rendered over the past 50 years. In addition, general guidelines for measuring and collecting unabsorbed HOOH outside that of Eichleay are presented as developed by analysis of cases reaching back as far as 1873. DOI: 10.1061/(ASCE)LA.1943-4170.0000201. © 2016 American Society of Civil Engineers.

Introduction

Projects often overrun original budgets and time frames because of delays outside contractor control. These delays can increase home office overhead cost. Home office overhead (HOOH) includes higher-level management items such as executive management salaries and office rent (Singh and Taam 2009). HOOH costs are termed unabsorbed HOOH costs when they cannot be recovered through some other means.

Because such costs cannot by definition be tracked in direct relation to a project, the actual total damages become difficult, if not impossible, to calculate. Attempts over the years have been made to develop formulas for calculating unabsorbed HOOH, with the Eichleay formula being widely used and a source of controversy (Niesse 2004). This is largely due to Eichleay being an oversimplification of HOOH costs, leading to a potentially disproportionate allocation (Rubin et al. 1999).

Clear patterns in court decisions have arisen in recent times, allowing the authors to formulate criteria for recovery under the Eichleay formula. Court cases reaching back to the time of the U.S. Civil War until present were examined in an effort to understand the development of U.S. courts' viewpoint on recovering unabsorbed HOOH. The cases examined in this paper were chosen because are often cited, making them representative of national trends.

Based on this review of case law and appeal board decisions, the authors have developed and provide in this paper criteria that

an owner, general contractor, or subcontractor can utilize for defense against or recovery with the Eichleay formula. Additionally, guidelines to recover damages outside Eichleay are also presented. This work is intended to help resolve construction claims more expeditiously and fairly.

Eichleay Formula Background

The Eichleay formula first appeared in *Eichleay Corp.* (1960) when Eichleay, the contractor, sought to recover damages from a U.S.-Government-caused delay. The reason for the creation of the formula was to calculate the incalculable because "there is no exact method to determine the amount of such expenses to be allocated to any particular contract or part of a contract." The Armed Services Board of Contract Appeals (ASBCA) acknowledged that the "contractor's HOOH continues to accrue [when a project is delayed past the current contract completion date] but is no longer supported by revenue from the delayed project" (Zack and Halligan 2010; Taam and Singh 2003). This approach was put forth as "a formula to proportionately allocate their HOOH from the corporate level to the project level and then reduce it to a daily cost" and was deemed a reasonable way to determine damages (Zack and Halligan 2010; Taam and Singh 2003).

The original Eichleay formula depends on a three-step process (Ness and Carper 2010; Taam and Singh 2003)

$$\frac{\text{Actual Billings for Delayed Contract}}{\text{Total Actual Billings for Period}} \times \text{Total Home Office Overhead} = \text{Overhead Allocable to Delayed Contract (\$)} \quad (1)$$

$$\frac{\text{Overhead Allocable to Delayed Contract}}{\text{Days of Performance}} = \text{Daily Contract Overhead for Delayed Contract (\$/day)} \quad (2)$$

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Note. This manuscript was submitted on May 29, 2015; approved on May 4, 2016; published online on July 8, 2016. Discussion period open until December 8, 2016; separate discussions must be submitted for individual papers. This paper is part of the *Journal of Legal Affairs and Dispute Resolution in Engineering and Construction*, © ASCE, ISSN 1943-4162.

Daily Contract Overhead for Delayed Contract

$$\begin{aligned} & \times \text{Number of Days Delay} \\ & = \text{Overhead Claim Amount for Delayed Contract (\$)} \end{aligned} \quad (3)$$

Step one of the formula takes the total billings for the delayed contract to date of completion and proportions that to the total billings the company had during that same time period. This proportion is then multiplied against the total HOOH expenses incurred during the contract period. This yields an estimated amount of HOOH that applies to the delayed contract under the assumption all projects have the same HOOH rate. The applicable HOOH is divided by days of performance on the contract, including the delay as part of the performance period, resulting in a daily rate in Step 2. Finally, the daily rate is multiplied by the number of days of delay to arrive at an estimated HOOH figure for the delay period.

Not all courts have accepted the Eichleay formula as fair and accurate (Taam and Singh 2003). This has resulted in the creation of alternatives, two of which are presented next.

The Manshul formula “is a creature of the State of New York” (Zack 2001)

$$\begin{aligned} & \text{Cost of Work Performed During Delay Period} \\ & \quad \times \frac{\text{Contract Cost \%}}{\text{Contract Cost \%} + \text{Markup \%}} \\ & = \text{Direct Cost} \end{aligned} \quad (4)$$

$$\begin{aligned} & \text{Direct Cost Incurred during Delay Period} \\ & \quad \times \text{Home Office Overhead \%} \\ & = \text{Home Office Overhead Owed} \end{aligned} \quad (5)$$

In *Manshul Construction* (March 1981), Contract Cost % is taken as 100, which is to say this is the base price for all the labor and materials used on the project. This is divided by Contract Cost % plus a reasonable markup percentage that would cover HOOH and profits. Cost of work performed during the delay period is multiplied by this ratio to arrive at an estimate of direct costs. Finally, the HOOH is separated out from profit by multiplying the direct cost by a reasonable HOOH percentage.

Another alternative recovery formula is the Carteret formula used in manufacturing cases, which “assumes that there is a differential in overhead rates during a delay period” (Zack 2001). It additionally assumes that a contract is proceeding as planned if other work is performed simultaneously (Taam and Singh 2003). The Carteret formula is as follows:

$$\begin{aligned} & \text{Actual Overhead Rate During Delay Period} \\ & \quad - \text{Normal Overhead Rate} \\ & = \text{Excess Overhead Rate} \end{aligned} \quad (6)$$

$$\begin{aligned} & \text{Excess Overhead Rate} \\ & \quad \times \text{Total Cost of Work During Delay Period} \\ & = \text{Home Office Overhead Owed} \end{aligned} \quad (7)$$

The Eichleay approach is the most frequently used method, especially on federal cases, despite widespread dissatisfaction due to unclear usage guidelines (Rubin et al. 1999; Taam and Singh 2003; Niesse 2004). This article offers such guidelines that are intended to offer clarification.

Analogous to the United States’ experience, overseas jurisdictions are developing methodologies that are similar to Eichleay (Zack and Halligan 2011). The Hudson formula, for instance, was developed in the United Kingdom and later adapted in Canada. It is important in both cases to understand what is included in the home office overhead costs. For example, a dispute arose where the contractor tried to assert that year-end bonuses were a regular cost of doing business, and should thus be included in HOOH calculations. That position was denied by the court.

Previous Research

The Eichleay Formula has a number of problems associated with it from an accounting standpoint, such as the presumption that any delay affects project costs uniformly throughout a project. As a consequence, there has been “uneven acceptability across various jurisdictions” (Ibbs and Razavi 2014). Further complicating matters is the fact that there “are at least nine variations to the Eichleay method” (Ibbs and Razavi 2014). Nevertheless, the U.S. Government still allows Eichleay as a method for calculating unabsorbed HOOH if certain conditions are met (*E.R. Mitchell*) (1999).

Court decisions have historically shaped the use and application of various measures of HOOH recovery, and Eichleay is no different (Taam and Singh 2003; Singh and Taam 2009). The most pertinent result is a trend that shaped criteria for what circumstances the Eichleay Formula may be used: (1) the uncertainty of standby period, and (2) the availability of other work that can absorb outstanding HOOH (Taam and Singh 2003; Singh and Tamm 2009). These criteria are discussed in more detail later in this paper with discussion of a supporting case review.

Despite the research completed to-date, a process model built on guidelines developed from case and board decisions is needed and would be very useful for the industry (Ibbs and Razavi 2014). The remainder of this paper presents such a process model and guidelines for recovering HOOH.

Navigating the Criteria and Guidelines Presented

To help understand the remaining structure of the paper, Fig. 1 presents the proposed process model. It begins by evaluating if the Eichleay formula is applicable to the situation and jurisdiction. Decision-making then branches off to recovery with or without Eichleay. Recovery under Eichleay requires one more set of criteria to pass before the possibility of winning the claim can be realized.

Criteria for Applying the Eichleay Formula

Based on a review of court cases, the following criteria were created for when the Eichleay formula can be applied to recover unabsorbed HOOH. They are ordered by precedence. All seven conditions must be met for Eichleay to apply.

1. The Eichleay formula is used for primarily prime contractor versus owner disputes. Subcontractor and prime contractor disputes are discussed later in this paper;
2. Unabsorbed HOOH caused by force majeure events cannot be recovered;
3. The Eichleay formula is only applicable to HOOH when the project’s schedule is extended past the contract performance period;
4. Any “wholly unrealistic figure” produced by the Eichleay formula will be disallowed;

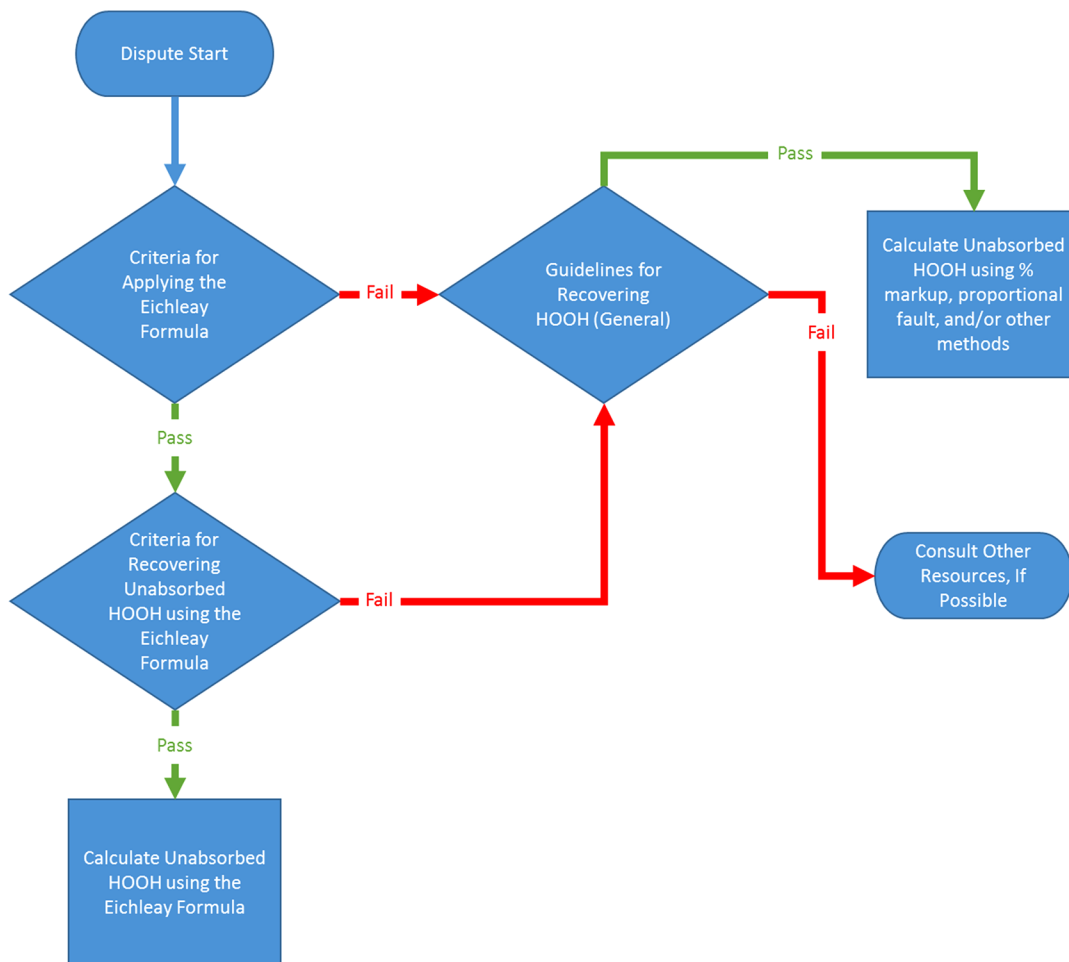


Fig. 1. Flowchart for navigating unabsorbed HOOH recovery

5. Oral agreements may be enforceable regardless of a written contractual agreement stating otherwise;
6. Contractual agreements are upheld regardless of actual damages; and
7. Inability to calculate actual damages warrants the use of the Eichleay formula.

The following sections provide case law detail and discussion for each of these guidelines,

Eichleay Formula Is Used Primarily for Prime Contractor versus Owner Disputes

In most of the court cases reviewed in this study, the Eichleay formula was used for prime contractor claims against the owner.² This leads towards the conclusion that the Eichleay formula is more often utilized as a tool for estimating unabsorbed HOOH in cases where the owner was responsible for a project's delay, particularly in U.S. Federal Government cases (ConstructionPro Network 2016). Though more recently in *JMR Construction Corp v. Environmental Assessment and Remediation Management (EARM), Inc.*, the prime contractor JMR successfully used the Eichleay formula to recover unabsorbed HOOH from their subcontractor EARM. JMR claimed that EARM did not perform their plumbing work at the Presidio of Monterey according to the project's schedule, resulting in 63% of the causation for the project delay. The contractor was able to prove EARM's fault through demonstration that the Presidio contract impaired their bonding

capacity, making other work impossible (ConstructionPro Network 2016).

Unabsorbed HOOH Caused by Force Majeure Cannot Be Recovered

Various authorities have pointed to a case dating back to the American Civil War as starting point for HOOH-related disputes. In this case, *McCord's Case, Charles P. Chouteau*, the U.S. Government ordered alterations to a sailing vessel being constructed under a contract which clearly stated the United States would pay for extra expenses incurred. The alterations were issued after a naval engagement that revealed weaknesses in the design and were deemed necessary for the defense of the country. These changes delayed the contract completion date. Further exacerbating the problem were changes in the currency and political events, which increased the prices of everything during the performance period. The contractor sued to recover various items including unabsorbed HOOH. The court ruled however that the events were outside the control of the owner, thus "the United States [...] not being in fault for the delays, is no more liable for such increase of prices than any individual contractor would be."

The outcome places such things as war and changing currency outside owner control and is an example of force majeure. In this case, the owner still compensated the contractor for additional labor and materials and allowed for an extended time frame but no compensation for additional unabsorbed HOOH.

This case, which of course predates Eichleay, does provide some insights. Typically, unabsorbed HOOH from a project delay involving a case of force majeure will not be awarded. A contract can, however, allow for recovery of damages like unabsorbed HOOH without precluding Eichleay or something equivalent. Yet, it is likely that no contract will affirmatively allow Eichleay due to the controversy surrounding the formula, only disallow it. The conclusion is that generally, force majeure cases will not allow for recovery of unabsorbed HOOH using the Eichleay Formula.

Eichleay Formula Is Only Applicable to HOOH Outside of the Contract Performance Period

The third guideline points to delays with the contract performance period. In *Interstate General Government Contractors* (1993), the contractor filed a bid protest in accordance with the contract, which provided for “a stop-work order if a bid protest were filed and for equitable adjustment to the contractor if a stop-work order resulted in increased performance time or cost.” Upon receipt of the bid, the owner instructed the contractor to “remain ready to commence performance within a ‘reasonable time’ after the decision was rendered.” This correspondence happened before the notice to proceed was issued. Interstate General argued the instructions constituted a constructive change order and thus, it was due overhead for the delay period. The court denied the claim on the basis that a constructive change order can only occur during the performance period.

Amount Produced from the Eichleay Formula Cannot Be a “Wholly Unrealistic Figure”

The value generated by the Eichleay formula must be a reasonable figure in relation to the work performed during an overrun. However, the concept of what constitutes a “wholly unrealistic figure” as put forth in *Manshul Construction* (March 1981) was not defined. During the case, Manshul claimed the owner was responsible for delays, which caused “engineering or design problems that called for central staff consideration.”

That claim was accepted by the court but the argument to use the unabsorbed HOOH amount generated by the Eichleay formula was seen as unreasonable by the court. Instead the court applied its own formula based on the proportional fault of the parties, completion percentage, and markups presented in the contract itself. Manshul was unable to prove the court’s figure lower than the actual cost of unabsorbed HOOH incurred.

Oral Agreements Are Enforceable Regardless of a Written Contractual Agreement Stating Otherwise

The contract in *Grand Trunk Western* (1941) contained a provision that prohibited payment for changes to work performed unless the chief engineer and contractor agreed to the change in writing. Trouble began early in construction when the contractor was told to stop work since the land for the railroad was slated for residential permitting and locals threatened to file injunctions against the firm. The owner instructed the contractor to move to another location, but the same issue arose again with more injunctions that resulted in construction being halted for 24 days. An oral agreement between the contractor and the owner’s chief engineer followed stating the owner would pay to keep the equipment and labor on standby for when the injunctions dissolved. The argument thus revolved around whether the owner would pay to keep the contractor on standby until the situation was resolved.

Grand Trunk Western sued for HOOH when the owner breached the contract through fraudulence when they gave the notice to

proceed but had not obtained the proper permits. HW Nelson, the owner, countered with an argument based on the contractual agreement, which provided that changed work had to be written and signed. The court dismissed the defense and upheld the oral agreement between the contractor and the owner’s chief engineer because the owner was bound to agreements made by its representatives orally or otherwise, and that contract did not specify the manner in which the agreement was to be made.

Contractual Agreements Are Upheld Regardless of Actual Damages

Fehlhaber Corporation (1978) demonstrates the validity of a limited liability clause even in the face of actual damages. The contract put forth that the owner had a maximum liability of \$1.2 million for anything related to the project. Fehlhaber successfully proved it was due \$2,896,503 in damages including HOOH from numerous owner-related delays including lack of coordination between contractors, multiple mechanical/electrical changes, and an unreasonable amount of time to approve drawings. The design had 2,716 revisions, which extended the work past the original contract duration of 787 days. Though Fehlhaber’s damages were higher, the court limited Fehlhaber’s award to \$1.2 million maximum liability set by the contract.

Of additional interest is a contract’s ability to nullify claims after a specified date as seen in *Broward County* (2005). The court dismissed part of Brooks Builders’ claim for compensation as Brooks had filed after the 10-calendar-day period postconstruction for claims stipulated in the contract. In other words, owners not only can provide for a limitation for claims within the contract, but they can also relieve themselves, through express language, of liabilities stemming from their own interference on a project.

Inability to Calculate Actual Damages Warrants the Use of the Eichleay Formula

Eichleay may only be applied in instances where actual damages are unable to be calculated and an increase in HOOH can be proven. The record for *Wickham Contracting* (1994) sums up the thought well: Eichleay is used when establishing actual damages are theoretical at best, so the formula offers an approximation for a “feasible, equitable, and predictable method of compensating a contractor for unabsorbed overhead.”

In *Manshul Construction* (June 1981), the contractor advocated use of Eichleay. Use of Eichleay was mentioned by the Manshul court to be an unsatisfactory way to calculate HOOH when good records of expenses were kept and thus actual damages may be calculated. In finding for the contractor, the court put great emphasis on Manshul’s log books and correspondence.

Another instructive case is *Berley Industries* (1978). Here, a contractor sued New York City when working on the 48th Precinct Police Station and Firehouse HVAC systems because of project delays attributable to the City. HOOH damages were not awarded through Eichleay or otherwise in because the contractor could not show that it accrued additional HOOH costs because of the delay.

Criteria for Recovering Unabsorbed HOOH Using the Eichleay Formula

Once the initial screening of a dispute has passed the criteria for applying the Eichleay formula described previously, requirements for recovering HOOH using the formula must be considered. Very importantly, the contractor has the burden of proving it was held on

standby and pursuing other work was impractical. Two key terms here are *standby* and *impractical*.

In *Complete General Construction* (2002) standby was defined as “when work on a project is suspended for a period of uncertain duration and the contractor can at any time be required to return to work immediately.” The emphasis on *uncertain* is key here. That is, the courts are definitely moving toward a position of requiring that the delay have an unpredictable duration before they will entertain application of Eichleay.

As an example, the court rejected CBC Enterprises’s argument because there was no element of uncertainty because in the length of the delay. The court stated that in order to apply Eichleay there “requires at least some element of uncertainty arising from suspension, disruption or delay of contract performance. Such delays are sudden, sporadic and of uncertain duration. As a result, it is impractical for the contractor to take on other work during these delays” (*CBC Enterprises* 1992).

The definition of standby was further defined more recently in *Redland Company* (2011). Here, the contractor moved equipment and personnel to a company staging area. Redland maintained they could deploy their forces within an instant back to the project once the notice to resume work was received. This argument was dismissed and the court put forth that immediate restart of work means equipment and personnel are on site idling where they may instantly begin work once the standby is lifted. Resources not on site are able to be deployed elsewhere and hence are not technically on standby.

In essence, a contractor must be spending money on the delayed project to recover HOOH. Proving idleness on site while spending money can be difficult to prove, as seen in *Broward County*. In that matter the contractor’s regular billings listed in the accounting books were indicative of work being performed.

Uncertain duration of delay makes the performance of other work *impractical*, the second key term for recovering using the Eichleay formula. *Community Heating & Plumbing Company, Inc.* (1993) is a case that has similarities to *CBC Enterprises* (1992). It upheld the CBC’s ruling that uncertainty must be present for the Eichleay formula to be applicable. It also went further ruling that change orders do not necessarily cause uncertainty and that HOOH cost is assumed to be included in the price of a change order that both parties have accepted.

These cases lead the authors to view *impractical* as express language meaning unrealistic. One implication of this uncertainty is that other work cannot be pursued to offset HOOH expenses during a period of uncertain delay because the contractor has no knowledge of when the delay will end and thus cannot plan to move its labor force and/or equipment to another job. On the other hand, if a contractor does redeploy its crews to other work during an uncertain delay, the courts may view this as demonstrative that other work was indeed practical. In such a case, HOOH would be absorbed through the other work and an Eichleay claim would be double-counting. An example of this may be seen in *Interstate General Government Contractors*, (1993) where the contractor moved its workforce to another job and was denied HOOH because of move.

Guidelines for Recovering HOOH

A contractor, as stated in *Nello Construction* (2006), is entitled for damages “such as increased labor costs, loss of productivity, and overhead costs resulting from delays in contract performance caused by government agency” or another contracting owner. This begs the question of how to prove delays that created unabsorbed

HOOH. From a review of these various cases, the following general guidelines are offered for recovering HOOH damages, whether or not Eichleay is used.

- Prove the delay affected the critical path to recover HOOH;
- Cannot use contract ambiguity to recover HOOH; and
- Excessive contractual revisions are grounds to recover HOOH.

The following sections provide detail and explanation for each guideline developed with examples from court cases.

Prove the Delay Affected the Critical Path to Recover HOOH

If a delay can be proven to directly affect the critical path of a project or there is substantial evidence showing that the delay drastically affected activities outside of the critical path, it is quite likely that the contractor can recover unabsorbed HOOH. *WB Construction* (2005) was one such case.

The contractor did not prove the delays impacted the critical path, but it did show the “changes to the plans and specifications caused the delays in completion of the project . . . Substantial evidence showed that many of the changes required WB to obtain new pricing, engage in discussions, obtain approvals, and reschedule directly and indirectly affected subcontractors. On the whole, the evidence showed WB worked diligently to complete the project as soon as possible and would have completed the project on time but for the extensive changes to the plans and specifications.”

Additionally, if the time used for calculation of unabsorbed HOOH begins with the projected early finish date on the schedule, the court will likely dismiss use of Eichleay. The reasoning is that there needs to be significant evidence to prove the contractor could have actually finished earlier than the expected finish date.³

Cannot Use Contract Ambiguity to Recover HOOH

In *Community Heating & Plumbing* the contractor claimed a defense of ambiguity against the Navy in an attempt to recover HOOH. This was deemed by the court to be impermissible because the federal acquisition regulations provide that it is the duty of the contractor to get clarification on any part of the specifications or provisions that are vague.

Excessive Contractual Revisions Are Grounds to Recover HOOH

Contingency placed within a project’s price takes into account a reasonable number of revisions. Anything beyond reasonable would not be covered by contingency, and the contractor would have a right to recover unabsorbed HOOH from delays caused by the excessive revisions. Examples include *Fehlhaber Corporation* (1978) where there were 2,716 revisions on a 787 day project; and in *WB Construction*, where numerous owner changes forced the contractor to request 163 time extensions. Neither case states what is considered to be unreasonable for a number of revisions on a project, which leaves this topic as subjective and contextual in nature. The issues of reasonableness and foreseeability are important in such circumstances and have been discussed in *Ibbs and Razavi* (2014).

Discussion

The Eichleay formula has been a topic of interest in disputes of unabsorbed home office overhead since its inception. Some argue the calculated amount is too large and others too little. Many variations of the formula have arisen in courts across the

United States, further complicating the matter. However, certain trends are emerging, which this paper seeks to translate into the following set of guidelines:

- Only include regular course-of-business costs, and avoid including extraordinary costs such as bonuses;
- Eichleay is generally precluded when caused by force majeure delays;
- Eichleay can only be used when the project's schedule is extended past the contract performance date. The Plaintiff must show project's critical path was delayed by the Defendant;
- Unrealistic figures will likely be rejected—apply a reasonableness test;
- Oral agreements may be enforceable;
- Contractually specified values for extended overhead will generally overrule Eichleay computed values;
- Actual, exact damages, if they can be calculated, will prevail over an Eichleay computation;
- Plaintiff must demonstrate it was on indefinite standby;
- Plaintiff must demonstrate it was impractical to shift idled resources to another project during the extended delay; and
- Simplistic, mechanistic Eichleay computations should be avoided.

One of the trends and criteria is to determine whether an Eichleay calculation is reasonable, which demands that it be viewed in the context of the project's contract value, duration, underlying disputes, and the company's other projects.⁴ Courts never followed a simple-minded mechanistic application of Eichleay, and recent decisions have made it even harder to employ the formula.

Another consideration is the dispute's impacts on the contractor's other, entire business activities. This is where the process gets difficult. Courts put forth that in order to use Eichleay, one has to prove a significant degree of uncertainty of when work will resume on a project to the point where pursuing other work during the period was impractical. In other words, the determination is needed of whether the contractor truly was forced into indefinite suspension.

Uncertainty is a key word and concept here. If the project can be proven to have a high level of uncertainty to the point that there is a large risk for the contractor to deploy its workforce elsewhere, recovery can be realized. The reason for this stems from the possibility that the contractor would be held in breach of contract for not resuming work immediately after the delay period ended. Thus, the contractor can easily prove other work was impractical at the time.

The process is not over if the Eichleay formula conditions are not met, or, considering Eichleay is typically a tool favored in federal cases, one might have to seek recovery using other means for disputes outside U.S. Federal Government contracts. Three distinct how-to guidelines are presented in the section "Guidelines for Recovering HOOH" for those situations where Eichleay may not apply. Strategies such as proving the owner caused the delay or a subcontractor default affected the critical path provide strong evidence for unabsorbed HOOH recovery. Projects with large amounts of change orders bring forth the question whether the design and contract specifications were ready for public issuance and can also be grounds for claims. Other methods not covered in this study may also serve useful, though keeping ample documentation on a project whether a change order or simple purchases greatly aids in providing evidence for or defense against any claim. The courts, in cases outside application of Eichleay, will most likely revert to some measure of fault based on proportion of responsibility and generate figures off an assumed overhead percent markup from industry standards or financial records of the project.

In the end the development of the Eichleay formula was a landmark achievement for delay damage disputes, particularly in U.S. Government projects. The time before Eichleay was perilous for a contractor entering into an U.S. Government contract as recovery of damages for a delay by the government was not possible unless the contract allowed it (Taam and Singh 2003). The formula was a landmark step because it ratified the view that contractors may be entitled to recover HOOH on delayed projects. It also spawned other formulas seeking to accomplish the same goal in other industries, and other formulas that seek to be a better, more accurate estimation of unabsorbed HOOH.

Conclusion

The history of court cases reviewed herein suggests that the Eichleay formula can be applicable to unabsorbed HOOH on work done outside the contract performance period and only when a reasonable figure can be calculated without restriction from contract terms. Once this is confirmed, the burden to prove the claim rests on the contractor. Demonstrating uncertainty, while difficult, provides the road to successful recovery as long as the following conditions are proven: (1) the contractor was to remain on standby for an unknown period, and (2) during that period, pursuing other work would have been impractical.

In summary, the Eichleay formula can be used for

- Prime contractor, subcontractor, owner disputes;
 - HOOH outside the contract performance period; and
 - Calculating damages when actual damages are incalculable.
- Eichleay cannot be used for
- HOOH resulting from force majeure;
 - Recovery of HOOH when an unrealistic value is calculated; and
 - Contractual agreements that specify a limit on the owner's liability for damages.

There remains the possibility of recovering outside Eichleay where circumstances, typically court dismissal or failure to prove uncertainty, direct a move towards more-general approaches. Evidence such as delays affecting the critical path or an unreasonable amount of project revisions have been shown to be promising approaches. What constitutes an unreasonable amount of revisions, among other items presented earlier, is not well defined and is project-specific. Additionally, there exists the possibility that damages may be recoverable from a subcontractor. This is uncommon occurrence and further investigation should be undertaken before pursuing that avenue of HOOH recovery. The authors maintain that there are always mitigating circumstances, and items presented within the paper simply remain just guidelines and not mandates.

Acknowledgments

This material is based upon work supported by the National Science Foundation Graduate Research Fellowship Program under Grant Number DGE 1106400. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

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 Wickham Contracting Co., Inc. v. Dennis J. Fischer, Acting Administrator, General Services Administration, 12F.3d 1574 (1994)

Endnotes

- ¹A prime contractor, Gardner, sued its subcontractor, Fergusons, for unabsorbed HOOH in *Allen v. Gardner*. The subcontractor breached the contract and refused to supply concrete to be poured on site for constructing a school. An unsuccessful argument that the breach did not affect HOOH on the part of Gardner was put forth. The argument was dismissed after review of accounting records kept by the prime contractor where “the breach of the contract by the Fergusons adversely affected the contract of the prime contractor responsible for the entire project, by increasing its duties and responsibilities, and consuming the time of Gardner and its staff in performing the work the Fergusons had contracted to perform.” This was ample evidence against the Fergusons to award Gardner HOOH as the subcontractor had directly caused a disruption of service.
- ²See for instance *Redland Company*; *CBC Enterprises*; *Manshul Construction* (March 1981); *Berley Industries*; and *Wickham Contracting*.

³*Wickham Contracting* is an often-cited case that demonstrates this outcome. Here the contractor experienced many delays because the owner halted construction due to concerns about structural integrity of the building, and attempted to recover damages using the projected early finish date on the CPM schedule. The board denied this claim because there was no way to prove Wickham Contracting could have finished before the date specified in the contract.

⁴This is another instance where foreseeability is a vitally important issue in construction contracting (Ibbs and Razavi 2014). As stated in Owen (2009) “... foreseeability swirls throughout the law of tort, permeating, connecting and providing moral strengths to the elements of negligence.”

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