Process Model for Identifying and Computing Allowable Home Office Overhead Cost Claims

William Ibbs, M.ASCE¹; Benjamin Baker²; and Fiona Burckhardt³

Abstract: Construction change often leads to both direct and indirect cost damages. Direct costs are the *bricks and mortar* costs, which arise from extra craft labor and extra material. Indirect costs include the overhead costs associated with supporting a project. Those indirect costs include the contractor's home office overhead costs. When a project is delayed, those overhead costs may be extended and the contractor may seek to recover some portion of these costs. Claims for such home office overhead damages are frequently controversial and hard to compute. A widely used method to calculate these costs is the Eichleay formula. However, its application is not always successful, partly due to misunderstanding and partly due to misapplication. Based on a review of the project management literature and legal decisions, this paper presents a process model and guidelines for identifying circumstances eligible for home office overhead damage claims and for applying the Eichleay formula. These guidelines and the model can help contractors, owners, and other interested parties resolve home office overhead disputes faster and more economically. **DOI:** 10.1061/(ASCE)LA.1943-4170.0000164. © 2014 American Society of Civil Engineers.

Introduction

Contract claims for home office overhead (HOOH) damages are among the most litigated of all delay claims [Schwartzkopf and McNamara 2001; Transportation Research Board (TRB) 2003]. A major reason for this is that the conditions under which such damages are allowable are not well understood. For example, it seems that it is particularly difficult for smaller and medium-sized contractors to reduce home office overhead because they are more dependent on key employees, and to release such people would be more devastating to the contractor who employs them.

A contractor's likelihood of winning extended HOOH disputes was never high in the past (Taam and Singh 2003), and recent court decisions have tightened the conditions even further, in large part because a set of guidelines has been missing (Jones 2004).

The purpose of this paper is to provide such guidelines. These guidelines are intended to help contractors and owners more readily identify circumstances under which HOOH cost claims are allowable, and ultimately reduce project disputes and dispute costs. The research methodology used to develop the guidelines presented herein was as follows: (1) review and summarize key court decisions and project management literature on the subject; (2) identify trends, complications, and contradictions in such decisions and literature; and (3) synthesize those decisions and literature into a flowchart. As with any model, the flowchart will not be universally accurate, but the authors hope it will improve the ability to identify conditions in which a contractor is entitled to HOOH compensation.

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After defining HOOH costs and explaining their importance, this paper presents a review in chronological fashion of the key legal decisions that have shaped current thinking about unabsorbed HOOH damages. These decisions are used to explore and detail the nuances associated with HOOH costs. Next, a flowchart is presented to summarize a generalized checklist for determining when a contractor is eligible to be reimbursed for HOOH damages. Finally, the practical applications of this model are discussed from the viewpoints of the intended audience of this paper.

That intended audience is any contractor, owner, or other interested party who may be affected by project delay and unabsorbed extended HOOH costs. Although written from the viewpoint of a contractor/plaintiff pursuing an extended HOOH claim against an owner/defendant, the points presented could apply to the reverse situation.

Home Office Overhead Costs

Construction change often leads to both direct and indirect cost damages. Direct costs are the *bricks and mortar* costs needed to build a particular project. Included in this category are craft labor, construction equipment, material, and subcontractor expenses. Indirect costs include the overhead costs associated with and needed to support a project, whether they are field overhead costs (e.g., site trailers, security fencing) or home office overhead costs (TRB 2003).

HOOH costs are the costs of running the contractor's permanent office and supporting a group of projects (Zack 2001a, b). They include executive and clerical salaries, legal and accounting expenses, home office rent and expenses, advertising, company insurance, recruiting costs, utilities, human relations costs, interest on company borrowings, travel for home office staff, bad debt, depreciation of company assets, entertainment, professional fees, contributions, and bid costs. Another definition is that they are the general and administrative (G&A) expenses a business must spend to support its various revenue-generating operations (McGeehin and Strouss 1996). A third definition is that HOOH costs are an actual cost that is an essential part of a contractor's cost of doing business (G.S. & L. Mechanical & Construction, Inc., and Wickham Contracting Co. v. Fischer 1994). They must be "expended for the benefit of the whole business," and not attributed

¹Professor of Construction Management, Dept. of Civil and Environmental Engineering, Univ. of California at Berkeley, Berkeley, CA 94720; and President, Ibbs Consulting Group, Oakland, CA 94618 (corresponding author). E-mail: Bill@TheIbbsConsultingGroup.com

²Ph.D. Candidate, Univ. of California at Berkeley, 213 McLaughlin Hall, Berkeley, CA 94720.

³Business Economics and Engineering, TU Munich–School of Management.

exclusively to a particular contract (*Nicon*, *Inc. v. United States* 2003). There are few regulations governing their definition, but contractors must consistently use the same system on all their contracts (Callan and Rice 2004).

A contractor's bid includes both the direct and indirect costs, with many of the HOOH costs being computed on a time basis. For instance, HOOH costs may be prorated across all active projects and prorated across the durations of those projects, resulting in a charge of X per day per project. This overhead daily rate is then multiplied across the anticipated number of days necessary for the project.

If a project is delayed for a period of time, the HOOH costs may become extended, meaning that more home office support is needed for a longer time period than originally anticipated and included in the contract price. These costs continue to accrue and will come from the contractor's profits. If another project can be secured, it may pick up these HOOH costs. If such a second project cannot be acquired, these HOOH costs are unabsorbed and profits impaired. Such a case is unfair and the contractor may be eligible for compensation for those costs.

One way to measure such unabsorbed HOOH is through the Eichleay formula, described in the next section.

Eichleay Formula: General Background

The first case known to consider overhead as a part of delay damages was *Baruch v. United States* (1941). A large number of government-issued change orders and stop work directives resulted in a 58-day delay. Baruch was awarded general office overhead damages because

"[The defendant] should be permitted to recover the actual and necessary costs proximately flowing from the delay that was occasioned by this action on the part of the [government]."

In another case a few years later, the U.S. Court of Claims ruled in *Fred R. Combs v. United States* (1945) that

"...it is held that [the contractor] is entitled to recover a proper proportion of main office overhead for the period of delay, without any precise proof of the amount by which the plaintiff's overhead was ultimately increased by the [government's] delay" (emphasis added).

Neither Baruch nor Combs explained how the damages were calculated, but they clearly set the stage for the 1960 *Eichleay Corporation* decision.

During the construction of a military base, Eichleay Corporation encountered government-caused delays. As part of its damage claim, Eichleay asserted lost HOOH costs and proposed a threestep formula to estimate those losses, which the Armed Services Board of Contract Appeals accepted. That formula computes the daily amount of overhead the contractor would have presumably charged to the project had there been no delay and awards the contractor damages based on that daily amount multiplied by the delay time. Specifically, the HOOH costs allocable to the contract are first determined by multiplying the total overhead by a ratio of the contract's billings (not necessarily the same as the original contract value) to the contractor's total billings for the contract period. A daily overhead rate is next computed by dividing the allocable HOOH by the actual days of contract performance. Last, the total overhead recoverable is calculated by multiplying the daily HOOH

rate for the contract by the number of delay days; see Steps 1, 2, and 3 in Fig. 1.

Even if the genesis of the Eichleay formula relies on government-caused delays, the allocation of home office overhead expenses that incur during a period of suspension of work obviously is not only a problem of government-arranged projects. Over time, private sector parties have adopted the Eichleay formula and its variations.

There are a number of problems associated with Eichleay. From an accounting perspective, one of the more important issues includes the unproven presumption that a proportional relationship exists between contract billings and HOOH. That is, the direct costs of a project change may increase the underlying contract billings, but there is no evidence in many cases that the HOOH resources and HOOH costs need to increase as those billings increase.

Another issue with Eichleay is that a delay's effect is presumed to be the same throughout the entire project, regardless of when the delay occurs (Anderson 1988). Delaying a project that is essentially complete may not have the same impact on HOOH resources and costs as delays that occur at a project's outset. Similarly, late project delays may not have ramifications to bidding future work, where being prevented from bidding another job means there is no additional contract value over which to spread the home office overhead costs. Another concern is that a contractor's HOOH may include extravagant expenditures which are not a legitimate part of running a prudent operation.³

From the contractor's perspective, using Eichleay to recover HOOH costs is problematic because of uneven acceptability across various jurisdictions.⁴ A national contractor trying to recover such damages in two different parts of the country may find liberal acceptance of Eichleay in one part of the nation and restrictive, or even nonacceptance, in another part, which would complicate project management practice and accounting computations. At the same time, the federal government has mandated use of Eichleay in federal government construction contracts (E.R. Mitchell Construction Company v. Danzig 1999).

Another difficulty for both owners and contractors is that there are at least nine variations to the Eichleay method (Zack 2001a, b; Ottesen and Dignum 2003; Ponce de Leon 1992). They tend to differ based on whether the originally planned or actual contract period should be used to compute a daily HOOH rate, or whether the planned or actual HOOH costs should be used. For example, in the modified Eichleay version, in order not to understate the damages (the original formula is conservative), the delay days are removed from the contract period in the formula. The simplest version is to multiply the contractor's planned overhead rate by the dollar amount of planned earnings for the delay period (as would already be known for projects tracking earned value). The most complicated is to use the specified base allocation method, which involves creating indirect cost pool accounts and a basis for allocating the accounts to each contract based on the established percentages of the overall cost item.

For these reasons, a process model that helps to regularize the application of HOOH damage identification and Eichleay application would be useful to the industry. That is the subject of this paper.

Entitlement to HOOH Damages: General Background

According to the Defense Contract Audit Agency (DCAA 2011), extended HOOH costs are compensable only when (1) the delay/suspension is owner-caused, (2) the owner requires the contractor

to stand by, (3) it is impractical for the contractor to take on other work, and (4) the delay/suspension causes the contractor to be unable to complete the contract within the original contract performance period (Corps of Engineers 2007).

If the contractor is able to find additional or replaceable work and use HOOH resources to perform this other work, the revenue achieved from the new work covers the amount expected from the original contract to pay for its portion of extended HOOH costs. Thus, the contractor's extended HOOH costs are absorbed by some other project, and its case for recovering the extended HOOH costs will be weakened or denied.

According to the Corps of Engineers (2007), a contractor has developed a prima facie case for recovering the HOOH damages when these conditions are met. Conversely, the owner has the right to deny such claims by demonstrating that (1) it was reasonably possible for the contractor to obtain replacement work during the delay/suspension period, (2) the contractor's inability to take on other work was not caused by the owner's delay/suspension, or (3) the contractor was able to reduce fixed overhead expenses during the period of delay/suspension (Corps of Engineers 2007).

In the following sections, various pertinent legal cases and board decisions are discussed and were used to develop the guidelines and process model presented later in this paper.

Recent Case Law and Board Decisions

Mere application of the Eichleay formula without demonstration of meaningful impacts has been criticized ever since its creation. In *Berley Industries, Inc. v. City of New York (1978)*, the court denied "the mechanical imposition of the formula" by the trial court. *Berley* is the foundational case that precludes blind application of the Eichleay formula, and a variety of subsequent cases have helped shape understanding of what is needed to demonstrate recoverable damage. The more noteworthy cases and board decisions are discussed in the following paragraphs.

Exclusive Means for Calculating Extended HOOH

The Federal Circuit held in *Wickham Contracting Co. v. Fischer* that the Eichleay formula is the exclusive means available for calculating unabsorbed HOOH on a federal construction contract. However, there are instances where application of Eichleay is not possible, and where modified versions of the Eichleay formula and other methods were allowed.

One such case in which a modified version was allowed is Appeal of Genisco Technology Corporation (1999). In this case, actual cost values were not available, so the court permitted use of estimates:

"As respondent argues, we have held that claims based on estimates are proper under the Contract Disputes Act (CDA), 41 U.S.C. §§ 601-613, as amended...DCAA recognizes that complete financial data may not be available when an unabsorbed overhead claim is filed and sanctions the use of estimates in formulating an Eichleay claim."

In Complete General Construction v. Ohio Department of Transportation (2002), a state court offered:

"Once it is determined that an owner-caused delay has caused a contractor to suffer unabsorbed overhead costs, then the Eichleay formula can be employed but not necessarily exclusively. For instance, a court could utilize the direct cost formula. The direct cost method compares the direct cost actually attributed to a project as a portion of all the direct costs incurred by the business over a particular period. The result is a ratio by which the percentage of indirect costs can be calculated, including home office overhead applicable to a particular project."

By direct costs, the Supreme Court of Ohio was referring to the types of costs that "include construction wages and equipment expenses and are attributed to specific projects," as opposed to "the expenses involved in generally running a business, not attributable to any one project." Furthermore, the court modified the use of the Eichleay formula in Ohio to match the way that costs can be compensated in federal cases under the Federal Acquisition Regulation (FAR). The court ruled that "[t]he idea that the owner should fund a contractor's parties, sports tickets, political contributions, or other expenses that bring nothing tangible to the owner's project is unreasonable," and should not be recoverable. FAR prohibitions on compensation include interest on borrowings, entertainment expenses, contributions and/or donations, bid and proposal costs, and bad debts (US Code of Federal Regulations, Section 1.101, Title 48, C.F.R. Section 31.205-1 et seq.).

In *P.J. Dick Inc. v. Anthony Principi (2003)*, electrical design deficiencies occurred throughout the entire installation of electrical branch circuits. This led to uneven workflow, constructive acceleration, and reduced labor productivity. The court allowed the contractor to compute a loss of productivity using a measured mile based on similar work (feeder circuit) even though that work was done by a different crew (Ibbs 2012). That loss of productivity led to a time extension, for which HOOH damages were successfully recovered.

Successful application also requires that the underlying delay causing the unabsorbed extended HOOH costs be proven to be the owner's responsibility. Delays caused by the contractor that are concurrent to owner-caused delays may reduce or even preclude entitlement (Sauer, Inc. v. Danzig). The presence of no-damagesfor-delay and other contract clauses that specifically prohibit compensation for extended HOOH costs will also preclude such compensation, and contract language stipulating that change order markups compensate for unabsorbed HOOH may also preclude recovery (TRB 2003). The senior author of this article has seen mediated settlements where contractors have been able to recover some HOOH. In those instances, the contractors have clearly demonstrated that their home office overhead amounts substantially exceeded the contractually stipulated change order markup amount. On the other hand, that author has seen instances where the contractor was not successful in recovering HOOH over and above the change order markup, and excess was not substantial or well demonstrated.

Work That Has Been Performed versus Not Performed

For the suspension cases in which work has been performed, DCAA and courts have clear requirements for the entitlement to HOOH recovery. One of those prerequisites is that the contractor could not undertake replacement work that would pick up the otherwise unabsorbed HOOH costs. *Capital Electric Co. v. United States* (1984) is one such case. It required the contractor to show that it was not possible to taken on "any large construction jobs during the various delay period due to the uncertainty of the delays and . . . due to the limitation on its bonding capacity."

The board in *R.G. Beer Corp.* (1986) reinforced this requirement, stating that numerous factors, mostly subjective, are involved in determining whether a contractor could or should have taken on other work, including the (1) amount of notice and certainty as to

the length of the delay period; (2) bidding, mobilization, geographic, and submittal restraints attendant upon starting other work; (3) size, resources, capabilities, and expertise of the contractor; and (4) size and degree of the completion of the job and the amount of work planned for the delay period.

A few years later, the federal court in *C.B.C. Enterprises, Inc. v. United States (1992)* approved the use of the Eichleay formula, "provided that compensable delay occurred, and that the contractor could not have taken on any other jobs during the contract period." Controversies dealing with performance of replacement work are further discussed in a later section of this paper.

In *Mech-Con Corp. v. West* (1995), the owner had admitted that the delay was solely at its fault. The court in turn ruled that the contractor had a prima facie case for recovery of its unabsorbed HOOH (Eaton 2009). The contractor did not need to prove (1) it was impractical to take on other work, and (2) the delay/suspension caused it to be unable to complete the contract within the original contract performance period, as extended by any modification.

Unlike the situation in which actual construction work is performed, there are no clear guidelines for circumstances where a project is terminated for the convenience of the owner without any performance. *Nicon, Inc. v. United States (2003)* is one such case where the contract was terminated for the convenience of the owner after the owner-caused suspension. The contractor, Nicon, was awarded a contract to repair a dormitory at MacDill Air Force Base, Florida. Partially because of a bid protest, the owner never issued a notice to proceed. After the owner terminated Nicon's contract for convenience, the contractor sought to recover \$387,513 in unabsorbed home office overhead for the 288 days between contract award and contract termination.

The court did agree to compensate a contractor if the contractor satisfies the requirements for the Eichleay damages as defined by the court. This is true also for a case where the Eichleay formula is not applicable. In this case, as stated in the previous section, some courts have allowed the use of a modified Eichleay formula and other methods, and some have stated that the Eichleay formula is the exclusive means available for calculating extended HOOH.

In the original case (*Nicon, Inc. v. United States 2001*), the Court of Federal Claims ruled against replacing the total billing with the contract price in the Eichleay formula, stating that the formula could not be modified to "fit a fact situation where the contractor has not yet begun to perform." The court reconfirmed that the Eichleay is an "extraordinary remedy" applicable only when certain facts exist. It also ruled that only delays that extend contract performance can give rise to Eichleay damages.

The Federal Circuit ruled that Eichleay damages are awarded for the number of days for which an owner-caused delay results in overall contract performance to be extended—not the number of days that it causes work to be suspended. In this instance, there was a 288-day alleged delay period, but the contractor never started to perform work. The court furthermore ruled that, if performance has not yet begun, there is no way to determine how long the delay would have extended contract performance. It also refused to assume that the contractor would have been paid the full contract price.

The U.S. Court of Federal Claims initially denied the contractor's unabsorbed overhead claim, stating that the Eichleay formula could not be modified to fit a situation where the contractor had not yet started work. The contractor had no actual *contract billings* or days of performance to use in the formula. For purposes of the Eichleay formula, the contractor argued that it would have completed the project at the contract price and within contract but for the termination. Using this approach, Nicon computed its daily contract overhead by inserting the contract price for contract

billings and the time the contract allowed for performance for actual days of performance into the Eichleay formula. The appeals court ultimately rejected those assumptions, stating that "constructive figures may not be substituted into the *Eichleay* formula."

After rejecting Nicon's Eichleay claim, the court did note that because fairness to a terminated contractor is a central concern, it would be inappropriate to rigidly apply the Eichleay formula to deny the contractor fair compensation, and that the contractor might be able to receive "some of its unabsorbed home office overhead as part of its termination for convenience settlement by some other method of allocation." However, the Federal Circuit has consistently held that the Eichleay formula is the only acceptable method for computing unabsorbed overhead (Jones 2004).

The same court seemed to note that rigidly applying Eichleay could hurt an owner. In response to Nicon's argument that "[the] comparison of the value of Nicon's various contracts can be made to allocate a fair portion of its overhead costs to the contract," it stated:

"[I]t must be determined...if the facts of this case permit the allocability of the unabsorbed overhead, keeping in mind the fairness principles that govern in the termination for convenience context."

The court cautioned that a contractor seeking unabsorbed overhead as part of its termination for convenience must still prove entitlement to unabsorbed overhead. Thus, the contractor must show that (1) before the owner terminated the contract, there was ownercaused delay of uncertain duration; (2) the contractor played no role in the delay, and the delay was not the fault of someone or something beyond the owner's control; and (3) the contractor was on standby and unable to take on other work.

The Redland Co. (*The Redland Co. v. United States 2011*) faced a similar situation, claiming compensation for a 4-year suspension of work on a U.S. Air Force project of paving a jet aircraft parking area. The contractor sought compensation for the unabsorbed HOOH despite the fact that the suspension preceded the project start. Redland had received a notice to proceed, but was denied HOOH recovery because it had not actually begun physical performance of the work.⁶

Contractor Placed on Standby

To be on standby, a contractor must prove that the owner-caused delay was of indefinite duration. That is, the contractor cannot foresee with reasonable certainty when work will resume. One case along these lines is *Mech-Con Corp. v. West (1995)*. In this instance, the owner provided the contractor with a 3-month period to remobilize its work force on site. As a result, the contractor could not recover the unabsorbed HOOH for this period because, by the standard of indefiniteness, the contractor was not on standby—meaning that there was no indefinite period of suspension issued by the owner.

E.R. Mitchell Construction Company v. Danzig (1999) is much the same condition. The court stated that if the owner suspends work on the contract but provides the contractor with a specific return date, the contractor is not on standby. Similarly, in Melka Marine, Inc. v. United States (1999), the court stated that if the contractor "knew when the delay period would end in order to resume full scale work," indefinite duration standby would not apply, and the contractor would not be eligible for compensation.

In Sergent Mechanical Systems v. United States (2002), the contractor was required to keep some of its workers and equipment at the site, and it was necessary that the contractor be prepared to

resume work when requested by the owner. In this case, the contractor either stayed idle at the site or worked on another project that allowed it to resume work on short notice. Thus, the court stated:

"[...] the contractor was not on 'standby' status...rather, it was a subcontractor that was responsible for having workers ready. None of the contractor's employees were required to do more than monitor the contract...Finally, there was a minimal amount of work—eight hours—remaining on the contract during the delay period."

Contractor Performed Replacement Work

Another important prerequisite to securing HOOH damages is demonstrating that replacement work is not available, as it would cover HOOH. Performing replacement work can mean, for example, being able to continue on other unaffected parts of the same project or perform work on a completely different project. A series of cases have probed the nuances of this condition.

In Charles G. Williams Construction Inc. (CGW) v. Thomas E. White (2001), the board confirmed that a contractor had failed to prove the irreplaceability requirement. Due to several delays during the performance of the contract, the owner terminated work for its convenience. CGW claimed extended HOOH costs, but the board denied CGW's unabsorbed overhead claim because they were fully absorbed during the extended period:

"The DCAA [Defense Contract Audit Agency] auditor found that the overhead for the entire period of extended contract performance was fully absorbed by the basic contract, contract modifications, and other projects. He further found that CGW used both variable and fixed overhead expenses in computing the average daily overhead rate. On this evidence, CGW's Eichleay claim is not proven [and thus denied]."

In *P.J. Dick (PJD), Incorporated v. Anthony Principi (2003)*, a federal court reversed a Veterans Affairs Board of Contract Appeals (VABCA) denial of a contractor's claim for unabsorbed HOOH costs. The court summarized its view of the standby requirement in detail, and appears to have tightened the requirements.

PJD was hired by the Veterans Administration (VA) to construct an addition to a medical center in Ann Arbor, MI. Over the course of the project, the VA issued more than 400 change orders, increasing the contract value by more than 5% and extending the schedule by 107 days. The contractor signed each of the changes and reserved the right to seek delay damages under a suspension of work (SOW) clause. The project was eventually finished 260 days after the original contract completion date and 153 days after the revised date.

The VABCA found that the contractor was not entitled to recover unabsorbed HOOH costs under the Eichleay formula because it had been able to continue work on other unaffected parts of the medical center, thus never being placed in a standby position.

On appeal, the court rejected the argument that a contractor is automatically on standby any time there is an owner-caused delay of uncertain duration that extends the performance of the contract and at the end of which the contractor can be required to immediately resume work. The court began its analysis by reviewing its earlier decisions discussing the standby requirement. It stated that, in the absence of a written order suspending work for an indefinite duration and requiring the contractor to remain ready to resume work immediately or on short notice, the contractor must prove standby through indirect evidence. To satisfy the standby requirement, a contractor must show that

- The owner-caused delay was not only substantial but was of indefinite duration;
- During the delay, the contractor was required to be ready to resume work on the contract immediately and at full speed; and
- The contractor was not able to gradually remobilize in a reasonable amount of time.

Although PJD characterized its direct billings as "minor," it billed as much as 47% of the predelay monthly amount during the delay period, meaning PJD was able to perform substantial amounts of work during the alleged suspension period.

The court went on to list the following questions a court should ask when analyzing Eichleay claims for the recovery of unabsorbed HOOH costs:

- 1. Was there an owner-caused delay that was not concurrent with another delay caused by another source?
- 2. Was the contractor able to prove that additional overhead was incurred?
- 3. Did the owner contracting officer issue a suspension?
- 4. If not, was there a delay of indefinite duration, and can the contractor prove that it could not bill a substantial amount of work on the contract and was required to be able to return to work at the end of the delay period immediately at full speed?
- 5. Can the owner demonstrate that it was not impractical for the contractor to take on replacement work (owner's burden of production)?
- 6. If the owner meets its burden of production, can the contractor show that it was impractical for to obtain sufficient replacement work (contractor's burden of persuasion)?

The unusual twist on PJD was that the court did not conduct a thorough review of the applicability of Eichleay because it ultimately decided the case on an unrelated issue. Specifically, the court concluded that the contractor was entitled to Eichleay damages under the SOW clause based on the stipulation the parties reached, authorizing recovery of field and HOOH costs at stipulated daily rates.

As a consequence, the contractor was entitled to compensation under the terms of the stipulation, despite the contractor's inability to independently prove entitlement to HOOH damages. In the eyes of the court, entitlement under the SOW clause requires proof entirely different, and less demanding, than that required to show entitlement to Eichleay damages.

Accordingly, under the four-part test to recover under the SOW clause, the irreplaceability requirement is unnecessary:

- 1. There must be a delay of unreasonable length extending the contract completion time;
- The delay must have been proximately caused by the VA's action or inaction;
- 3. The delay resulted in some injury; and
- 4. There is no delay concurrent with the suspension that is the fault of the contractor.

Change

Compensating HOOH for delays (nonsuspension) caused by changes is even more complicated. A contractor may have to prove that its productivity rate is affected by substantial changes (for example, through a measured mile approach). The contractor could prove HOOH damages by showing the involvement of central staff (i.e., providing engineering or administrative services), lost job opportunities, and labor costs for the delay period. However, delay caused by change may not cause one to stand by, and thus the contractor may not meet the standby requirement of Eichleay recovery.

Courts may contend that delay caused by changes to the work is properly compensated through application of the contract's overhead and profit rates, and no unabsorbed overhead is owed. Following are the various cases that address the complexity.

In *Berley Industries, Inc. v. City of New York* (1978), the court denied the claim and concluded that the contractor had failed to show any proof that "the delay precipitated, or was precipitated by, engineering or design problems that called for central staff consideration."

In Fehlhaber Corp. v. State (1979), "[T]he Appellate Division, Third Department, has interpreted Berley as permitting the recovery of home office overhead where it can be shown that the delay must necessarily have engendered the involvement of home office personnel through engineering problems or design changes."

The contractors in these cases could not technically meet the prerequisites for entitlement to Eichleay damages. Yet, by showing the involvement of central staff, for the delay period, they were able to recover extended HOOH costs (Ernstrom and Essler 1982).

West v. All State Boiler (1998) set a precedent for computing the length of a delayed period rather than suspended period: "damages are to be awarded for the period of time by which overall performance is extended, rather than the period of the suspension." It thus distinguished between the literal time of the suspension and any downstream consequences that might flow from the suspension. Examples of downstream consequences might be the loss of productivity that occurs because of an interruption to a workforce's learning curve.

In Zurn Constructors, Inc. v. Castaic Lake Water Agency (2003), the court allowed application of approximate damage estimates, rather than precise measurement, arising from a construction delay:

"A contractor is entitled to recover damages if an owner's breach of contract results in an increase in the amount of overhead expenses incurred for the project... A delay in contract performance caused by errors and inconsistencies in the plans and specifications, requests for extra work, and design changes, as occurred here, can result in an increase in the amount of indirect overhead expenses incurred to support the project. The contractor need not calculate the amount of the increase with precision, as stated ante."

In Martin County v. Polivka Paving Inc. (2010), the court dealt with a case of extended performance in which the contractor admitted that it never incurred a suspension. This particular case dealt with delays caused by differing site conditions and additional work. The court wrote that if an owner-imposed delay required the contractor to indefinitely stand by to the point that the contractor was unable to take on additional work, it would effectively be considered suspension. The majority opinion was that the contractor's evidence at trial had not met this entitlement prerequisite, i.e., the contractor had not been suspended. The dissenting judge wrote that even though the contractor had not proven suspension and thus could not use Eichleay, the contractor would still be eligible for an award to make up for extended performance that caused "an increase in materials, labor, time, and cost when the owner [misrepresented] the full extent of the work to be done." The court cited Appeal of Satellite Elec. Co. v. Dalton (1997): "home office overhead damages which are awarded...to an owner contractor who suffers 'unabsorbed home office overhead when the owner delays work on the contract indefinitely but requires the contractor to remain available to resume work immediately on the owner's instruction.' 774 So.2d at 57 (quoting Satellite Elec. Co. v. Dalton)."

The court was referring to the conditions for standby when recovering the extended HOOH from the owner-caused suspension. The contractor, however, never "remained available to resume work," simply because there was no stoppage or substantial decrease in the billing. The matter of standby should not be applied to such a case and should not determine a contractor's right to recover from owner-caused delay. The entitlement requirements for the Eichleay formula are not applicable in this type of case.

Summary of Case Law and Board Decision Literature Review

From the foregoing cases, a series of key principles emerge:

- 1. Exclusive means for calculating extended HOOH
 - a. Although the Federal Circuit has held that the Eichleay formula is the exclusive means available for calculating extended HOOH on federal construction contracts (Wickham Contracting Co. v. Fischer), it stated that the contractor might be able to recover through "some other method of allocation."
 - b. The Ohio Court of Claims has ruled that the Eichleay formula can be used at the state level but not necessarily exclusively (*Complete General Construction Co. v. Ohio Department of Transportation*).
 - c. The Armed Services Board of Contract Appeals (ASBCA) allowed other methods (including measured mile) for calculating extended HOOH (P.J. Dick Incorporated v. Anthony Principi).
- 2. Work has been performed versus never has been performed
 - a. A contractor is entitled to recovery of extended HOOH using the Eichleay formula, if the contractor can meet the four prerequisites discussed earlier.
 - b. If the court allows the use of estimates in the Eichleay formula, use the Eichleay formula. Otherwise, another method has to be implemented.
- 3. Contractor placed on standby
 - a. For a contractor to be on standby, it is required that the contractor prove that the owner-caused delay was of indefinite duration, meaning there is no specified date requiring the contractor to continue work.
- 4. Contractor performed replacement work
 - a. A contractor is not entitled to recover HOOH damages unless determined otherwise by the board.
- 5. Change (nonsuspension)
 - a. Entitlement to Eichleay damage is not applicable.
 Prove HOOH damages by showing the involvement of central staff (i.e., providing engineering or administrative services).

Recommended Practice

The flowchart in Fig. 1 is recommended for different circumstances that the contractor may face. Fig. 1 summarizes the recent evolution of court thinking concerning the Eichleay formula. The flowchart is based on the assumption that the contract is complete and does not contain a clause regarding extended HOOH damages, which would overrule.

Discussion

To recover HOOH damages, the contractor must meet certain requirements. Questions, adapted from the PJD case, that must be asked by the court or a board of contract appeals to evaluate

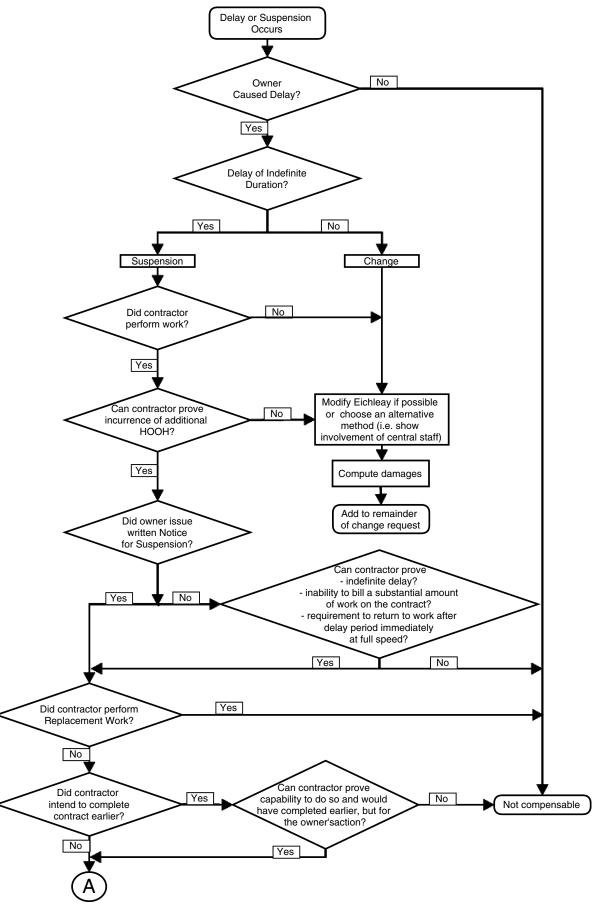


Fig. 1. Recovering extended HOOH process model

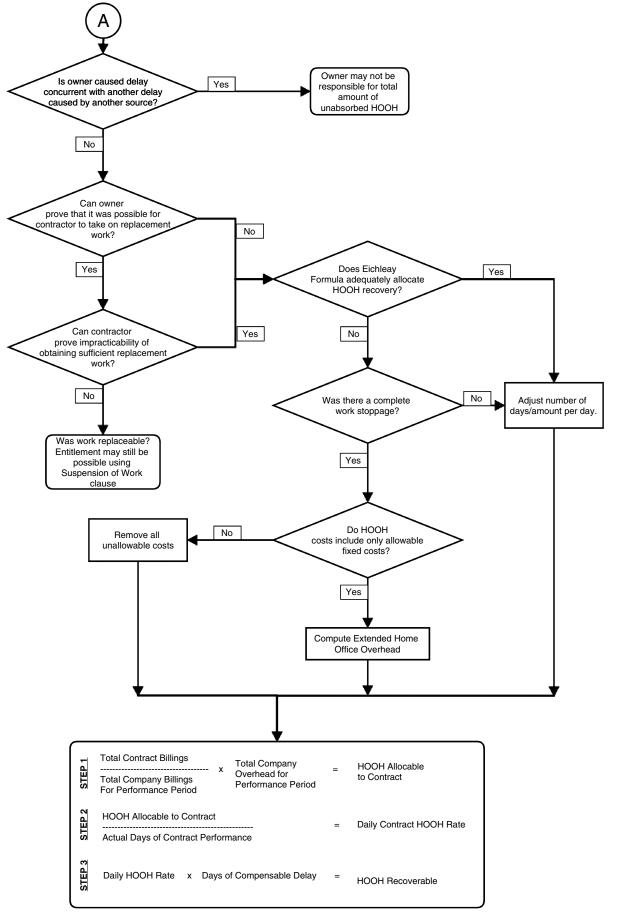


Fig. 1. (Continued.)

a contractor's claim for unabsorbed home office overhead were mentioned in the "Contractor Performed Replacement Work" section.

If there was an owner-caused delay not concurrent with another delay caused by another source, the contractor was able to prove that it incurred additional overhead, and the owner contracting officer issued a suspension, then the contractor is eligible to proceed with its case in court and recover Eichleay damages.

The delay must be unforeseeable under a professional standard of care by a reasonable person (i.e., not substantially likely) and beyond the contractor's control to be compensable. If the delay was beyond anyone's control, the delay is not compensable but may be excusable, i.e., a time extension may be granted, depending on the proximate cause (e.g., strikes, unusually severe weather, earthquakes, floods, fires, etc.).

Even if the owner did not issue a suspension, the contractor could still be eligible for recovery of damages if it provides proof that there was a delay of unknown duration and was not able to absorb the expected amount of HOOH from the project. In the event that the owner has issued a suspension, recovery could still be denied if the owner proves that it was possible for the contractor to allocate replacement work. Of course, there are many instances where it is impractical or impossible for a contractor to acquire replacement work, particularly if the delayed job is consuming special and unique resources, e.g., a specialized piece of construction equipment or inimitably qualified employee.

An additional question to ask would be whether the contractor planned to finish sooner, i.e., whether there was an early completion schedule. The contractor is still eligible for compensation under the Eichleay formula even if the contractor completed the work before the contract deadline, provided that the contractor can prove that it intended to and would have finished earlier but for the owner's action(s).

If the contractor could have performed replacement work, then the delay would not have resulted in as much of a substantial reduction (if any) in the stream of project cash flow (direct costs). The contractor may have found it impractical to perform replacement work, however, if it had been experiencing numerous, sporadic disruptions of the work; its bonding capacity had been exhausted; it did not have sufficient size or capability; or all available equipment was committed to this project.

The cost of the delay may differ depending on the percentage of contract completion. Will the formula produce the same result if the contract is 1% complete or 99% complete? For example, this could make a difference if the construction project is to build a plant: is the plant operating at or near production capacity when the delay occurs?

Summary and Conclusions

The costs of damages indirect to a project will always be contentious and complicated to calculate. This paper lessens those complications by properly synthesizing the Eichleay formula's treatment in courts into a single flowchart diagram. However, different court systems may result in varying appeals decisions; a case can be swayed in one direction or another. Still, well-structured reasoning should prevent any biased and unreasonable decisions. To ensure reasonable decision making, and because each contract differs, a careful study of the contract is necessary by both parties.

For instance, one of the cases that is favorable toward contractors pursuing such claims is *P.J. Dick Incorporated v. Anthony Principi* (2003). Although the contractor failed to show the evidence of suspension in this dispute, it was only required to show

the entitlement to damages under the SOW clause according to a *stipulation on quantum* that was negotiated between the contractor and the owner. Therefore, a comprehensive understanding of the contract from both the owner and contractor is the best way to prevent and avoid any need for compensable damages from the beginning. Other cases that are helpful to contractors are the *Wickham* and *Genisco* cases discussed earlier in this paper.

The contradictions of different court decisions regarding the Eichleay formula, as discussed in this paper, result in no single correct process for determining allowable HOOH damages that courts would be guaranteed to accept. The Eichleay method is an attempt to compute the most reasonable number for the contractor and owner. Therefore, it is necessary for both the contractor and owner to understand that the flowchart provided in this paper is a guide, not a definite answer that can be blindly adopted in every case. In other words, there may be exceptions to some of the steps. The Eichleay formula provides merely an estimate of damages, but there can be many different modifications and interpretations. For example, over time, courts may change their interpretation of when the Eichleay formula can be used. Nevertheless, the flowchart provided in the paper is based on the most recent court cases and can help determine when home office overhead damages are allowable.

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Endnotes

¹Zack (2001a) says, "Based on current court rulings at the Federal level, there is now a clear distinction between extended and unabsorbed HOOH. Extended HOOH stands for the proposition that, for every day of owner-caused delay, the owner owes the contractor HOOH based on a rate derived from one of the formulas outlined earlier. In contrast to this approach, unabsorbed overhead arises when a contractor's cash flow on a project is substantially diminished as a direct and sole result of an owner-caused delay of unknown duration at the outset. The unknown duration at the start of the delay prevents the contractor from replacing the stopped work with other work, which could help support (absorb) the overhead costs."

Furthermore, Cokinos (1997) notes that the difference between unabsorbed and extended overhead is important, quoting Southwest Engineering Co. v. Cajun Electric Power Coop, Inc.: "The requirement of Guy James that a contractor show added overhead costs, which exceed its normally incurred fixed expenses attributable to ongoing operations, is a sound one for extended overhead but not for unabsorbed overhead. In an extended overhead situation, where a job spills over into the time frame not allocated for that job, a contractor may still be able to complete the work without incurring 'added' overhead costs because of, for instance, a plant's under capacity. In such circumstances, it would be appropriate to require a showing that the contractor has incurred added overhead costs resulting from the prolongation . . . Unabsorbed overhead costs, on the other hand, present a different situation. In such cases, damage awards are made because overhead resources have been furnished for a particular job that is subsequently suspended. Under these circumstances we would not expect to see 'added' overhead costs, and, indeed, we may even see a drop in overhead costs if, for example, employees are laid off. A damage award in these cases, however, is not made because of 'added' overhead costs, but because a portion of existing overhead costs, which would have been absorbed by the suspended job, must not be spread out among the remaining jobs."

²As the Court of Claims explained in *Fred R. Combs v. United States*, "[I]t is, ordinarily, not practicable to lay off main office employees during a short and indefinite period of delay such as occurred here. So the contractor, instead of saving the salary of that proportion of his main office staff which is attributable to this contract, is obliged, in effect, to waste it, and to spend a similar amount at the end of the contract for the extra time made necessary by the delay. This waste is caused by the breach of contract, and it ought to be paid for by the party guilty of the breach." (This comes from the section of the *Capital Electric* case that mentions *Combs.*)

³Zack and Halligan (2011) speculate about including golf club memberships and skybox payments. The senior writer of this article encountered a claim in which the contractor (unsuccessfully) argued that his \$500,000 annual bonus was a routine and justifiable part of HOOH. In another matter, a plaintiff contractor wanted the defendant owner to pay for some of his alimony costs because their disrupted project led to the contractor being divorced. This request, too, was rejected.

⁴McGeehin and Strouss (1996) report that only Florida, Maryland, Massachusetts, Ohio, Rhode Island, and Washington have state case laws accepting the formula, and even then under strict circumstances. Other states strictly prohibit its use; cf. Berley and Manshul Construction Corp. v. Dormitory Authority. At the same time, the federal government has mandated its use in federal government construction contracts; cf. E.R. Mitchell.

⁵According to the court, the Eichleay formula focuses on the length excluding all other factors. For instance, it may include contractor-caused delays and concurrent (contractor and owner)-caused delays. According

to Appeal of Atherton Constr., Inc. (2000), extended HOOH caused by concurrent delays are not compensable.

⁶"The Federal Circuit has established the so-called Eichleay formula as the exclusive method for calculating a contractor's unabsorbed home office overhead during a period of owner-caused delay after the start of performance. See Nicon, 331 F.3d at 888...Eichleay damages are not available in all instances of owner-caused delay, however. The Federal Circuit has stressed that Eichleay damages are only available when the owner-caused delay occurs after performance has begun, thereby extending the period of performance. The Federal Circuit has otherwise recognized only one situation in which a contractor may recover unabsorbed overhead during a period of delay that precedes the start of performance. See Nicon, 331 F.3d at 888. Plaintiff does point to the concurring opinion in Nicon and urges this court to adopt its view that whether performance has begun is immaterial to the availability of Eichleay damages. However, it is the majority opinion in Nicon which held that Eichleay damages are only available when performance has begun, that binds this court. Because plaintiff had not yet begun performance at the time of the suspension, it is not entitled to recover Eichleay damages."

⁷A general heuristic is to compare the weather over the past 5 years.

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