



Quantum/Damages Analysis: Product Deficiency or Defective Project Performance Claims

OVERVIEW

Product Deficiency or Defective Project Performance claims hit the “bottom line.” A business can not survive if it does not recover cost and make a profit! When a construction project is delayed, accelerated, the design is changed, or other events take place that cause an overrun, the Contractor attempts to recoup all that it expended, or gave up, to complete the project. Likewise, the Owner can not pay more than a project “should cost.” Also, a higher than expected Owner’s cost of production, facility rental, etc., will cause the Owner’s business to be less profitable. A deficient product can result in lost sales. The quantification and recovery of the correct damages amount is critical.

Product Deficiency or Defective Project Performance claims are not labeled in the Job Cost Report or General Accounting Ledgers as “Lost Profits,” “Damages Due to Defective Work,” or “Abnormal Production Equipment Maintenance Costs,” or other similar descriptors for such claims. The claims are determined by cause and effect engineering and economic analyses. Cause is based on facts and relevant data often resulting from engineering and economic analysis. Reliable financial, accounting, and economic principles and methods, utilizing factual information regarding the performance or timing of delivery of the project or product, form the basis for damages conclusions. In these cases, a claimant’s actual costs may or may not be the appropriate basis to measure damages.

The measurement of damages involves quantifying the amount of money required to put the Contractor, Owner, or other party in as good a position as they would have been had the contract been performed according to the specifications, terms and conditions. In effect, the damages expert must determine how the project would have been performed under the contract, and evaluate the impact of non-performance on the outcome of the project and, sometimes, on the Owner’s business. The measurement of Product Deficiency and/or Defective Project Performance damages is complex, requiring careful causation analysis from an engineering perspective combined with issues of business operations, economics, and accounting.

Long International provides a combined approach to damages quantification, integrating its engineering, accounting, and financial professionals.

Long International’s Integrated Approach...

Projects are conceived to take advantage of an opportunity or solve a problem. Plants or facilities are planned to meet the needs of the market. Increased energy, more efficient transportation, improved pharmaceuticals, new consumer products, and other market needs create opportunities to develop a project, make an investment, build a facility, and operate it for decades.

When events take place that cause the facility to be delayed in its completion, operate less profitably, or require abnormal maintenance, claims can result. Engineers study what caused the delay and what party



was responsible. They may also determine if the production design was flawed such that the product manufactured is different from what was specified. In both cases, financial professionals can then answer the question of financial/economic impact.

Supports the Foundation for Financial Damages...

Product Deficiency or Defective Project Performance claims are the result of economic analysis in context of the facts and circumstances. For example, current and future warranty costs, on-going abnormal maintenance expenses, lost profits, and regulatory fines are damages that can occur because of product deficiency or defective project performance. These economic damages may occur from defective construction, flawed design, delays in meeting end-customer orders, and regulatory penalties, among other situations.

Long International’s identification of cause and the linking of cause with effect can form the framework within which engineers and financial professionals work together to analyze damages. Additionally, financial professionals may isolate the “cause” and engineers can confirm that the cause does not result from some other problem.

For example, when the loss of business results from product deficiencies that engineering analysis determines is the result of faulty construction of new technological designs of a temperature control conveyer

system, economic analysis can quantify the dollar effect and strengthen the overall argument by evaluating and eliminating other causes of the loss of the particular business sales or market. From an economic perspective, the following issues need to be considered:

- The profitability of the plaintiff on similar past projects;
- The size of the market for similar products;
- The experience and success of competitors on similar bids;
- The impact of new technology on the market for similar projects;
- The existence of qualified labor and supervisors to perform the work; and
- The financial and/or bonding capacity to add new work.

Together with engineering causation analysis, technically sound accounting, financial, economic, and business analyses are required to establish causation and eliminate other potential causes of the damages at issue. Long International’s joint engineering and financial/accounting/economic analyses build a strong damages foundation that enables the development of appropriately measured/quantified damages.

Leading to Supportable Results.

As described above, damages can arise due to deficiencies in a product. Whether the product is a facility or an engineered system, damages may include the incremental revenues less costs that would have been earned, excluding a party’s actions or inactions, e.g., lost-profits.

Long International’s accounting and financial skills are used in the analysis of damages to evaluate accounting and financial information in context of Generally Accepted Accounting Principles (GAAP). These backgrounds enable our professionals to consider the way in which management uses the underlying data to prepare accounting/financial information, evaluate the “costs” in cost estimates and “job cost reports,” and determine whether claims are for “real” costs incurred or based on “standard rates/scheduled costs.” Finally, in the end when a claim is prepared or the evaluation of a claim is put forth, these same accounting, financial, economic, and engineering professionals know how to present the results of their work in an understandable way to the decision-making audience.

Whatever the case, the claim must be carefully analyzed to determine that causation is solidly associated with the effect, and that the damages are properly measured. Long International’s experienced engineers and financial professionals provide an integrated approach for superior claim analysis.

While often complex, such economic damages often are significantly greater than the underlying construction claim!

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The Project Life Path of some construction projects is not always a smooth journey.

Projects are conceived to take advantage of an opportunity or solve a problem. The decision to make an investment is made. A facility is planned, and contracts to develop and build the project are let. The business is intended to return a targeted profit and operate for decades. That is the Project Life Path.

The Project Life Path

The Project Life Path may not be a smooth journey.

The journey may include production that does not meet the specifications that were originally set, i.e., production that results from a flawed specification that was developed by the design engineer working from a proprietary process of the “engineering firm.”

The journey may include the defective construction of pneumatic production casting systems, resulting in decreased product throughput.

Or, the construction project may be delivered one-year late.

Long International has the engineering, accounting, financial, and economic professionals to evaluate the Owner’s claims of product deficiencies and defective project performance. Claims deriving from deficient production and defective construction, among other causes, requires expert engineering analysis to establish technical cause and effect. With the technical cause and effect foundation established by engineers, the financial and economic analysis can address the financial impact, whether that is

increased production cost, increased cost to sell, additional material handling cost during production, increased warranty costs, or even lost sales.

Finally, the combining of financial, business, and engineering perspectives also is important in developing and evaluating whether damages are compensable even when “consequential damages” are excluded in the contract. Specifically, our combined analysis can evaluate whether the damages follow as a necessary consequence of the contract breach...or are “foreseeable.”

In that regard, our engineers can help assess whether increased maintenance effort, for example, would necessarily flow from a given design flaw. Our financial/accounting professionals can, likewise, opine whether the types of costs that are claimed are costs that necessarily result from the extra maintenance efforts claimed. Legal counsel may then argue that “foreseeable” damages should not be excluded as consequential damages.

Damages are often claimed for economic losses beyond the increase in the cost to construct. While damages that are more than “increased cost to construct” may be harder to identify and are generally not captured in the Contractor’s or Owner’s books and records as “claimable costs,” they may be significant and, in the end, determine whether the project is financially successful. Long International’s integrated engineering and financial approach to construction claim analysis is critical to a complete analysis of compensable Product Deficiency or Defective Project Performance claims.

