

Kluwer Arbitration Blog

Reficar v. CB&I: A New Standard for Risk Allocation and Contractor's Liability in Construction Contracts of Energy Infrastructure

Alberto Madero-Rincón (Universidad del Norte) and Estefanía Contreras (Baker McKenzie) · Thursday, September 14th, 2023 · Asociación Latinoamericana de Arbitraje (ALARB)

On June 7, 2023, an ICC tribunal issued an [award](#) that will redefine risk allocation in the construction industry. The arbitration was initiated by Refinería de Cartagena S.A.S. ("Reficar"), a wholly owned subsidiary of Ecopetrol S.A., which is in turn owned by the Republic of Colombia, against Chicago Bridge & Iron Company NV., CB&I UK LTD, and CBI Colombiana S.A. (jointly "CB&I"). In this arbitration, Reficar mainly sought reimbursement of costs paid to CB&I that were not reasonably and properly incurred in the construction of one of the biggest industrial projects in Latin America.

We discuss in this post the background to the dispute, the Tribunal's decision and its implications.

The Dispute

The dispute arises out of the expansion and modernization of a refinery in Colombia. Reficar selected CB&I as the contractor responsible for the engineering, procurement and construction ("EPC") of the refinery. The project was originally conceived as a Lump-sum turnkey contract ("LSTK"). During precontract negotiations, CB&I claimed enormous potential for costs savings under a reimbursable structure and Reficar agreed to change the LSTK to a cost reimbursable contract.

On June 15, 2010, Reficar and CB&I entered into six agreements collectively known as the "EPC Contract". The two most important agreements were the Onshore Contract for mainly construction work performed by CB&I Colombiana S.A. in Colombia, and the Offshore Contract for design, engineering, procurement, and other work performed by CB&I UK LTD primarily outside of Colombia. The Onshore Contract was governed by Colombian law, while the Offshore Contract and other agreements were governed by New York Law.

In 2011, the project started to experience considerable costs overruns and schedule delays. These deficiencies continued over the whole duration of the project and resulted in a two-year delay and the increase of EPC cost to USD 5.9 billion.

On March 8, 2016, Reficar filed its request for arbitration before the International Chamber of Commerce seeking damages in excess of USD 2 billion. On May 25, 2016, CB&I submitted its response and filed its counterclaim, mainly, for payment of unpaid invoices.

The Tribunal issued its award on June 7, 2023, and CB&I filed a petition to vacate the award the following day. This petition was filed before the United States District Court for the Southern District of New York and is still pending.

The Tribunal's Decision

The Tribunal issued its award seven years later, on June 7, 2023. In its decision, the Tribunal rejected Reficar's claim that CB&I committed pre-contract misconduct by inducing Reficar to switch from an LSTK to a reimbursable cost contract. The Tribunal found that CB&I's conduct during contract negotiations, although not commendable, did not amount to *dolo* or breach of good faith duties. The Tribunal also dismissed Reficar's claims on loss profits and other costs, given that it had no authority to award indirect or consequential damages under the arbitration agreement.

Additionally, the Tribunal found that CB&I breached its cost control commitments under the EPC Contract and had to reimburse Reficar USD 845.4 million. The Tribunal also ordered CB&I to pay USD 152.75 million for breaching its schedule control commitments and USD 10.3 million for breaching its defect correction obligations.

In dealing with the counterclaim, the Tribunal determined that Reficar owed CB&I USD 914,939 and COP 28,256,049 for unpaid invoices. The Tribunal further determined that Reficar was entitled to an award on costs in the amount of USD 61 million, while CB&I in the amount of USD 2.6 million.

The EPC Contract was not a standard cost-reimbursable contract, rather it imposed on CB&I stringent cost and schedule control obligations.

In standard cost-reimbursable contracts, the risk of cost overruns and delays lies with the owner. Conversely, under the EPC Contract, CB&I cost overruns and delays caused by breach of CB&I's costs and schedule commitments must be borne by CB&I.

The Tribunal determined that CB&I's cost control commitments were two-pronged. First, CB&I had a "Heightened Diligence Obligation" because it agreed to "rigorously control costs and schedule similar to a lump sum contract safeguarding Reficar resources as if their own". This standard placed CB&I in the position like that of a mandatary in a mandate contract. In other words, CB&I had fiduciary duties *vis-a-vis* Reficar and had to act in compliance with a reinforced standard of good faith. Thus, Reficar was entitled to rely on forecasts, estimates, schedules and representations made by CB&I. Second, CB&I had to comply with a "Reasonable Cost Obligation", under which CB&I agreed only to claim reimbursement for costs that were incurred reasonably, properly and in accordance with the EPC Contract. In turn, Reficar was allowed to clawback any amounts accepted or paid to CB&I, which were incurred in breach of such commitments.

Against this legal standard, the Tribunal found that CB&I breached its Heightened Diligence Obligation because the record showed that CB&I had a careless attitude towards increasing cost. It also failed to adopt meaningful measures to control costs in response to Reficar's repeated requests. Moreover, CB&I's breach is demonstrated by the drastic growth in EPC costs, from USD 3.971 billion to USD 5.9 billion; CB&I making an additional profit of USD 90 million; the doubling of engineering manhours, and a delay of almost two years. The Tribunal also determined that CB&I's breach of its Heightened Diligence Obligation equally demonstrates the breach of the Reasonable Cost Obligation: failure to diligently control costs will result in unreasonable and improper costs.

In relation to the schedule control commitments, the Tribunal determined that the EPC Contract imposed two specific duties on CB&I. First, CB&I assumed an obligation of result to achieve mechanical completion of the project by February 28, 2013 (the "Guaranteed Mechanical Completion Date"). Second, CB&I committed to rigorously control schedule in a manner similar to a LSTK and to safeguard Reficar resources as if its own.

The Tribunal determined that CB&I breached the schedule control commitments because CB&I failed to achieve mechanical completion at the Guaranteed Mechanical Completion Date. The Tribunal found that the project achieved mechanical completion on February 23, 2015, and thus was delayed 725 days. The Tribunal allocated 334 of these days to CB&I and ordered CB&I to pay Reficar USD 152.75 million in damages.

Tribunal's quantum of damages determination: Bottom-Up Approach or invoice-by-invoice review?

The Tribunal used Reficar's a Bottom-up Modified Total Cost Approach, and rejected CB&I's approach of reviewing invoice by invoice, to quantify unreasonable and improper cost. Pursuant to this approach, the actual EPC Costs (USD 5.9 billion) are compared with a reasonable estimate on how much the project should have cost (the "Reasonable Cost Benchmark"). The difference between the actual EPC Costs and the Reasonable Cost Benchmark are the "Excess Costs" caused by CB&I breach of its cost control commitments. The Tribunal underscored that the Bottom-Up Modified Total Cost Approach, by its very nature, established the causality between the breach and the damage.

In setting the Reasonable Cost Benchmark, the Tribunal discarded the benchmarks suggested by the parties, and opted to use a December 2011 forecast prepared by CB&I. This forecast set EPC costs at USD 3,971 million. The Tribunal attached much weight to the fact that CB&I's Project Director represented to Reficar, in a May 2012 letter, that the USD 3,971 million forecast complied with the requirements of a Class I +/-5% estimate (the most accurate category of cost estimate). Moreover, the Tribunal noted that this forecast was prepared by CB&I itself, at an advanced stage of the EPC activities, and thus CB&I was fully aware of the scope of the project and deficiencies in its execution.

In view of the above, the Tribunal determined that the Excess Costs that Reficar was in principle allowed to claw-back from CB&I amounted to USD 1,937 million. Nonetheless, the Tribunal deducted USD 1,091.20 million for costs caused by unpredictable events, scope of work changes and Reficar's responsibility; none of which are attributable to CB&I. Therefore, the Tribunal

ordered CB&I to reimburse USD 845.4 million to Reficar for damages caused by breach of its cost control commitments.

The Tribunal renders inapplicable the agreed-upon liability caps because CB&I acted with *culpa grave* and gross negligence.

The EPC Contract capped CB&I total aggregate responsibility at USD 87.7, but excluded liability arising from *culpa grave*, gross negligence, *dolo* or wilful misconduct. Reficar argued that the liability cap did not apply because CB&I acted either with *dolo* or *culpa grave*. The Tribunal started by establishing that Colombian law (article 63 of the Civil Code) provides that *culpa grave* implies “not managing others’ affairs with the care that even negligent or careless persons usually use in their own affairs.”

After reviewing the opinions of both parties’ legal experts, judgments and arbitral awards submitted by the parties, the Tribunal identified three criteria to establish if CB&I acted with *culpa grave*. First, the Tribunal evaluated the significance and magnitude of the obligation that was breached. It concluded that the cost and schedule commitments were essential obligations. Second, the magnitude and significance of the damage caused. The sheer value of Improper EPC Costs, over USD 800 million, and CB&I’s delay of nearly a year demonstrated that CB&I acted with *culpa grave*. In reaching this conclusion, the Tribunal also highlighted that the records show that CB&I’s conduct allow it to gain an additional unexplained profit of USD 90 million from the extended duration of the works. Finally, the Tribunal evaluated CB&I’s attitude towards the foreseeable damage. It found that CB&I’s showed recklessness, by taking no responsibility for the increasing costs and delays and failing to adopt mitigating actions. As a result, CB&I breached cost and schedule commitments with *culpa grave*, and thus the liability cap did not apply.

Although the finding of *culpa grave* rendered the liability cap inapplicable, the Tribunal noted that applying New York Law would lead to the same result. The Tribunal considered that the standard for gross negligence under New York Law is very similar to that of *culpa grave* under Colombian Law. Therefore, the previous test for establishing *culpa grave* also served to establish that CB&I acted with gross negligence. However, exercising extreme caution, the Tribunal also determined that CB&I’s conduct met the tests advanced by New York courts ¹⁾.

Conclusion

The Reficar v. CB&I award is a landmark decision for shifting risks over cost overruns and delays from the Owner to the contractor in cost-reimbursable contracts. In fact, this decision identifies specific language that parties could include in contracts for such purpose. Moreover, it provides guidance on how to quantify damages and establish causation in complex construction projects. Finally, it is one of those rare cases where an arbitral tribunal has rendered inapplicable liability caps, and probably the only award that establishes the interrelation of *culpa grave* under Colombian Law and gross negligence under New York Law.

Before the authors joined their current jobs, they worked at Reficar and participated in its representation in this arbitration. Alberto Madero was Head of Arbitration and Estefanía Contreras a lawyer in the Arbitration Group. The views expressed herein are those of the authors, and do not necessarily reflect the views of their past and present employers.

To make sure you do not miss out on regular updates from the Kluwer Arbitration Blog, please subscribe [here](#). To submit a proposal for a blog post, please consult our [Editorial Guidelines](#).

Profile Navigator and Relationship Indicator

Access 17,000+ data-driven profiles of arbitrators, expert witnesses, and counsels, derived from Kluwer Arbitration’s comprehensive collection of international cases and awards and appointment data of leading arbitral institutions, to uncover potential conflicts of interest.

Learn how **Kluwer Arbitration** can support you.



Newly updated

Profile Navigator and Relationship Indicator Tools

 Wolters Kluwer

Request your free trial now →

References

The magnitude of the results of CB&I’s breaches demonstrates the “extreme culpability” required in *Radiology and Imaging Specialist v. FUJIFILM Med. Sys. U.S.A.*. The Tribunal also found that **1** CB&I’s reckless disregard in controlling the costs and delays that affected Reficar shows “a reckless indifference to the rights of others”, which meets the standard in *Matter of Part 60 Put-Back Litig.*

This entry was posted on Thursday, September 14th, 2023 at 8:05 am and is filed under [Colombia](#), [Construction](#), [Damages](#), [Energy](#), [Latin America](#), [Risk Management](#)

You can follow any responses to this entry through the [Comments \(RSS\)](#) feed. You can leave a response, or [trackback](#) from your own site.