Recurrent Contract Claims in the Indian EPC Industry

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Abstract— Every year, the Indian government invests millions of dollars in new facilities to improve the country's infrastructure. Engineering, Procurement and Construction (EPC) projects are complex, uncertain, require the integration of multiple work components (Civil, Mechanical, and Electrical) to function together as a single unit, have extended execution and construction durations, and include many parties. The projects necessitate highly specialized designs, thorough plans and specifications, high-risk constraint procedures, competent management, full supervision, and tight coordination. As a result, claims are widespread in these initiatives. Today, more lawsuits are filed against EPC projects than any other industry. Claims appear to be impeding the completion of EPC projects and causing delays in their delivery. These claims are unfavorable because they take a long time and a lot of resources to resolve, and they create hostile relationships amongst the parties involved. As a result, it is in the best interests of all parties involved to prevent, reduce, or settle them as amicably as possible. Identifying prevalent claim types and their causes is critical for developing strategies to reduce and hopefully eliminate them in future projects. The findings of a pilot study of the types and causes of commercial claims in the EPC industry are presented in this report. Following that, recommendations for avoiding or reducing claims in the projects are offered. The conclusions of this study are likely to assist EPC firms in avoiding the primary sources of claims and, as a result, minimizing delays and cost overruns in the projects.

Keywords— EPC, Commercial, Claims, Delay, Disputes, Resolution

I. INTRODUCTION

A Commercial Claim is a request for reimbursement from either party to the contract, usually the Contractor, for damages caused by the other party's failure to fulfill his portion of the contract's obligations. The recompense is usually in the form of a larger sum of money or a longer period of time (EOT).

Many project participants consider commercial claims to be one of the most stressful and unpleasant aspects of the project. Due to the intense competition, contractors have been obliged to propose projects with low profit margins in order to stay in business. Projects are growing increasingly complex and dangerous as a result of their multiparty character. Contractors have been put under even more pressure to build increasingly complex and dangerous projects with fewer resources and earnings. It is unsurprising that the number of claims in the EPC business continues to rise in light of these circumstances.

Owners can anticipate possible claims situations by understanding the various sorts of commercial claims. This acknowledgment can help protect owners from losses and aid in the recovery of compensation. Commercial claims are categorized into eight different sorts in this study work; most of the claim types presented are interrelated, regularly occur, and most of them may refer to a specific situation.

I. FOCUS OF RESEARCH

- Conduct a thorough examination of commercial claims in EPC projects.
- In EPC projects, identify and assess the various types of claims and their reasons.
- Based on the analysis and severity of claims in EPC projects provide findings and recommendations for future research.

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III. TYPES OF CONTRACTUAL CLAIMS

Delay Claims
Price Acceleration Claims
Change of Work Order Claims
Extra item and Variation Claims
Different Site Condition Claims
Damage Claims
Loss of Profit Claims
Wrongful withholding of Deposits Claims

IV. CAUSES OF CLAIMS

In the EPC sector, a variety of problems arise between parties, most of which result in claims. After consulting with specialists such as experienced contractors, clients, designers, arbitrators, and industry professors, as well as analyzing research papers on construction claims, I have compiled the following list of claim causes.

d	Delay in Supply of Drawings,
	Delay in Handing over the Site,
	Delay in Supply of materials,
	Delay in Payments,
-	Delay in Starting work,
	Delay in Completing the work,
	Work actually done but not measured and
_	id,
	Refund of maintenance deposit,
	Loss due to extra overheads on account of
	tension of time limit,
Ø	Loss due to idle machinery and idle labour,
Ø	Due to Design errors,
Ø	Due to inadequate or incomplete
sp	ecifications,
Ø	Due to inadequate information related to
de	sign.
Ø	Due to Inadequate bid information,
Ø	Due to Inadequate time for bid preparation,
Ø	Due to Change in work scope,
Ø	Due to Changes in plans and specifications
du	ring execution,
Ø	Due to Insufficient plans and specifications,
Ø	Due to Extra items and Variations,
Ø	Due to Non granting of Completion by
En	gineer in charge.
-	Due to Partiality by the Engineer,
	Due to Unrealistic expectations,
-	Due to Poor management and administration
_	the construction site.
-	Due to Ambiguities in contract documents,
-	Due to Different interpretations of the
	ntract provisions,
-	Due to Inadequate investigation of site,
	Due to Unbalanced bidding,
	Due to quoting very low rates in the Tender,
	Due to Changes made or changes which occur
	t at the request of the owner,
	Due to Extension of time (EOT),
-	Due to financial failure of the contractor,
	Due to technical inadequacy of the contractor
	Due to Poor quality of execution work and use
_	
	wrong equipment,
•	Due to Failure to follow authorized
•	ocedures,
	Due to Employers' Lack of Execution
-	owledge
	Due to damages occur to adjacent
-	vironment during the work,
	Due to Strikes by Workers,
	Due to Stoppage of Work by workers,
Ø	Due to Failure of parties to cooperate with
ea	ch other in the performance of the work.
Ø	Due to Accidents,
Ø	Due to Natural Calamity,
Ø	Due to Increase in Material / Fuel Cost,
	Due to Court intervention,
	Due to Weather conditions,
	Due to Unforeseen ground conditions,
·	

Figure 1 Causes for the Commercial Claims

V. MOST FREQUENT CLAUSES

Most of the claims on the list above are settled between the parties by mutual understanding and negotiation, but some of the claims that occur often and may not settle, resulting in conflicts between the parties, are mentioned and discussed below. Advanced Dispute Resolution Methods can resolve these types of claims that do not settle and turn into a dispute.

Ø Payment related Claims		
Ø Change Claims		
Ø Delay Claims		
Ø Extra work Claims		
Ø Contractual Claims		
Ø Difference in pricing and measuring Claims		
Ø Different site condition Claims		
Ø Acceleration Claims		
Ø Damage Claims		
Ø Contract termination Claims		

Figure 2 Most Frequent Clauses

VI. PAYMENT RELATED CLAIMS

The majority of claims in the EPC sector stem from the failure to pay or the delay in paying Running bills, Final bills, unjustly deducting money from bills for no good reason, and the failure to pay security deposits, maintenance deposits, and other deposits.

VII. CHANGE CLAIMS

Change occurs in almost every execution job. Changes can have a substantial impact on a project's cost and schedule, whether it's a modification to the scope of work, a revision to the requirements, or an impact on the means and methods of doing the job. A claim between the contractor and the customer may arise as a result of a change in the scope of work. The quantity of work may rise or decrease due to changes in job scope or design, and if it is the work from which the contractor expects to make the most profit, he might demand higher rates for performing the work or extra money for completing it.

VIII. DELAY CLAIMS

One of the most typical types of disputes in the EPC sector is execution delay claims, or disagreements over schedule implications. Delay claims usually involve unanticipated project occurrences and/or situations that cause the project to be delayed and/or prohibit work from being completed as intended. An execution project's schedule might be delayed for a variety of reasons. Any project, especially today's mega/complex ones with numerous interfaces, is subject to delays and disruptions. Proving delay and/or interruption is a difficult and time-consuming procedure, particularly in mega/complex projects with thousands of activities, numerous details and interfaces, and many parties involved.

IX. EXTRA WORK CLAIMS

Any work ordered by the owner after execution has begun that was not included in the original contract is referred to as extra work. The contractor's additional effort is the outcome of a clarification of the contract documents. The contractor, on the other hand, believes he is doing extra work, whilst the owner believes the work was part of the original contract.

X. CONTRACTUAL CLAIMS

Contractual claims are those that are related to the contract itself. This includes any disagreements about the obligation or liability of elements of the documents that aren't included. Poorly worded contracts are the primary cause of these types of claims.

XI. DIFFERENCE IN PRICING AND MEASURTING CLAIMS

These kinds of claims deal with disagreements over measurements at the end of the execution process. These accusations also include pricing discrepancies between the contractor and the owner of some of the materials. In addition, the alteration and additional work frequently result in price discrepancies.

XII. DIFFERENT SITE CONDITIONS CLAIMS

An altered condition refers to a physical component of the project or its site that differs considerably from what the contract documents say, or that is exceptional and differs materially from what is normally encountered.

XIII. ACCELERATION CLAIMS

The term "acceleration" refers to the owners' instruction to the contractor to speed up his work so that the project can be completed sooner than the present date of work advancement allows. It happens when the contractor is told to speed up his or her work in some way, either directly or indirectly. These types of claims are common in large projects, but they are uncommon in small projects.

XIV. DAMAGE CLAIMS

Property damage can occur as a result of the owner's actions or owing to safety issues. This type of claim is uncommon because contractors are normally solely responsible for the site.

XV. CONTRACT TERMINATION

The contractor may be entitled to recover the loss of expected profit, or the difference between the contract price and the anticipated cost of the job, if the contract is terminated before the contractor has commenced the work. If the owner cancels the contract after the contractor starts working, the contractor may be able to recover the loss in a variety of ways. If the contractor completes the work in full conformity with the contract before it is terminated, the contractor should be entitled to the whole contract price. The amount of money that can be recovered and how much liability there is under cancelled contracts varies a lot.

Methods for Claims Settlement:

When an issue is discovered, the contractor should endeavor to eradicate or avoid it. If he is unable to do so, he should write a formal claim to the owner in a letter. The first stage in the claim process is to file a claim. The issue is addressed during regular meetings, or a special meeting may be called to resolve or discuss the conflict. If all else fails, mediation may be a viable option for resolving the issue in a pleasant manner. Other options for resolving the disputes

include arbitration or lawsuit. These methods could include the following:

XVI. CONCLUSION

The following conclusions can be derived from the

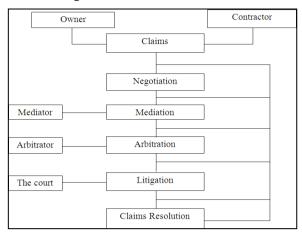


Figure 3 Methods for Claims Settlement

findings of this study:

- Payment delays are the most common cause of claims since they lead to financial difficulties and disagreements between the owner and the contractor.
- The contract's documents are quite crucial. Everything is normally okay for all parties at the time of creating the agreement, but the problem arises during the final stages of the project, when they refuse to make any changes to the contract.
- Owners frequently try to subtract from the final payment, claiming that the quality of the job is poor or that there are certain execution problems. Execution faults and quality are determined by the labor's and management's skill levels.
- One of the most common reasons for claims is that both owners and contractors fail to plan ahead of time before beginning a project. Typically, the owner is unsure of exactly what he requires. Furthermore, contractors rarely use any type of scheduling, which can lead to delays.
- Another problem is that the EPC sector is unregulated; anyone can become a contractor. As a result, contract prices fall, and the quality of work suffers as a result.
- In recent years, the economic impact and money constraints have resulted in an increase in the number of claims. Profit margins have shrunk and may become more difficult to maintain in the future.

XVII. RECOMMENDATION

- Contractors' rights and responsibilities, as well as the rights and liabilities of the owners and engineer, should be clearly outlined in the contract.
- Allow enough time for the design team to create accurate and complete drawings, bills of quantities, and specifications with no or few errors.
- The thorough preparation of contract paperwork aids in the avoidance of disagreements. As a result, the documents will aid in the avoidance of disputes. As a result, instead of delivering oral change orders, the contractor should urge the owner to write them down.

- Before beginning any work on site, the contractor should have signed change (variation) orders.
- Provide a system for processing and assessing change (variation) orders that covers direct, indirect, and productivity losses associated with any modifications.
- By hiring experienced labor and employing effective management strategies, the contractor should ensure his job superiority.
- The government should establish a set of procedures to ensure that execution work is of high quality. It should also develop licensing contractors to make certification more challenging.
- The most effective way to make a claim is to form a
 partnership between the owner and the contractor. Each
 side should attempt to resolve issues as soon as they
 emerge.
- To limit the project's delay, use software such as MSP, Primavera, and others to create bar charts, critical routes, planning, scheduling, cost control, productivity analysis, and, most significantly, the project status report.
- Develop cooperative problem-solving mindsets between the contractor and the client on the project.
- Maintain proper task records, such as time sheets, diary entries, reports, photographs, labor records, and records of plant on site and its use, in a timely way. Weather and its impact on progress, construction progress, and so on.

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