Computation of Damages in case of EPC Contracts

Introduction

The Indian economy is one of the fastest growing economies of the world. Fueling this growth is a favorable framework of incentives and policies, seeking investments for creation of world class infrastructure. The development of infrastructure is a complex task which requires execution and implementation of complex contracts commonly known as Engineering, Procurement and Construction ("EPC") contracts. Execution of an EPC contract requires multiple skill-sets and involves high risk due to the large size of infrastructure projects. As such, it becomes important to look at the provision for damages under such contracts at the initial stage to anticipate and assess the exposure under the contracts.

The difficulty arises with regard to the computation of actual damages other than the compensation or penalty stipulated for under the contract. Such damages are computed taking in account all the terms and conditions of the contracts along with the facts and circumstances which lead to the breach. This bulletin will explore the mode and manner in which the damages can be computed in case of a breach of an EPC contract.

1. Computation of damages under the Indian law

While the provisions under the Indian Contract Act, 1872 ("Act") do provide for liquidated damages in case of breach of contract, there is no mode for computation of the same. This is most likely because the computation of damages does not involve any question of legal recoverability. The question of how to calculate damages has been brought before the courts which have held damages to be pecuniary compensation due to breach of contracts and thus being specific to the facts and circumstances of each case.¹

The Act does not preclude a party from claiming astronomical amounts in damages, but it does stipulate that computation is to be based on the facts and circumstances of each case; however, such damages cannot exceed the loss actually sustained by the injured party. Courts in India have taken in account the provision under the Act for computing damages but have also acknowledged the necessity to use a particular formula, developed specially for calculation of damages under EPC contracts.

2. Indian Courts on computation of damages: Pre 2006

Since the thrust on EPC contracts kicked off after 1991, many disputes arose thereafter and judicial decisions with substantial understanding on issues of computation of damages began to emerge. The earlier case laws mostly deal with the principles on which the mode of computation of damages is to be based. Courts have held the necessity to

¹ Mangilal Karwa v. Shantibai, AIR 1956 Nag 221 (DB)
determine the quantum of damages with reasonable certainty\(^2\) for which only strict legal obligations under the contract should be taken in account.\(^3\) In Raigopal Oil Mills v. Louis Drayfus & Co. Ltd.\(^4\) the court held that the amount claimed in damages is to be computed by some generally accepted mathematical formula based on the evidences produced by the aggrieved.

In Dhulipudi Namayya v. Union of India\(^5\) the court discussed the mode for computation of damages due to the breach of a contract for specific work. It held that the computation of damages is to be based on the cost of reinstatement or cure, i.e. the increased cost of the work incurred in getting the same work done through another contract. Similarly, in a works contract the damages can be computed on the basis of diminution in value, being the difference between the market value of the contractor’s performance in its defective or incomplete state, and the market value of the performance if it would have been properly performed.\(^6\) In Bharat Coking Coal Ltd. v. L.K. Ahuja\(^7\) the Supreme Court took in account all the facts and circumstances leading to the losses suffered by the injured party for computing damages, but didn’t provide for any formulae to do so.

The decision of the courts above did not provide a clear understanding of the mode that could be applied for calculating damages. The Supreme Court decision in McDermott International Inc. v. Burn Standard Co. Ltd. and Ors.\(^8\) in 2006 brought much needed clarity in the modes that can be applied for determining the extent of damages.

3. Brief description in Mc Dermott’s Case

In this case Burn Standard Company Limited ("BSCL") and McDermott International Inc. ("MII") entered into various agreements whereof, the latter undertook work in respect of fabrication, transportation and installation of structure, modules, platforms and pipeline components which was to be completed within 24 months. The aforesaid work was sub contracted to MII by BSCL as part of the main contract between BSCL and Oil and Natural Gas Commission ("ONGC"). BSCL was bound to MII through the terms of the agreements and to the extent that the provisions of the respective main contracts between ONGC and BSCL apply to the relevant sub-contract work of MII. BSCL through these agreements assumed towards MII all the obligations and responsibilities that ONGC, by such main contract, assumes towards BSCL insofar as applicable to the sub-contract agreements.

There was a delay in performance of the contract on default of BSCL, which led to various disputes and claim for damages by MII. The matter went in for arbitration. In its final award the arbitral panel allowed certain amount of damages along with interests to MII based on the evidences produced by them, which was disputed by the opposite parties, i.e.

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\(^2\) Frederick Thomas Kingsley v. Secretary of State for India, AIR 1923 Cal 49
\(^3\) M.N. Gangappa v. Atmakur Nagabhushanam Setty & Co. and Anr. AIR 1972 SC 696
\(^4\) AIR 1960 Mad 388
\(^5\) Dhulipudi Namayya v. Union of India, AIR 1958 AP 533
\(^7\) (2004) 5 SCC 109
\(^8\) (2006) 11 SCC 181

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BSCL. For computation of damages the arbitration panel relied on the Emden Formula as argued by MII. The use of such formula was also disputed by BSCL and the award was challenged before the SC. For the first time the SC, broadly recognized and discussed in detail various formulæ that may be used by the parties for computation of damages.

4. **Methods for Computation as discussed in Mc Dermott’s Case**

The SC discussed the following formulæ which have been applied internationally for computation of damages in case of EPC contracts:

4.1. Hudson Formula: In Hudson’s Building and Engineering Contracts, Hudson formula is stated in the following terms:

\[
\text{Contract head office overhead} \times \frac{\text{contract sum} \times \text{period of delay}}{100} \times \frac{\text{contract period}}{100}
\]

For adoption of Hudson formula the claimant must prove the necessity to maintain resources on the project and an inability to re-allocate them to more profitable work. They must give evidence of the processes within head office to enable an assessment of the portion of overheads that are attributable to the delay caused by the breach. The court observed that although the Hudson formula has received judicial support in many cases, it has been criticized principally because it adopts the head office overhead percentage from the contract as the factor for calculating the costs, and this may bear little or no relation to the actual head office costs of the contractor.

4.2. Emden Formula: In Emden’s Building Contracts and Practice, the Emden formula is stated in the following terms:

\[
\text{Head office overhead percentage}^{10} \times \frac{\text{contract sum} \times \text{period of delay}}{100} \times \frac{\text{contract period}}{100}
\]

This formula has the advantage of using the contractor’s actual head office/profit percentage rather than the one contained in the contract and has received judicial support in a number of cases including Norwest Holst Construction Ltd. v. Cooperative Wholesale Society Ltd.\(^{11}\), Beechwood Development Company (Scotland) Ltd. v. Mitchell\(^{12}\) and Harvey Shoplifters Ltd. v. Adi Ltd.\(^{13}\)

4.3. Eichleay Formula: The Eichleay formula was evolved in America and derives its name from a case heard by Armed Services Board of Contract Appeals, Eichleay Corp.\(^{14}\) It is applied in the following manner:

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9 Eric and Valerie Coffey and Ors v. Fernbank Management Pty Ltd and Anor [2001] NSWSC 192
10 The HO/Profit percentage is head office percentage, arrived at by dividing the total overhead cost and profit of the Contractor’s organization as a whole by the total turnover.
11 [1997] APP.L.R. 12/02
12 2001 SLT 1214
14 ASBCA No. 5183, 60-2 BCA 2688
Step 1: Original delayed contract price/Total billings for the actual delayed contract period x Indirect expenses for the actual delayed contract period = Indirect expenses allocable to the delayed contract

Step 2: Indirect expenses allocable to the delayed contract/Actual days of delayed contract performance = Indirect expenses allocable to the delayed contract per day

Step 3: Daily indirect rate x Number of delays = Unabsorbed Indirect expenses

This formula is used where it is not possible to prove loss of opportunity and the claim is based on actual cost. The Eichleay formula is regarded by the Federal Circuit Courts of America as the exclusive means for compensating a contractor for overhead expenses.

5. The Supreme Court’s observation

The court held that the Indian law does not restrict the use of internationally accepted formulae for computation of damages and the same is consistent with the principle enshrined under the Act. As computation depends upon the facts and circumstances of each case, the Supreme Court held that the exact formula to be used is the prerogative of the adjudicator. Further, the list of formulae provided for in para 4 were held not to be exhaustive and any other formulae can be adopted for computation of damages, depending on the evidences produced by the claimant. Therefore, the Supreme Court upheld the validity and use of Emden Formula by the arbitration panel in the present case for computation of damages which was carried on by experts in the field.

Conclusion - Computation post 2006

The Supreme Court for the first time in McDermott’s case above acknowledged the applicability of various internationally accepted formulae for computation of damages. Following this decision, many courts in India have applied the formulae discussed and considered by the Supreme Court above which were most apt as per the facts and circumstances of the case. For example, in Mecon Limited v. Pioneer Fabricators (P) Ltd., the court upheld the use of any of the three formulae by the arbitration panel for computation of damages. Similarly in Chennai Container Terminal Private Limited v. Board of Trustees and National Thermal Power Corporation Ltd. v. Wig Brothers Builders and Engineers Ltd., the courts upheld the applicability of one of the formulae as decided earlier. Mostly these formulae are brought in use at the stage of dispute resolution. As the use of a particular formula can be only ascertained taking in account the facts and circumstances of a particular case, these are not mentioned in the contract itself. The use of these standard formulae minimizes the scope of errors in computation of damages and instills confidence in

15 Wickham Contracting Co., Inc. v. Fischer, 12 F.3d 1574 (Fed. Cir. 1994)
16 Mech-Con Corp. v. West, 61 F.3d 883 (Fed. Cir. 1995)
17 2007(4)ARBRLR323(Delhi)
18 MANU/TN/0897/2009
19 160(2009)DLT642
the contracting parties over the security of their investments due to breach. However, there is a lot of scope for development in this field of law and it’s high time that proper guidelines are framed, analyzing various facts and circumstances under which a particular formula can be used for computation of damages in an EPC contract.

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