2.7.2.B1 Example of Using Formula for HO OH

Formulae to Recover Head Office Overhead & Profit

January 2011 | Posted in Briefings

Keywords: Delay; Loss and expense; Head office and profit recovery; Formulae; Emden, Hudson & Eichleay;

In part I of this 2-part briefing series, I examined the legal principles appertaining to the recovery of overheads and profit where a project was delayed for events that the employer was culpable. In such claims, it is mandatory for a contractor to adduce the necessary level of proof to demonstrate the loss, but formulae, which are commonly used by contractors, is neither an appropriate nor acceptable means of calculating a loss.

The three most common formulae used [in the United Kingdom] for calculating loss of overhead and profit are Emden, Hudson and Eichleay, and to demonstrate in practical terms why such formulae are unacceptable 'tools' to finding out the real level of loss, below I have inputted each formula with identical data:

Data

Contract Sum	£525,000.00
Original contract period (in weeks)	52
Actual performance period	70 (18 weeks delay) – 490 days
Tender allowance for OHP	15%
Contractor company turn over from audited accounts	£7,100,000.00
Total annual HO OH&P	£2,450,000.00
Final Contract Valuation	£660,000.00

ensure margin not mark-up % or discount Contract Sum

exclude PC / Pro Sum
HO OH only in Prelim / measured works

Hudson Formula

$$= \frac{\text{Head Office Overhead \& Profit \%}}{100\%} \times \frac{\text{Contract sum x delay in weeks}}{\text{Contract Period in weeks}}$$

$$= \frac{15\%}{100\%} \times \frac{£525{,}000 \times 18 \text{ weeks}}{52 \text{ weeks}}$$

= 0.15 x £181,730.76

= **£27,259.61**

Emden Formula

$$= \frac{\text{Total OHP / Turnover}}{100\%} \times \frac{\text{Gross Contract Sum}}{\text{Planned Contract Period}} \times \text{Owner-Caused Delay Period}$$

$$= \frac{34\%}{100\%} \times \frac{£525{,}000}{52 \text{ weeks}} \times 18 \text{ weeks}$$

= 0.34 x £10,096.15 x 18 weeks

= **£61,787.52**

Eichleay Formula

$$= \frac{\text{Final Contract Valuation}}{\text{Total Turnover for Actual Period of Performance}} \times \text{Total Company Overhead During Actual Contract Period} = \text{Overhead Attributable to Contract}$$

$$= \frac{\text{Attributable Overhead}}{\text{Actual Days of Contract Performance}} = \text{Overhead Attributable to Contract/Day}$$

= Daily Overhead x Days of Owner-Caused Delay = Head Office Overhead

$$= \frac{£660{,}000}{£7{,}100{,}000} \times £2{,}450{,}000 = £220{,}500$$

$$= \frac{£220{,}500}{490 \text{ days}} = £450 \text{ per day}$$

= £450 x 126 days

= **£56,700.00**

L/E
CB.) 1)