The Impact of an Unbalanced Bid on the Change Order Process

By Frank A. Manzo

Introduction

As both public and private owners become more cognizant of the perils of incomplete and ambiguous contract documents, their attention has been focused on improving the quality of these documents. The hoped-for benefit is that there will be fewer claims from contractors based upon the implied warranty of the adequacy of the plans and specifications. An equal amount of attention should be directed towards the bid forms and a proper evaluation of the bids. Due to the nature of certain projects, bids are requested in unit price format with the low bid determined by an extension of the unit price by an (owner furnished) quantity estimate. It is relatively easy to detect an unbalanced bid in the evaluation of a unit price contract. In fixed-price lump-sum contracts, the process is more difficult and since it contemplates completion of all work, is it even necessary?

The unbalancing of a bid is the shifting of part of the cost of work for one element of the work to another element of the work. The degree to which this is accomplished determines whether a bid is simply *mathematically unbalanced* or *materially unbalanced*. In public sector contracts, an unbalanced bid is objectionable because it:

- Constitutes an advance payment.
- May not ultimately prove to be the best offer.
- Is detrimental to the concepts of competitive bidding.
In general, these characteristics are significantly problematic so as to warrant the rejection of the bid, or if procedures allow, a negotiation aimed at the balancing of the bid without changing the total bid.

Private owners, on the other hand, are not burdened with procurement regulations that prohibit this type of activity. They have invested a great deal of time in the planning and development of the project, the design and production of contract documents and once the project has been bid, the pressure to start work may obscure a need to identify and eliminate an unbalanced bid. Not only are unbalanced bids difficult to detect in a lump sum bid, but it can be argued that if the entire project is constructed, an imbalance will have no effect by the end of the project. Unfortunately, somewhere along the way the owner may add or delete work and if it affects the unbalanced work, the change order process is adversely impacted.

II    Mathematically Unbalanced Bid

A mathematically unbalanced bid is one in which each bid item (or breakdown of scheduled values in a lump-sum contract) fails to carry its proportionate share of the overhead and profit in addition to the necessary costs for the item. The results are understated prices for some items and enhanced or overstated prices for others. A common example is Front End Loading, wherein activities scheduled to be performed early in the project (such as demolition or sitework) have values encumbered with an excessive proportion of planned overhead costs and anticipated profit. As innocuous as it may seem, this is the “advance payment” characteristic
that is objectionable. If excess funds are paid at an early stage of the contract, the potential exists for an inadequate amount to properly complete the project and protect the owner's interests. Another serious problem, and the subject of this article, is that it will be difficult to establish a cost basis for equitable adjustments when contract quantities or work is changed.

II Materially unbalanced Bid

A bid that is *materially unbalanced* has shifted not only a disproportionate amount of overhead and profit, but also some portion of the actual cost of elements of work. In this situation, the *price (or scheduled value)* for some work can be understated and significantly less than the actual *cost* of that work, with an overstatement of prices for other aspects of the work. One illustration of the hazards of this type of bid is a case where a contractor anticipated an overrun in a the line item bid for drilling and grouting subsurface voids in order to mitigate the effects of subsidence. Costs for other parts of the work were shifted to the unit prices for the drilling and grouting. When the drilling and grouting work was eliminated from the contract the contractor complained that it had not been fairly compensated for the understated line items of work that it had performed. In its decision, the a Board of Contract Appeals held the contractor responsible for the unbalanced nature of the bid.² While this court did not view the unbalanced bid as objectionable as others have,³ the costs of the resulting dispute between the government and the contractor could have been avoided had the imbalance been detected prior to the award. As previously noted, an unbalanced bid is flawed and it may prove not to be the most advantageous to the owner. An uncorrected unbalanced bid carries increased potential
for disputes and claims with the increased costs of resolution for both the owner and the contractor.

III Changes

The process of reaching agreement on the amount of an equitable adjustment should be straightforward and generally adhere to the difference between the cost of the work prior to the change and the cost after the change. In unit-price contracts, price adjustments are often triggered by variations in quantities that exceed the thresholds contemplated by the contract. A new unit price is determined after agreement is reached regarding the amount of the adjustment to the unit price. The presence of unbalanced unit prices often adds an obstacle to the process. Contractors seeking to obtain an advantage because of an inaccurate quantity estimate quote prices below cost for items perceived to be under-run and overstate prices for items in which a large overrun is anticipated. The risk of this strategy is that variations may not occur, that they will be contrary to expectations or that the overstated elements will be deleted from the contract.

The dispute that arises from this scenario is whether a contractor is entitled to maintain its original profit structure, thereby continuing the advantage of the unbalanced bid. Decisions have supported two opposing theories relating to the basis for the equitable adjustment. For example, in a situation in which unit prices were inflated in anticipation of an overrun, and the overrun subsequently exceeds the variation in quantity threshold, an owner would expect to be entitled to relief from the overstated prices. Several courts have found otherwise, reasoning
that the basis for any adjustment is the difference between the performance cost of the overrun units and the performance cost of the contract (estimated quantity) units. If the unit price was overstated because of an excessive mark-up for overhead and profit, this approach will continue to burden the owner with the inflated prices. The owner will pay for the consequence of a bad quantity estimate and the failure to identify an unbalanced bid. It is of some consolation that an additional cost would have been incurred at the outset if the quantity survey had been more accurate. Therefore, if the contractor’s costs are the same for the base contract units and the overrun units, no adjustment is warranted.4 In this example, the owners could have benefited from identification of the imbalance and would not have been obligated to pay inflated prices for the overrun units. The issues would not exist if the quantity estimate were accurate. Nevertheless, the owner and the contractor were additionally burdened with the time and expense of resolving the dispute.

In a more recent decision, the United States Claims Court decided that the basis for the adjustment should be the actual performance costs of the overrun units less the contract price for the units.5 The court’s reasoning was that once the variation in quantity threshold has been exceeded, contractors should obtain relief from understated prices, and owners should not have to continue to pay overstated prices that create a windfall for the contractor. The Burnett decision is consistent with an earlier case that involved a lump-sum contract and an unbalanced schedule of values.6 In this example, a dispute (that appears to have taken 18 years to resolve) occurred when the parties could not agree on an equitable adjustment for elimination of an element of the work. The contract was for the construction of a subway project and the work in question was the trenching excavation and backfill for the installation of underground cables.
In a schedule of values that was submitted and approved for the purpose of calculating progress payments, the contractor listed approximately $1,300,000 for the trenching work. Subsequently, the contractor negotiated a subcontract for the trenching at a substantially lower cost. Prior to the initiation of the work, the owner changed the requirements and decided to have the cables installed above ground. The overstated trenching price, incorporated in the schedule of values, contributed to the dispute submitted to the Army Corps of Engineers Board of Contract Appeals for resolution. The board ruled that the schedule of prices was presumed to be reasonable and that the owner could base the credit for the equitable adjustment on the schedule’s prices for the work. The board also concluded that a credit should be the scheduled amount plus an additional 5 percent for profit on the deleted work.

Based upon the board’s ruling, the owner issued a deductive change order. Predictably, the contractor appealed to a district court that reversed the board’s decision stating that the schedule of prices were “simply an allocation…for administrative purposes under lump-sum contracts,” and remanded the matter to the Board of Contract Appeals to determine a reasonable cost for the work deleted. The board ultimately decided to utilize a cost estimate prepared by a consultant to the owner and ruled that the equitable value for the deleted work was $360,548. The owner refused to adopt the board’s recommendation and continued to use the schedule of values amount (plus 5 percent) as the basis of the deduction. The contractor appealed to the district court, and for a second time that court again ruled in the contractor’s favor.

The owner then appealed the district court’s decision to the U.S. Court of Appeals. The Court of Appeals held that the equitable adjustment was to be determined on the basis of cost
and that the line item values in the schedule could not be used to establish the reasonable costs of the eliminated trenching.  

IV Conclusion

In the General Railway Signal Co. example the contractor and the owner waged a battle for 18 years before the matter was finally settled. This is a good example of how unbalanced bids, and in this case the unwitting approval of an unbalanced schedule of values, contributed to the evolution of the claim. The owner had sufficient reason to question the schedule of values and failed to do so. Both parties incurred expenses that were entirely avoidable. This case should be remembered by owners and contractors as an example of the negative consequences of an unbalanced bid or schedule of values. It is possible to identify an unbalanced bid, in both unit price and lump-sum contracts. Bids and schedules of prices should be evaluated and tested as a matter of procedure to verify that the project owner will not be encumbered with an unbalanced bid or schedule. The process of determining the imbalance is simple and represents a minimal effort when compared to the potential costs of administering a contract with the imbalance or refuting claims that arise from under or overstated prices.

1 This article supplements Chapter 7 of the 1997 Wiley Construction Law Update (N. Sweeney, Ed. John Wiley & Sons, Inc.) entitled “Unbalanced Bids and Avoiding Disputes Relating to Them,” which was co-authored by Frank A. Manzo and Steven Tell of the construction consulting firm of GREYHAWK, North America, L.L.C., Woodbury, New York.

2 Appeal of Manis Drilling, IBCA No. 2658, 93-3 B.C.A. (CCH), at 115187 (1993). “We recognize that the practice of submitting unbalanced bids in the construction industry is not uncommon. While a contractor may legitimately unbalance its bid as a bidding technique, it does so at its own peril and must accept the consequence that the deletion of separately priced items may affect its profit or cost structure.”
For example, the GSBCA noted “A bidder does not inadvertently submit an unbalanced bid. The bidder purposefully bundles its costs so as to overstate the price for some bid items and to understate the prices for others. The bidder does so for a reason(s) as various as the procurements, but all are bottomed on the bidder’s desire to obtain a windfall, or a competitive advantage over bidders who do not submit unbalanced bids.” Protest of Severn Cos., GSBCA No. 9353-P 88-3 B.C.A. (CCH) 20,850 (1988).


Burnett Constr. Co. v United States, 26 Cl. Ct. 296, 38 Cont. Cas. Fed. (CCH) 76,327 (1992). In this case, the contractor submitted a severely understated price for water required for dust control on a road construction project. The unit price was $5 per thousand gallons: the actual performance costs were approximately $38 per thousand gallons. The overrun quantities - in excess of 115 percent of estimated - were 8,641,000 gallons. It is likely that the understated price was the result of a bid mistake rather than an imbalance. The contractor absorbed the cost of the mistake for the first 115 percent of the work (7,500,000 gallons) but was compensated for its costs for the unforeseen overrun units.


General Ry. Signal Co. v. Washington Metro. Area Transit Auth., 875 F.2d 320, 325 (D.C. Cir. 1989). The court commented “[c]ourts have consistently rejected efforts to equate bid prices for various portions of work with contract prices. The reason is judicial recognition that contractors frequently submit unbalanced bids, understating the true costs of one portion of the contract with an offsetting overstatement on a different portion. For reasons that follow, we agree with the District Court that, in this case, the $1.3 million line item totals were not contractually agreed upon prices at which the work in question was to be performed; those line item totals therefore do no presumptively reflect the reasonable costs of that work.”