

Material Pricing Deficiencies

The Scenario

Risk Assessment-General Research and Planning:

The field audit office (FAO) management selected for postaward¹ audit a \$900 million firm-fixed price Navy contract to produce guided missiles. The FAO manager and supervisor assembled the audit team that would be led by the defective pricing technical specialist to discuss the audit approach and the work that had already been completed. The technical specialist explained that the overall risk assessment procedures in the standard audit program had been completed and provided the audit team with copies of the related working papers and referenced documents. Each auditor was to review all risk assessment information and documents and then perform any other necessary analytical procedures related to their assigned cost element. The team would reconvene and determine what, if any, detailed audit testing would be done for the assignment. The technical specialist discussed the information obtained from the general risk assessment procedures with the team.

- The contractor produces several missile weapon systems used by the Navy, Air Force and Marine Corps.
- Contractor had \$2 billion in sales in the previous year, all for DoD contracts. The contract mix was primarily firm-fixed price.
- The contract brief verified that the contract was subject to defective pricing as it included the Federal Acquisition Regulation (FAR) clauses for price reduction for defective cost or pricing data. This included the requirement to obtain certified cost or pricing data for applicable subcontracts.²
- The contract had a 5-year period of performance. The contractor completed the contract 7 months earlier. Modifications issued did not affect the pricing action.
- The price negotiation memorandum (PNM) stated that the Procuring Contracting Officer (PCO) relied on the contractor-provided cost or pricing data to negotiate the contract. The negotiated price represented the contractor's final proposed costs, except for some negotiated reductions for labor rates and other direct costs, and the negotiated profit.

¹ Postaward audits are often referred to as defective pricing audits since the purpose of the audit is to determine if a negotiated contract price was increased significantly due to the contractor not submitting or disclosing current, accurate, and complete cost or pricing data. The Truth in Negotiations Act (TINA) (10 U.S. Code § 2306a) requires the contractor to certify that the submitted data is current, accurate and complete as of the date of price agreement. The Government is then on equal footing with the contractor when negotiating the contract. If the contractor fails to comply, TINA provides the Government with a price reduction remedy that includes interest and penalty provisions.

² Absence of a price reduction clause in a contract does not prevent an auditor from performing a postaward audit for defective pricing. Under the "Christian doctrine" a contractor is bound by a required clause even when the clause is omitted from the contract. The auditor should contact the contracting officer to verify that the contract is a negotiated procurement and subject to a defective pricing clause.

- When contacted by the DCAA technical specialist, the PCO did not identify any specific concerns about potential defective pricing, but clarified that another PCO negotiated the contract.
- DCAA did not audit the complete proposal prior to contract negotiations. The PCO only requested DCAA to audit the direct labor and indirect rates.
- DCAA obtained Defense Contract Management Agency's (DCMA) technical review report on the proposed materials and subcontracts. They also got the cost/price analysis of the material, subcontract, and other direct cost pricing information performed by the PCO's staff.
- DCAA audited the accounting and estimating systems about a year prior to the contract negotiations. DCAA determined that both systems were adequate during those audits.

Risk Assessment-Initial Data Obtained From Contractor:

The DCAA technical specialist, following a standard audit program step, obtained the following information from the contractor in response to an initial request for information.

- a copy of the final proposal, the final Certificate of Current Cost or Pricing Data, and a written statement that the contractor did not provide additional or updated cost or pricing data during or after negotiations; and
- the contractor's job cost ledger reports of the actual costs incurred on the contract by cost element.

Risk Assessment-Overrun/Underrun Analysis:

Based on the information provided by the contractor, the DCAA technical specialist concluded that the contractor's final cost proposal of \$825 million represented the initial audit baseline for defective pricing. The DCAA technical specialist then calculated the audit baseline by cost element to facilitate performing the overrun/underrun tests.

The DCAA technical specialist calculated that the contract's total actual incurred cost was moderately underrun in comparison to the contractor's final proposal (audit baseline). The DCAA technical specialist then performed the required underrun/overrun test from the standard audit program by comparing the total incurred costs for each cost element to that in the contractor's final proposal (audit baseline). The results are in the following table.

Cost Element	Proposed Cost (millions)	Incurred Cost (millions)	Difference: (Overrun)/ Underrun (millions)	Percentage (Overrun) or Underrun
Subcontracts	\$297	\$297	\$0	0
Indirect Costs	248	171	77	45
Labor	206	227	(21)	(9)
Materials	66	54	12	22
Other Direct Costs	8	9	(1)	(11)
Total	\$825	\$758	\$67	9

The DCAA technical specialist discussed the results of the overrun/underrun tests with the audit team. For their assigned cost elements, each auditor then calculated the difference between each significant cost component's proposed costs in the audit baseline/final proposal to the actual incurred costs for each.

Preliminary Analytical Procedures:

To better isolate a potential basis for the significant material cost underruns, the auditor assigned to review the material cost element and the DCAA technical specialist decided to analyze the cost in the bill of material by the material class sub-element.

Analytical Procedure: Compared proposed costs for each class of materials in the proposal bill of material to the incurred cost charged to each class.

Result: Calculated \$12 million underrun in the electronic materials class.

The auditor asked the PCO and ACO whether there were any changes in the required electronic materials. Neither was aware of anything happening that would impact the electronic materials cost element.

Audit Team Meeting and Brainstorming for Fraud Risk Assessment:

The audit team discussed all the information gathered, the results from the risk assessment/preliminary audit steps, and the overrun/underrun tests at the component cost level. The supervisor concurred with the team's determination that the postaward audit should continue. The auditors would perform detailed audit steps to further review the indirect rates and material cost elements since all had sizable underruns.

The audit team also brainstormed about potential non-compliances, due to error or fraud that could materially affect the risk for defective pricing. The group discussed conditions or situations that might motivate a contractor to engage in defective pricing and whether any of those might apply to the contractor.

Entrance Conference and Walk Through of Proposal:

The audit team discussed each team member's role in the entrance conference. The DCAA technical specialist would lead the meeting and ask the more general questions. Then the auditors would ask questions about their assigned cost elements. The team also collaborated on a list of questions to ask at the entrance conference.

The audit team held the entrance conference the following week with the contractor's audit liaison, the proposal manager, and the program manager. The contractor representatives went through each cost element/sub-element of the final proposal explaining the certified cost or pricing data submitted to support the proposal and how the proposed costs related to the negotiated price. This walkthrough also included identifying how the costs were accumulated in the accounting system to facilitate comparison of the actual costs to proposed costs. The contractor representatives confirmed the previous written statement given to the DCAA technical specialist that the contractor had not provided any additional cost or pricing data during negotiations and before final price agreement.

Auditor Question: "What organizational changes have occurred at the company during the years since this contract was negotiated and awarded?"

Contractor (audit liaison) Response: "There weren't any."

Auditor Question: "What internal controls were in place at the time of negotiations to ensure that the most current, accurate, and complete data were disclosed to the Government?"

Contractor (proposal manager) Response: "You reviewed our estimating system right before that time and deemed it adequate. Our tiered management review process that you evaluated followed the estimating system criteria listed in DFARS to make sure we complied with TINA."

Auditor Question: "What has management identified as the primary risks of fraud related to defective pricing?"

Contractor (audit liaison) Response: "The company is fully committed to fair and honest negotiation with the Government and would not knowingly engage in defective pricing. However, it is a large company and individuals might inadvertently do otherwise. So we have an extensive proposal review process to mitigate this risk."

Auditor Question: "Please describe how the review process mitigates the risk of defective pricing."

Contractor (proposal manager) Response: "I am required to review all proposals over \$5 million. One element of my review process is to assess whether the supporting cost or pricing data is current, accurate and complete for those proposals requiring certification. I do this through discussions with those who were involved in preparing the proposal such as program management, proposal preparer, and engineers. I also review some source documents. The Vice President of Contracts has to review proposals above \$10 million. The Chief Financial Officer and President review and approve proposals over \$100 million."

Auditor Question: "What has management identified as the primary risks of fraud related to the Navy guided missile program, the proposal and the contract?"

Contractor (proposal manager) Response: "We don't really consider fraud risks on individual programs or contracts. It's a firm-fixed-priced contract so really it is more our company's risk than the Government's risk."

Auditor Question: "Does management have knowledge of any fraud or suspected fraud affecting this program, proposal or contract?"

Contractor (audit liaison) Response: "No."

Auditor Question: "Has management received any allegations of fraud or suspected fraud related to negotiation and award of this contract or missile program, for example from employees, former employees, subcontractors, etc.?"

Contractor (proposal manager) Response: "I will need to check with our internal hotline, but I don't think so."

Auditor Question: "Please explain why the actual costs for electronic materials were less than those in the final proposal."

Contractor (program manager) Response: "These are items that are pretty susceptible to fluctuations in price. We gave the Government the best information we had at the time of award, but the price when we actually bought the material was different."

Audit Team Meeting to Determine Detailed Audit Procedures:

The audit team met again to determine the audit scope and the audit procedures to address the potential indicators of fraud and/or defective pricing indicators identified in the team brainstorming. The team agreed that the auditor responsible for the material cost element would perform the following detailed steps.

- Electronic materials category (total of 85 material parts available for review):
 - compare by part number and vendor, the unit price and quantity in the proposed bill of material to the actual unit cost paid and quantity purchased on the related purchase orders;
 - using the comparison, identify part numbers where the actual unit cost and/or quantity are 5 percent less (underrun) than the unit cost or quantity in the proposed bill of material; and
 - out of that subgroup, select items for further review after consultation with the DCAA technical specialist.
- Electronic material part numbers selected for further review (40):
 - compare the proposed unit prices in the bill of material with any available purchase history for the part;
 - review the complete buyer's purchasing files (including vendor quotes, purchase orders, correspondence, etc.) to identify any data or circumstances that could explain the underruns and whether that data existed but was not disclosed to the Government; and
 - determine if there are part numbers for which the vendor that supplied the part(s) was different from the proposed vendor.
- For the electronic material parts selected for review where the vendor that supplied the part(s) was different from the vendor in the proposed bill of material, obtain third party confirmations from both vendors. The auditor would first informally contact, by email or phone, the vendor point of contact (obtained from the contractor's files) about the forthcoming confirmation. The confirmation letter would ask the vendors to verify:

- the price quotations and dates, including the quotation expiration dates;
- purchase order dates; and
- purchase order amounts.

It should also request a copy of the signed purchase order document and that a company officer sign the response.

Results from Audit Procedures:

Out of the 85 electronic materials parts available for review, the auditor identified 40 parts for further review. The auditor documented the results as follows.

Number of Parts	Audit Finding
18	No issues
10	Lower quotes provided after negotiations
7	Quotes provided for another proposal
5	Courtesy bids

- The auditor found no evidence of defective pricing for 18 of the 40 parts reviewed. These parts were purchased well after award at the price applicable at that time consistent with the contractor’s explanation during the entrance conference. In addition, the purchase orders all had economic price adjustment clauses to address price fluctuations.
- For 10 parts, the vendors from which the material was purchased stated, in response to the confirmation letter request, that the contractor originally requested budgetary/planning quotes to support the proposal bill of material. The contractor then asked the vendors to provide lower firm quotes a few weeks after negotiations with the Government concluded. The auditor found that the contractor used the higher budgetary quotes in the proposal and issued the purchase orders using the second set of lower firm quotes.
- For 7 parts, the vendors confirmed that the quotes had been provided for another proposal. The purchase history supported that the contractor purchased these parts from the 7 vendors for the resulting contract. These vendors did not provide any material parts for the contract being reviewed. However, the contractor used these quotes in the final proposal and then purchased the parts from other vendors at lower prices.
- For 5 parts, the contractor solicited vendor bids for the proposal but did not purchase parts from the vendors. Vendors confirmed that they issued “courtesy” bids when requested. The vendors refused to do business with the contractor because of the complicated Government regulations that would have to be followed. The contractor also used the courtesy bids to price the material but then purchased the parts from other vendors at lower prices.

Further Actions:

The auditor, supervisor and DCAA technical specialist discussed the results of the material testing. The team agreed sufficient evidence existed to conclude that materials were defectively

priced and to calculate a recommended price adjustment. The audit team also agreed that the circumstances identified in the review of the material parts were fraud indicators that should be referred for further investigation. The team decided to perform the following steps.

- Calculate the recommended price adjustment for the defectively priced electronic material parts and incorporate these findings into the overall post award review.
- Contact the local DoD criminal investigator to discuss the audit findings and the forthcoming fraud referral. Also discuss the status of the audit and whether issuing the audit report would compromise a potential investigation.
- Discuss with the regional audit manager the audit findings and the potential for defective pricing on other contracts that used the same material parts or vendors associated with the irregularities.
- Draft an audit lead for proposal and postaward audits to increase testing for the identified material pricing deficiencies.

General Comments/Lessons Learned:

Defective pricing, as defined by TINA, occurs when the contractor has more current, complete and accurate cost and pricing data and does not disclose it to the Government resulting in a significant increase to the contract price. The contractor and the Government, therefore, were not on equal footing when the parties negotiated the contract price. The failure to disclose can result from fraud or error. However, potential defective pricing is more likely to occur when the contractor has poor internal controls and lacks management oversight over the proposal preparation processes. In addition, strong internal controls over the purchasing function can mitigate the risk of defective pricing in material and subcontract costs. Given the general criteria for defective pricing, auditors need to carefully consider fraud indicators when planning and performing these audits. The main differences between defective pricing and potential fraud include the root cause of the underrun and the contractor's intent. Since the auditor does not prove intent, the circumstances leading to defective pricing generally warrant a fraud referral.

Materials and subcontracts are cost elements particularly vulnerable to defective pricing, especially in contracts for major weapon systems with extensive bills of material and/or complex, multiple subcontracting tiers. There are multiple methods that contractors can use to request and manipulate material pricing information from vendors.

- Request to vendor is for initial or budgetary quote presumably to determine if a vendor's price point is realistic for the procurement. The contractor uses the budgetary or initial quote in the proposal. Later after negotiations with the Government, the contractor obtains a firm quote or best and final offer and uses this lower price to procure the material item.
- Request to vendor indicates a lower quantity than the contractor actually intends to procure and this quote is used in proposal. After negotiations, the contractor negotiates a lower unit price based on known quantity discounts. Often the contractor may be purchasing the same

material for use on multiple contracts to obtain the discount but this information is not in initial request to the vendor.

- Request for competitive bid sent to a vendor(s) that contractor knows will either be too high to be considered or does not meet contract specifications. The purpose of these bid solicitations is to create the appearance of competition and conceal secretly inflated prices included in the proposal. These are called courtesy, complementary or cover bidding and are a form of bid rigging³.

An effective audit technique used in defective pricing audits to validate the completeness, accuracy and currency of the prime contractor's proposed subcontract/vendor prices is to "mail out" inquiries to companies shown on the prime's bidder mailing lists. Sending out confirmations is successful because confirmations completed and returned by vendors can identify lower bids received but not documented in the contractor's purchasing files. Confirmation letters can also provide information that indicates the existence of a kickback⁴ or bribery scheme.

During a proposal audit, an auditor can reduce the Government's risk of overpaying for materials or subcontracts by calculating and using a decrement factor. The factor can be developed by reviewing vendor purchasing information for patterns of reductions from quotes to actual prices paid. In addition, information about historical reductions is cost or pricing data that the contractor should disclose to the Government and use in preparing their proposals.

FRAUD INDICATORS

- **A significant variance between proposed and negotiated vendor/ subcontract quantities or prices.**
- **Use of different vendors or subcontractors than proposed.**
- **Contractor using higher budgetary/planning quotes to support proposal or negotiations knowing that lower firm quotes have been or will be submitted on request.**
- **Contractor using higher courtesy bids to support proposal or negotiations knowing that lower bids are or will be available. Courtesy bids also increase the lowest bid.**
- **Failure to disclose the existence of a decrement factor, purchase discount or historical negotiation experience with vendors.**

³ Bid rigging occurs when competitors conspire to raise prices or keep prices artificially high when competitive bids are solicited prior to contract or subcontract award. Essentially, competitors agree in advance who will submit the winning bid.

⁴ A kickback is any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime contractor, prime contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or a subcontract relating to a prime contract.

- **Specific knowledge that is not disclosed regarding significant cost issues that will reduce the proposed cost.**
- **Consistent failure to update submitted cost or pricing data prior to agreement on price.**
- **Repeated defective pricing involving similar patterns or conditions.**
- **Continued failure to make complete disclosure to the Government of data known to responsible personnel.**
- **Denial by responsible contractor employees of the existence of historical or other records that are later found.**
- **Continued failure to correct known business system deficiencies that impact or allow for submission of proposal data that is not accurate, complete or current.**