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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

DEFENSE DIVISION

MAY 26 1971

Commander
Naval Ship Systems Command
Washington, D. C. 20360

Attention: M. C. Greer (Ships 08)

Dear Sir:

In August 1967 the General Accounting Office (GAO) issued a report to the Congress (B-156313) concerning the pricing of nuclear submarine propulsion equipment that General Electric Company, Medium Steam Turbine Generator and Gear Department (GE) furnished under subcontract to General Dynamics Corporation, Electric Boat Division. The Navy had negotiated the subcontract with GE. The report showed that a significant portion of GE's certified costs were based on the cost of processing 16 castings in its own plant, although before the pricing certificate was executed on February 3, 1964, GE had requested and received quotations from vendors for fully processed castings at substantially lower costs. Two quotes were not disclosed to the Navy during negotiations. We estimated that, if the Navy had been told about these quotes a price reduction of about $564,000 could have been negotiated.

The Navy agreed that the quotes for castings were significant pricing data which should have been submitted by GE for consideration in price negotiations. The Navy said that action would be taken to recover an appropriate amount.

At the time of our examination in 1965 and 1966, contractors were not permitted by Department of Defense regulations to offset overestimated costs by underestimated costs. After the Cutler-Hammer (Court of Claims) decision, the Department of Defense revised its regulations in March 1970 to permit recognition of properly supported and verified claims by contractors for such offsets. In April 1970 GE advised the Navy that it had found underestimates of about $646,000 as offsets against the potential price reduction of $564,000 for castings.

GE claimed underestimates on the basis of historical data on overhead rates (experience for 1963) and other information which, it said, were available as of the date of price certification (February 3, 1964) and should have been considered in price negotiations. GE did not say why these factors were not used at negotiations.

In June 1970 the Defense Contract Audit Agency (DCAA) resident auditor at GE, reviewed GE's claimed underestimates and questioned $182,400 of the $646,200. These costs were questioned primarily because of lack of detailed auditable support for a labor reduction which GE claimed should have been reinstated in the price negotiated as of February 3, 1964.

In October 1970, the Navy informally requested GAO to review GE's claim, particularly from the standpoint of whether GE's rationale and support for the underestimates generated a basis for increasing the amount of overestimated costs. From this standpoint and on the basis of the data subsequently furnished by GE in support of its claimed offsets, we found that overestimated costs less offsets amounted to about $524,600 as shown below.

	Overestimates Less (Offsets)	
	GE Claim	GAO Recomputation
Castings	$564,000	$669,000
Reinstatement of reductions in GE Specifications	($142,000)	-
Labor variance based on work area variances	-	$ 88,700
Indirect manufacturing expense based on work area rates	-	35,600
Net adjustment for contractual wage increases	(353,000)	(268,700)
Net adjustment of overhead load factors	(151,200)	-
Net understatement offsets	($646,200)	($144,400)
Net price over- (under-) statements	($ 82,200)	$524,600

Castings

As stated in our report, the Government would have had a basis for reducing the subcontract price by an amount which we estimated at about $564,000 had GE submitted to the Navy the quotes received from two vendors, (GE Steel Foundry and General Steel Industries). Our computation of the potential price reduction was conservative because it was based on procuring all 16 castings from the GE Foundry, the higher priced of the two vendors. Had we computed the potential price reduction on the basis of procuring each of the 16 castings at the lowest price offered by each vendor, we would have estimated the overpricing at about $669,300.[1]

Reinstatement of reductions in GE's specifications

In a preliminary quotation to the Navy dated July 12, 1963, GE proposed a labor reduction of $35,167 for the relaxation of technical requirements to Government specifications. After GE's July 12, 1963, quotation, various modifications, additions, and deletions were made, the cost of which were included in quotes dated September 18, 1963, December 9, 1963, and February 3, 1964. GE claims that this labor reduction was inadvertently included in subsequent price proposals and that the final negotiated price included the $35,167 labor reduction. According to GE, the final negotiated price was understated by $141,974 ($35,167 factored to $141,974 selling price) exclusive of contractual wage increases and overhead rate increases.

In his June 1970 review of GE's claimed understatements, the DCAA auditor questioned $153,993 ($141,974 plus $12,019 in contractual wage increases and overhead rate increases and profit) for this item, on the basis of a technical evaluation by agency engineering personnel and a lack of substantiation.

According to the technical evaluation report, the original proposed direct labor reduction of $35,167 was an engineering estimate without backup data. The evaluator said that he could not determine if the tasks related to the planned labor reductions were included in labor costs in subsequent proposals.

The administrative contracting officer noted that, although the contractor had said that the alleged understatement of $35,167 was not

Note 1 - GE actually paid about $648,400 less than the amount included in the negotiated price for the castings by buying at lower prices from the two suppliers.

eliminated in later proposals, he had not furnished any substantiating evidence of this.

We agree with DCAA's position that GE has not supported its claim that costs for these specification changes were omitted from its final proposal. Thus, the claimed understatement of about $142,000 should not be allowed as an offset.

Labor variance based on work area variance

Included in the costs certified by GE on February 3, 1964, was an estimated amount of $361,920 computed by applying a 64 percent variance factor to standard labor costs of $565,498. The 64 percent factor consisted of a 42.8 percent rate by which actual labor costs were expected to exceed standard labor costs for three labor subsections where the propulsion system was to be manufactured plus a 50 percent increase. GE contended that the 50 percent increase, which added $119,886 in labor costs, was justified because the work involved was such that actual costs would be approximately 50 percent greater than standard costs.

GE did not give consideration, however, to the fact that 76 percent of the work was to be done in one of the three subsections which had a variance rate of only 30.8 percent, or 12 percent less than the composite rate.

We recomputed the total labor costs on the basis of variance rates for each of the three subsections, which were available at the time of negotiations, applied to estimated standard costs for each subsection. As a result, estimated labor costs accepted in negotiations were about $22,000 (factored to $88,700 selling price), higher than indicated by labor cost data for each subsection. This amount is an addition to our reported findings on castings.

Indirect manufacturing expense based on work area variance

GE certified to Indirect Manufacturing Expenses (IME) of $1,895,933 based on a rate of 190 percent of total negotiated labor ($997,859). GE personnel informed us that this was a composite IME rate for the three applicable subsections for manufacturing castings, based on experience for 11 months of 1963 plus an estimate for December.

The DCAA auditor in reviewing GE's claim questioned whether an adjustment should not have been made for overstated costs based on the final 1963 composite IME rate of 188.7 percent of direct labor dollars as opposed to the 190.0 percent rate negotiated. GE agreed that IME expense should have been adjusted.

Since the use of 1963 experienced IME rates available at the time of negotiation for each subsection where the work was to be performed would be more appropriate than using a composite rate for the three subsections, we recomputed the IME costs on this basis. We found that IME costs certified by GE were overestimated by $25,600 (factored to $35,600 selling price). This amount, too, is an addition to our reported finding on castings.

<u>Net adjustment for contractual wage increases</u>

GE claimed underestimates in its labor costs because they were based on 1961-1962 average standard hourly labor rates effective October 19, 1961, which did not include three wage increases which had been negotiated with a labor union, as follows:

Effective Date	Percent Increase
4/2/62	3.0
9/23/63	3.1
4/5/65	2.5

GE claims that these labor increases were not included in negotiated costs certified on February 3, 1964. As a result, labor costs were understated by $84,469 (exclusive of labor for specification relaxation) computed as follows:

The original subcontract period of performance was February 8, 1964 to May 13, 1966, or 27 months. The first two of these wage increases would, therefore, have a 100 percent impact on subcontract labor costs. The April 5, 1965, increase of 2.5 percent would affect the cost of labor incurred 14 months after award date (February 8, 1964 to April 4, 1965) or after 52 percent of the total period of performance; i.e. ($\frac{14}{27}$ months = 52 percent).

GE contends that at 52 percent completion, its experience with four prior Navy contracts indicates that an average of 14.5 percent of total direct labor would be expended. Thus, the April 5, 1965, increase would be applicable to 85.5 percent of its labor cost estimate. The four prior contracts were:

Contract	Type of Ship	Percent Direct Labor Expended At 52% Of Period Of Performance
Nobs-84196	Aircraft carrier	16
Nobs-84167	Nuclear submarines	12
Nobs-78495	Nuclear submarines	10
Nobs-86526	Nuclear submarines	20
		58
	Average	14.5

Available information indicated that the 1961-62 average standard labor rates effective October 19, 1961, were used for the propulsion system proposal and the wage increases were not included. Therefore, the first two wage increases would be applicable to the entire period of performance and would account for underestimated labor costs of $61,797 according to GE's computations. GE's claim, however, that the 1965 wage increase of 2.5 percent was applicable to 85.5 percent of the labor dollars to be incurred under the subcontract is questionable. The data GE presented to compute 14.5 percent performance at 52 percent completion did not include a contract for prototype machinery for MST-12 (SS(N)605) the last part of which was delivered in November 1962. Had the costs experienced for the MST-12 been included in GE's computation, it would have shown that 78.6 percent of labor costs would be expended after April 4, 1965. Using the 78.6 percent factor, we computed a total offset for increased labor rates of $268,700 instead of $353,000.

Net adjustment of overhead load factors

GE claimed offsets of $151,218 because higher calendar year 1963 overhead rates, which were not formally published by February 3, 1964, were available at that date and should have been used in negotiating overhead costs. Our review indicated that evidence showing the availability of these rates at February 3, 1964, was lacking.

Data used by GE in computing their claim was as follows:

Overhead Factor	Rate Certified	1963 Rate	Date 1963 Rate Published	Under (Over) Statement Per GE
Material Variance	4.2%	6.4%	3/20/64	$ 23,665
Product Engineering Cost and Expense (PECE)	13.7%	16.1%	2/12/64	122,306
Complaints	2.2%	2.4%	2/12/64	10,574
G&A	8.7%	8.6%	2/12/64	(5,327)
Net Understatement				$151,218

Material variance

GE's certified data included a material variance percentage of 4.2 percent of standard material cost based on actual experience for the period September through December 1962. In its claim for offset, GE contends that an experienced rate of 6.4 percent for the September through December 1963 period was available at February 3, 1964. GE claims that the use of the more current rate results in an understatement of $16,999 in material costs ($23,665 selling price).

In support of the 6.4 percent rate, GE has an undated workpaper. It shows that on March 17, 1964, an adjustment for certain costs was made which revised a rate of 6.0 percent to 6.4 percent. Whether or not the 6.0 percent rate was available on February 3, 1964, is a matter for conjecture. The 6.4 percent rate, however, was not available until March 17, 1964. If the 6.0 percent rate was available, applying it to material costs less our adjustment for overestimated casting cost, would result in understated material costs of $18,931 instead of $23,665.

Unless GE has evidence, however, that the undated workpaper in support of the 6.0 percent rate was available on February 3, 1964, the $18,931 offset would not be justified.

Other overhead factors

In 1965, GE personnel informed us that the rates certified on February 3, 1964, for PECE, Complaints, and G&A were based on experience for the first 11 months of 1963 plus an additional month's estimate to complete the year. In its claim for offsets, GE states that final information on 1963 overhead rates was available in summary form prior to the certification date February 3, 1964. GE informed the DCAA auditors that overhead rates were not published until February 12, 1964, and dates of completion of rate calculations were as follows:

PECE	2/12/64
Complaints	2/11/64
G&A	2/5/64

These dates are subsequent to the date GE certified to the data submitted to the Navy. The worksheets supporting GE's calculation show that the total overhead costs were available prior to February 3, 1964; other data needed, however, to compute rates for allocating the costs to specific departments (Turbine, External Sales, etc.,) were not available.

According to information GE furnished to DCAA, the calculation of overhead rate factors was completed after the certification date and there is no data showing that the information needed to compute factors to allocate overhead costs were available at an earlier date. Therefore we feel that there is no justification for recomputing the costs for PECE, Complaints and G&A.

The foregoing results of our examination of GE's claim for offsets are submitted for your information. We have not obtained formal comments from GE.

Sincerely yours,

James H. Hammond

James H. Hammond
Associate Director