COST PROPOSAL ANALYSIS FOR ACO/CA NEGOTIATED PROPOSALS

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DESCRIBE THE STEPS IN ANALYZING COST PROPOSALS (i.e. UCAs, Over & Above, Spares, Repairs, Claims, etc.)

DETERMINE THE PRICING APPROACH...

ESTABLISH A FAIR AND REASONABLE PRICE
AGENDA/OVERVIEW

1. DETERMINE THE PRICING REVIEW APPROACH (Price Analysis or Cost Analysis)

2. DEFINE THE PRICING APPROACH

3. TECHNIQUES FOR PRICING SPARE PARTS OR SUPPORT EQUIPMENT

4. DEFINE & EVALUATE COST ELEMENTS

5. REQUESTING AUDIT AND/OR TECHNICAL SUPPORT

6. APPLYING QUESTIONED COST/HOURS TO APPROPRIATE BASES (EXERCISES)
STEPS TO EVALUATING COST PROPOSALS
DETERMINE THE REVIEW APPROACH

PRICE ANALYSIS

OR

COST ANALYSIS
WHAT IS PRICE ANALYSIS?

FAR 15.404-1(b)

DEFINES PRICE ANALYSIS AS THE PROCESS OF EXAMINING AND EVALUATING A PROPOSED PRICE WITHOUT EVALUATING ITS SEPARATE COST ELEMENTS AND PROPOSED PROFIT.
"PRICE ANALYSIS"

**FAR 15.404-1(a)(2):** PRICE ANALYSIS **SHALL** BE **USED** WHEN COST OR PRICING DATA ARE **NOT** REQUIRED

**NOTE!** FAR 15.403-1(b) EXCEPTIONS TO COST & PRICING DATA REQUIREMENTS. FAR 15.404-1(b)(2)(i-vi)... EXAMPLES OF PRICE ANALYSIS TECHNIQUES
NOW ......

IF A FAIR AND REASONABLE PRICE COULD NOT BE ESTABLISHED THROUGH

"PRICE ANALYSIS"

THEN....

"COST ANALYSIS"
WHAT IS COST ANALYSIS?

**FAR 15.404-1(c)**

**COST ANALYSIS** is the review and evaluation of the separate cost elements and profit in an offeror’s or contractor’s proposal (including cost or pricing data or information other than cost or pricing data) and...
WHAT IS COST ANALYSIS?

FAR 15.404-1: (Continue)

.....THE APPLICATION OF JUDGMENT TO DETERMINE HOW WELL THE PROPOSED COSTS REPRESENT WHAT THE COST OF THE CONTRACT SHOULD BE, ASSUMING REASONABLE ECONOMY AND EFFICIENCY.
COST ANALYSIS SHALL BE USED TO EVALUATE THE REASONABLENESS OF INDIVIDUAL COST ELEMENTS WHEN COST OR PRICING DATA ARE REQUIRED....

(REQUIREMENT IS BASED ON FAR 15.403-4....
..The threshold for obtaining cost or pricing data is $500,000)

PRICE ANALYSIS SHOULD BE USED TO VERIFY THAT THE OVERALL PRICE OFFERED IS FAIR AND REASONABLE.
PRICE ANALYSIS GENERALLY IS FAVORED OVER COST ANALYSIS FOR TWO REASONS;

- FOCUSES ON THE PRICE AND NOT ON WHAT IT COST TO MAKE THE PRODUCT.
- GENERALLY IS LESS COSTLY AND TIME CONSUMING THAN IT COSTS.

REMEMBER........
too much paper! $$$
PROPOSAL ANALYSIS
PROPOSAL ANALYSIS FOR SPARE PARTS OR SUPPORT EQUIPMENT

DFARS 215.404-1(a) PERFORM AN ANALYSIS OF.....

(i) THOSE LINE ITEMS WHERE THE PROPOSED PRICE EXCEEDS 25% OR MORE THE LOWEST PRICE THE GOV’T HAS PAID WITHIN MOST RECENT 12 MONTH PERIOD BASED ON REASONABLY AVAILABLE INFORMATION;

(ii) THOSE LINE ITEMS WHERE A COMPARISON OF THE ITEM DESCRIPTION AND THE PROPOSED PRICE INDICATES A POTENTIAL FOR OVERPRICING;
(iii) SIGNIFICANT HIGH-DOLLAR VALUE ITEMS.

IF THERE ARE NO OBVIOUS HIGH DOLLAR VALUE ITEMS, INCLUDE AN ANALYSIS OF A RANDOM SAMPLE OF ITEMS; AND

(iv) A RANDOM SAMPLE OF THE REMAINING LOW-DOLLAR VALUE ITEMS. SAMPLE SIZE MAY BE DETERMINED BY SUBJECTIVE
EVALUATING COST ELEMENTS

ELEMENTS OF A COST PROPOSAL

- DIRECT COST
- INDIRECT COST
- PROFIT/FEE
DIRECT COSTS

FAR 31.202

DIRECT COST IS ANY COST THAT CAN BE IDENTIFIED SPECIFICALLY WITH A PARTICULAR FINAL COST OBJECTIVE.
TYPES OF DIRECT COST

DIRECT MATERIAL
- PURCHASE PARTS
- RAW MATERIAL
- SUBCONTRACT ITEMS

DIRECT LABOR
- ENGINEERING
- MANUFACTURING
- SERVICE LABOR

OTHER DIRECT COST
- TRAVEL
- SPECIAL TOOLING,
### “SAMPLE” BILL OF MATERIALS (BOM)

<table>
<thead>
<tr>
<th>PART</th>
<th>UNIT PRICE</th>
<th>QUANTITY</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>123XYZ</td>
<td>1,125.50</td>
<td>100</td>
<td>$112,500</td>
</tr>
<tr>
<td>321ZYX</td>
<td>1,200.00</td>
<td>75</td>
<td>90,000</td>
</tr>
<tr>
<td>A248XS</td>
<td>175.00</td>
<td>125</td>
<td>21,875</td>
</tr>
<tr>
<td>9632MF</td>
<td>150.00</td>
<td>50</td>
<td>7,500</td>
</tr>
</tbody>
</table>

**ESCALATION**: 2.5%

**TOTAL MATERIAL COST**: $237,672
"SAMPLE"

DIRECT LABOR

<table>
<thead>
<tr>
<th>LABOR CLASS (Manufacturing)</th>
<th>HOURS</th>
<th>RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRINDING</td>
<td>1,450</td>
<td>$18.50</td>
</tr>
<tr>
<td>$ 26,825</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POLISHING</td>
<td>1,270</td>
<td>18.50</td>
</tr>
<tr>
<td>23,495</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WIRING</td>
<td>865</td>
<td>15.00</td>
</tr>
<tr>
<td>12,975</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASSEMBLY</td>
<td>366</td>
<td>15.50</td>
</tr>
<tr>
<td>5,673</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INSPECTION</td>
<td>131</td>
<td>16.00</td>
</tr>
<tr>
<td>2,096</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL MANUFACTURING LABOR $73,693

ESCALATION 3.7% $2,629

TOTAL $76,322
<table>
<thead>
<tr>
<th>LABOR CLASS</th>
<th>HOURS</th>
<th>RATE</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR. ENGR.</td>
<td>885</td>
<td>$20.50</td>
<td>$18,143</td>
</tr>
<tr>
<td>SYSTEM ENGR.</td>
<td>2,100</td>
<td>18.00</td>
<td>37,800</td>
</tr>
<tr>
<td>DESIGN ENGR.</td>
<td>1,125</td>
<td>18.50</td>
<td>20,813</td>
</tr>
<tr>
<td>DRAFT</td>
<td>275</td>
<td>17.50</td>
<td>4,813</td>
</tr>
<tr>
<td>CHECK</td>
<td>153</td>
<td>16.00</td>
<td>2,448</td>
</tr>
</tbody>
</table>

**TOTAL ENGINEERING LABOR**

$87,126
OTHER DIRECT COST (ODC)

COSTS THAT ARE COMMONLY PROPOSED AS ODC INCLUDE ........

- SPECIAL TOOLING
- TEST EQUIPMENT
- TRAVEL
- PACKAGING & SHIPPING
- COMPUTER COST
INDIRECT COST

FAR 31.203

INDIRECT COST IS ANY COST NOT DIRECTLY IDENTIFIED WITH A SINGLE FINAL COST OBJECTIVE,
TYPES OF INDIRECT COST

- MATERIAL OVERHEAD
  (i.e. Material Handling, etc.)

- LABOR OVERHEAD
  (i.e. Manufacturing, Engineering, etc)

- GENERAL & ADMINISTRATIVE EXPENSE (G & A)
DETERMINE ANALYSIS SUPPORT

**FIRST**

- UNDERSTAND WHAT YOU ARE BUYING
- CHECK THE PROPOSAL FOR ACCURACY
- DO YOU HAVE PRICING HISTORY ON FILE
- REVIEW PRICE HISTORY
- HAS THIS ITEM BEEN PURCHASED IN RECENT PAST
- IS AUDIT OR TECHNICAL NEEDED
* REQUESTING TECHNICAL OR AUDIT SUPPORT

SOME OF THE AREAS THAT MAY REQUIRE TECHNICAL SUPPORT

- QUANTITIES AND KINDS OF MATERIAL
- NUMBER OF LABOR HOURS
- LABOR SKILL MIX
- SPECIAL TOOLING, SPECIAL TEST EQUIPMENT
-SCRAP AND SPOILAGE FACTORS
- PROCEDURES

AND PROCESSES

TRENDS IN PRODUCTION EFFICIENCY

REQUEST ONLY WHEN NECESSARY.

REQUESTING TECHNICAL OR AUDIT SUPPORT
REQUESTING
TECHNICAL OR AUDIT SUPPORT

(Continue)
SOME OF THE AREAS THAT MAY REQUIRE **AUDIT** SUPPORT........

- MATERIAL COST
- LABOR RATES (Absent FPRA/FPRR)
  - INDIRECT COST RATES ("")
  - COST OF MONEY ("")
  - ESCALATION FACTORS
- OTHER FACTORS
- SYSTEMS REVIEW
DETERMINE COST REASONABLENESS

FAR 31.201-3(a)

A COST IS REASONABLE IF, IN ITS NATURE AND AMOUNT, IT DOES NOT EXCEED THAT WHICH WOULD BE INCURRED BY A PRUDENT PERSON IN THE CONDUCT OF COMPETITIVE BUSINESS.
DO NOT ASSUME

THAT A COST IS REASONABLE

JUST BECAUSE THE

CONTRACTOR HAS ALREADY INCURRED THE COST

FAR 31.201-3(a)
IF YOU CHALLENGE THE REASONABLENESS OF AN INCURRED COST, THE BURDEN OF PROOF SHALL BE ON THE CONTRACTOR TO ESTABLISH THAT THE COST IS REASONABLE.

FAR 31.201-3 (a)
THE ANALYTICAL PROCESS
### XYZ INC.

#### COST PROPOSAL

<table>
<thead>
<tr>
<th>COST ELEMENTS</th>
<th>PROPOSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATERIAL</td>
<td>$237,672</td>
</tr>
<tr>
<td>MATERIAL O/H @ 5%</td>
<td>$11,884</td>
</tr>
<tr>
<td>MANUFACTURING LABOR</td>
<td>$73,693</td>
</tr>
<tr>
<td>MFG. LABOR O/H 154.82%</td>
<td>$114,092</td>
</tr>
<tr>
<td>ENGINEERING LABOR</td>
<td>$87,126</td>
</tr>
<tr>
<td>ENGR. LABOR O/H @ 109.7%</td>
<td>$95,577</td>
</tr>
</tbody>
</table>

**SUBTOTAL** $620,544

G & A @12% $74,465

**PROFIT/FEE @ 10%** $62,054

**TOTAL PRICE** $757,063
ANALYSIS 1

TECHNICAL ANALYSIS QUESTIONED THE FOLLOWING:

PURCHASED PARTS:
- PART 123XYZ - 15 ITEMS
- PART 9632MF - 10 ITEMS

MANUFACTURING LABOR:
- GRINDING - 50 HRS.
- INSPECTION - 20 HRS.

ENGINEERING LABOR:
- DESIGN - 20 HRS.
ANALYSIS

II

DCAA AUDIT QUESTIONED THE FOLLOWING:

DIRECT MATERIAL:
PART NO. 321ZYX $25.00
UNIT PRICE
MATERIAL ESCALATION 1.2%
MATERIAL O/H 1.0%

MANUFACTURING LABOR:
INSPECTION .50
HRLY. RATE WIRING .50
HRLY. RATE
ANALYSIS II
(Continue)

ENGINEERING LABOR:

SYSTEM ENGR. $ .50 HRLY. RATE
CHECK $ .50 HRLY. RATE
ENGR. ESCALATION 1.5%
ENGR. LABOR O/H 3.2%

G&A RATE 1.5%
# EXERCISE 1:
**Determine the Recommended Material Cost**

<table>
<thead>
<tr>
<th>COST ELEMENT</th>
<th>PROPOSED RECOMMEND</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATERIAL</td>
<td>$ 231,875</td>
</tr>
<tr>
<td>MTRL ESCL. @ 2.5%</td>
<td>5,797</td>
</tr>
<tr>
<td><strong>TOTAL MATERIAL</strong></td>
<td><strong>$ 237,672</strong></td>
</tr>
</tbody>
</table>
ANSWERS TO EXERCISE 1: DETERMINE THE RECOMMENDED MATERIAL COST
PROPOSED BILL OF MATERIALS

<table>
<thead>
<tr>
<th>PART</th>
<th>U.P</th>
<th>QTY.</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>123XYZ</td>
<td>$1,125</td>
<td>100/</td>
<td>85</td>
</tr>
<tr>
<td>$112,500/</td>
<td>95,625</td>
<td></td>
<td></td>
</tr>
<tr>
<td>321ZYX</td>
<td>1,200/</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>90,000/</td>
<td>88,125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A248XS</td>
<td>175</td>
<td></td>
<td>125</td>
</tr>
<tr>
<td>21,875</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9632MF</td>
<td>150</td>
<td></td>
<td>50/40</td>
</tr>
<tr>
<td>7,500/</td>
<td>6,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**EXERCISE 2:**

**DETERMINE THE RECOMMENDED MNFG. LABOR COST**

<table>
<thead>
<tr>
<th>COST ELEMENT</th>
<th>PROPOSED RECOMMENDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNFG. LABOR</td>
<td>$ 71,064</td>
</tr>
<tr>
<td>MNFG. LABOR ESCL</td>
<td>2,629</td>
</tr>
<tr>
<td><strong>TOTAL MNFG. COST</strong></td>
<td><strong>$ 73,693</strong></td>
</tr>
</tbody>
</table>
# ANSWERS TO EXERCISE 2

**DETERMINE THE RECOMMENDED MANUFACTURING LABOR COST**

<table>
<thead>
<tr>
<th>LABOR CLASS</th>
<th>HRS.</th>
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<th>COST</th>
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</thead>
<tbody>
<tr>
<td>GRINDING</td>
<td>1,450/1,400</td>
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<td>$26,825/25,900</td>
</tr>
<tr>
<td>POLISHING</td>
<td>1,270</td>
<td>18.50</td>
<td>23,495</td>
</tr>
<tr>
<td>WIRING</td>
<td>865</td>
<td>15.00/14.50</td>
<td>12,975/12,543</td>
</tr>
<tr>
<td>ASSEMBLY</td>
<td>366</td>
<td>15.50</td>
<td>5,673</td>
</tr>
<tr>
<td>INSPECTION</td>
<td>131/111</td>
<td>16.00/15.50</td>
<td>2,096/1,721</td>
</tr>
</tbody>
</table>

**ESCALATION** 3.7%/2.2%  

**TOTAL** $73,693/70,857
EXERCISE 3:

**DETERMINE THE RECOMMENDED ENGINEERING LABOR COST**

<table>
<thead>
<tr>
<th>COST ELEMENT</th>
<th>PROPOSED RECOMMENDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR. LABOR</td>
<td>$ 84,017</td>
</tr>
<tr>
<td>ENGR. LABOR ESCL</td>
<td>3,109</td>
</tr>
<tr>
<td><strong>TOTAL ENGR. LBR.</strong></td>
<td><strong>$ 87,126</strong></td>
</tr>
</tbody>
</table>
ANSWERS TO EXERCISE 3
DIRECT LABOR
(Engineering)

<table>
<thead>
<tr>
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<th>HRS.</th>
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<td>885</td>
<td>$20.50</td>
<td>$18,143</td>
</tr>
<tr>
<td>SYSTEM ENGR.</td>
<td>2,100</td>
<td>18.00/17.50</td>
<td>37,800/36,750</td>
</tr>
<tr>
<td>DESIGN ENGR.</td>
<td>1,125/1,105</td>
<td>18.50</td>
<td>20,813/20,443</td>
</tr>
<tr>
<td>DRAFT</td>
<td>275</td>
<td>17.50</td>
<td></td>
</tr>
<tr>
<td>CHECK</td>
<td>153</td>
<td>16.00/15.50</td>
<td>2,448/2,372</td>
</tr>
</tbody>
</table>

ESCALATION 3.7%/2.2%

$84,017/82,521

$87,126/84,336
QUESTIONED COST DUE TO RATE:

PROPOSED BASE $ 
X QUESTIONED RATE _______ 
QUESTIONED DUE TO RATE $ 

QUESTIONED COST DUE TO BASE:

QUESTIONED BASE $ 
X ACCEPTED/RECOM. RATE _______ 
QUESTIONED DUE TO BASE $ 

TOTAL COST QUESTIONED $ 42
<table>
<thead>
<tr>
<th>COST ELEMENTS</th>
<th>PROPOSED</th>
<th>RECOMMENDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATERIAL</td>
<td>$237,672</td>
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<td></td>
<td><strong>$757,063</strong></td>
<td></td>
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XYZ INC.
COST PROPOSAL
OTHER FACTORS

ESCALATION INDICES: APPLY APPROPRIATE ESCALATION INDICES IN ALL CASES, i.e. ..DRI, INC.

COST OF MONEY/PROFIT: APPLY CURRENT TREASURY INTEREST RATE IN THE COST OF MONEY CALCULATION AND USE THE WEIGHTED GUIDELINE MODEL.

PNM: KNOW THE STATUS OF THE KTR’S BUSINESS SYSTEMS, I.E., PURCHASING, ACCOUNTING, COMPENSATION, ESTIMATING, ETC.
SUMMARY CHECK LIST

< PERFORM PRICE ANALYSIS OR COST ANALYSIS (Remember the preferred method)

< REVIEW PROPOSAL FOR ADEQUACY

< REQUEST AUDIT OR TECH ASSISTANT ONLY WHEN NECESSARY (Check file for history)

< COMPUTER SPREADSHEET (Apply rates to...
REFERENCES

**FAR PART**

15.402 PRICING POLICY
15.403 OBTAINING COST OR PRICING DATA
15.404 PROPOSAL ANALYSIS
15.405 PRICE NEGOTIATION
15.406 DOCUMENTATION
31.201-3 DETERMINING REASONABLENESS
31.202 DIRECT COST
31.203 INDIRECT COST

CONTRACT PRICING REFERENCE GUIDE