FEMA

PRICING GUIDE FOR RECIPIENTS AND SUBRECIPIENTS UNDER THE UNIFORM RULES (2 C.F.R. PT. 200)

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Introduction and Purpose

Cost or price analysis is an essential component of the procurement process associated with procurements under Federal disaster assistance, despite being overlooked due to the brief discussion afforded to it under the Federal procurement standards. Few procurement topics solicit as many collective sighs of frustration and dread as cost or price analysis. Frequently relegated to the mystical realm of accountants, pricing analysts, or other mathematically inclined, and (allegedly) well compensated individuals, cost or price analysis has frequently and preemptively challenged many, with its perceived maze of complexity and necessary recall of long lost mathematical skills last seen, much less used, in grade school. This often times results in a complete failure to perform cost or price analysis, or at the very least, results in a failure to perform the required analysis correctly.

With this in mind, this Guide is written with the specific intent of assisting FEMA's recipients and subrecipients (formerly referred to as "grantees" and "subgrantees," and now collectively referred to as "non-federal entities" or "NFEs") with identifying and executing basic contract cost or price analysis requirements associated with procurements under Federal disaster assistance grants. Accordingly, this Guide will identify and discuss commonly used general standards and techniques that various entities at all levels of government and industry use to meet the pricing requirements found within the *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*[1] (hereinafter referred to as the "Uniform Rules" or "Supercircular").

Note that while this Guide is intended to be a tool in assisting NFEs with identifying and applying some of the commonly available cost or price analysis techniques to their procurements, it is not intended to provide an in-depth discussion of either the specific methods or techniques addressed in the Guide or every available method or technique associated with cost or price analysis.

This Guide is limited in its purpose to providing strictly general information about cost or price analytical methods and techniques, and accordingly, is not intended to be, nor should it be, considered legal advice.

Everyone may use this Guide as a resource in assisting with cost or price analysis requirements under the Federal procurement standards, however, ***FEMA makes no guarantee that the use of this Guide will automatically result in the full reimbursement of eligible expenses. When confronted with an actual, real-world legal issue, please direct your legal concerns to your servicing legal counsel for immediate assistance and advice***.

The guidance provided herein is directed towards and applicable to Indian Tribal governments acting as recipients and/or subrecipients and NFE's *other than* states (hereinafter, simply referred

[1] See 2 C.F.R. 200.

to as “NFEs”). The guidance provided by this document does not strictly apply to State procurements using Federal disaster assistance funds (although, it may be used as amplifying guidance where a State requires additional information in conducting its procurement and State law is silent on the issue). Pursuant to 2 C.F.R. § 200.317, States (to include, state agencies and instrumentalities, exclusive of local governments[2]) must follow the same policies and procedures they use for procurements from their non-Federal funds. In other words, States will follow and apply their own cost or price analysis requirements and standards to their procurements associated with Federal disaster assistance awards.

<u>Policy</u>:

NFEs must evaluate pricing using either cost or price analysis in order to ensure that required supplies and/or services are procured at fair and reasonable prices. The current Federal procurement standards set by the Uniform Rules states that NFEs must perform *some form* of cost or price analysis in connection with every federally assisted procurement action, including contract modifications that exceed the simplified acquisition threshold, which is currently set at $150,000.[3] (Emphasis added) The Department of Homeland Security (“DHS”) Office of Inspector General (“OIG”) has frequently opined that the absence of cost or price analysis in contracting increases the likelihood of unreasonable costs and misinterpretations, or errors in pricing. Accordingly, failure to conduct an appropriate cost or price analysis may jeopardize the possibility for full reimbursement of otherwise eligible expenses.

However, despite imposing this requirement upon NFE’s to perform a cost or price analysis, the current Federal procurement standards are curiously silent as to what *form* such a cost or price analysis should take, beyond stating that “the method and degree of analysis is dependent upon the facts surrounding the particular procurement situation.”[4] Due to the lack of additional guidance in the current (and superseded) regulations, NFEs often inquire as to what techniques or steps they must perform in order to meet the regulatory requirements to conduct a price or cost analysis.

[2] 2 C.F.R. § 200.90.
[3] See, 2 C.F.R. § 200.88. Simplified acquisition threshold means the dollar amount below which a NFE may purchase property or services using small purchase methods. NFEs adopt small purchase procedures in order to expedite the purchase of items costing less than the simplified acquisition threshold. The simplified acquisition threshold is set by the Federal Acquisition Regulation at 48 CFR Subpart 2.1 (Definitions) and in accordance with 41 U.S.C. 1908. Please note that the dollar value associated with the simplified acquisition threshold is periodically adjusted for inflation.
[4] 2 C.F.R. § 200.323(a).

When posed questions concerning the appropriate methods and techniques to use for cost or price analysis, beyond the limited information provided in the Federal procurement standards, FEMA's response has traditionally fallen within one of the following three general categories:

(1) As with all Federal procurement standards imposed by the *Uniform Rules*, NFE's must ensure that their procurements comply with any cost or price analysis requirements imposed by their own local procurement laws or regulations, any and all state (and/or tribal government, where applicable) procurement laws or regulations, as well as ensure that those laws and regulations are consistent with the Federal procurement standards found in the *Uniform Rules* at 2 C.F.R. §§ 200.318 – 326.[5] In other words, NFEs must ensure that they conform to and comply with, any local, state, and/or tribal procurement laws and regulations pertaining to the specific use and application of cost or price analysis, in order to also meet the Federal procurement standards requiring cost or price analysis for all procurements above the simplified acquisition threshold of $150,000 – unless a more stringent requirement exists.

a. If for example, local procurement regulations impose a mandatory cost or price analysis on transactions valued over $50,000, the NFE would have to perform cost or price analysis (whichever is appropriate under the local procurement requirements) at all dollar thresholds in excess of $50,000, even though the Federal standard establishes a $150,000 threshold. This is so because the Federal standards, as applied to NFEs other than States, establish a minimum floor for certain identified procurement standards. In other words, in situations where a direct conflict in applicable laws exists, the NFE must comply with the more stringent standard.

b. Conversely, if the local procurement regulation imposes a less stringent dollar threshold applying mandatory cost or price analysis only to transactions over $200,000, the NFE could not utilize the less stringent local dollar threshold of $200,000, but would instead be required to utilize the more stringent Federal dollar threshold for the application of cost or price analysis found in the *Uniform Rules*.

(2) If cost or price analysis is not addressed by local, state, or tribal (where applicable) procurement laws and regulations, FEMA has previously provided very limited guidance on "cost analysis" concerning only debris removal contracts.[6]

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[5] Previously found at 44 C.F.R. § 13.36(b) – (i) for local and tribal governments; and 2 C.F.R. §§ 215.40-48 for Non-profit organizations.

[6] FEMA Recovery Fact Sheet, RP9580.201, *Debris Contracting Guidance*, Attachment 1: Debris Removal Contract Cost Analysis, dated 9/27/10. As of 1 January 2016, FEMA's Public Assistance Branch has replaced its 9500 series policies with FP 104-009-2, *Public Assistance Program and Policy Guide*. The *Policy Guide* does not address cost or price analysis beyond referencing 2 C.F.R. pt. 200. The 9500 series policies, however, will remain in effect for

(3) If cost or price analysis issues are raised concerning situations involving anything other than debris removal contracts and no local, state or tribal guidance is provided, FEMA typically utilizes guiding principles drawn from the Federal Acquisition Regulations ("FAR") (which apply to Federal government procurements) as a tool to analyze the adequacy of the cost or price analysis conducted by the NFE in connection with its procurement.[7]

Accordingly, amplifying guidance is required to supplement the limited information provided by 2 C.F.R. Part 200, and includes recommended deference and documented application of local, tribal, and state cost and pricing rules and requirements, where applicable. Furthermore, where useful, this Guide discusses the most common forms of cost or pricing techniques used by prospective applicants, to include procedures described in the Federal Acquisition Regulations ("FAR"). While not strictly applicable in this context, the FAR provides useful guiding principles on cost or price analysis that FEMA (or NFEs) may consult in conducting its reviews of NFE cost or price analyses.

The Federal Procurement Standards under the Uniform Rules.

The current Federal procurement standards, to include the revised cost or price analysis requirements found at 2 C.F.R. § 200.323, went into effect on December 26, 2014, with the implementation of the *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*. Prior to December 26, 2014, there were technically two cost or price analysis standards in place, each dependent upon the type of entity that was receiving Federal disaster assistance. 44 C.F.R. § 13.36(f) dealt with cost or price analysis requirements for procurements affecting local and Indian tribal governments, while 2 C.F.R. § 215.45 established the cost or price analysis standards applicable to Institutions of Higher Education (IHE), Hospitals, and other private non-profit organizations ("collectively referred to as "PNPs").

Of these three cost or price analysis standards, 44 C.F.R. § 13.36(f) and 2 C.F.R. § 200.323 are the most similar. When drafting the new Federal procurement standards, the Office of Management and Budget ("OMB") essentially utilized the cost or price analysis standard found at 44 C.F.R. § 13.36(f) as its template for the new cost or price analysis standards. Accordingly, those familiar with the old cost or price analysis requirements from § 13.36(f) will find comfort

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all projects associated with disasters or emergencies declared prior to 1 January 2016. Accordingly NFEs may use RP9580.201 as amplifying guidance as to how to apply cost analysis to debris removal contracts, in conjunction with the information provided in this Guide.

[7] See, 48 C.F.R. Vol. 1, Chapter 1, Parts 1-51, Federal Acquisition Regulation (e.g. "FAR"); or http://farsite.hill.af.mil for a streamlined website for the FAR and the various Agency FAR supplements – select for example, FAR part 15, subpart 15.4 "Contract Pricing." While not strictly applicable to the Federal procurement standards found at 2 C.F.R. pt. 200, the FAR incorporates many commonly used techniques of cost or price analysis, and can be useful in assisting NFEs conduct their own cost or price analyses, where no additional amplifying guidance is available or applicable.

in that the new standard is much more permissive than the old. The new requirements retained much of the same language, although some of the more restrictive language and guidance was removed.

While the new cost or price analysis standards found at 2 C.F.R. § 200.323 are the default standards going forward under the *Uniform Rules*, the cost or price analysis standards that preceded it are still in effect under certain situations. For example, the old standards are still in effect for declarations (and projects associated with awards and subawards associated with those declarations regardless of start date) issued prior to December 26, 2014, as well as for projects that are initiated pursuant to the *Uniform Rules*' recognized "grace period."[8] Accordingly, knowledge of both the old and the new standards will remain important to NFEs for the foreseeable future and both are briefly discussed below.

The *Uniform Rules*' Cost or Price Analysis Standards – 2 C.F.R. § 200.323.

The regulation at 2 C.F.R. § 200.323 includes the following contract cost or price requirements:

> (a) The non-Federal entity must perform a cost or price analysis in connection with every procurement action in excess of the Simplified Acquisition Threshold, including contract modifications.[9] The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, the non-Federal entity must develop an independent estimates before receiving bids or proposals.[10]
>
> (b) The non-Federal entity must negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where cost analysis is performed.[11] To establish a fair and reasonable profit, consideration must be given to the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for work.[12]
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> (c) Costs or prices based on estimated costs for contracts under the Federal award are allowable only to the extent that costs incurred or cost estimates included in

[8] See, 2 C.F.R. § 200.110.
[9] Cost or price analysis is required for all procurements exceeding the Simplified Acquisition Threshold. The Simplified Acquisition Threshold is currently set at $150,000, but is subject to periodic revision.
[10] Must conduct an independent cost estimate in all situations regardless of dollar threshold. A variety of methods exist to meet this requirement. For example, an independent cost estimate can be conducted utilizing can be established through the use of market research that identifies the median price for a particular type of supply or service.
[11] Cost analysis is generally performed for cost-reimbursement type contracts, Architecture & Engineering contracts, or professional services contracts, for example.
[12] In other words, the more difficult or complex the required work is, the more likely a NFE can justify higher profits as fair and reasonable within the overall context of the procurement.

> negotiated prices would be allowable for the non-Federal entity under Subpart E—Cost Principles of this part.[13] The non-Federal entity may reference its own cost principles that comply with the Federal cost principles.
>
> (d) The cost plus a percentage of cost and percentage of construction cost methods of contracting must **not** be used.[14] (Emphasis added. These contracting methods must never be used.)

These current requirements, while substantially similar to earlier cost or price analysis requirements, differ in certain regards to those found previously at 44 C.F.R. § 13.36(f), which, as earlier stated, was used by OMB as the template for the new Uniform standards:

> (1) Grantees and subgrantees must perform a cost or price analysis in connection with *every* procurement action including contract modifications.[15] The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, *grantees* must make independent estimates before receiving bids or proposals.[16] *A cost analysis must be performed when the offeror is required to submit the elements of his estimated cost, e.g., under professional, consulting, and architectural engineering services contracts.*[17] *A cost analysis will be necessary when adequate price competition is lacking, and for sole source procurements, including contract modifications or change orders, unless price reasonableness can be established on the basis of a catalog or market price of a commercial product sold in substantial quantities to the general public or based on prices set by law or regulation.*[18] *A price analysis*

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[13] Cost principles deal with whether an expense is allowable, allocable and reasonable in nature. *See, Subpart E – Part 200—Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.*

[14] These types of contracts are strictly prohibited. They are prohibited because there is no incentive for the contractor to keep its incurred costs low due to the associated percentage of profit earned on incurred costs. There is instead a reverse incentive for the contractor to continue to increase its incurred costs in order to increase its associated profit. In other words, the higher its incurred costs, the higher the contractor's profit will be. See, PDAT Procurement Field Manual, pp. 81-83 for further discussion of Cost Plus Percentage of Cost Contracts (CPPC).

[15] Unlike the new *Uniform Rules* standards, cost or price analysis under the old standards was required at all dollar thresholds. There was no limitation based upon the Simplified Acquisition Threshold ($150,000), as there is under the new Uniform Rules.

[16] Unlike the new *Uniform Rules* standards where all NFEs are required to conduct independent cost estimates, here, 44 C.F.R. Sec. 13.36(f) only requires grantees to perform independent cost estimates. In other words, only states and Indian Tribal governments acting as grantees were required to produce independent cost estimates.

[17] While these prior examples are no longer referenced by the new procurement standards, they still remain excellent examples of what constitutes cost analysis and when to use them, particularly where, under these situations, cost reimbursement contracts are utilized. As such, they remain useful tools for recipients and subrecipients

[18] Under the previous price or cost analysis standards found at 44 C.F.R. § 13.36(f), generally speaking, cost analysis was required where inadequate price competition or sole source contracting occurred. Under the new Federal procurement standards associated with the *Uniform Rules*, this is no longer the case, as price analysis may now be used under these same circumstances, which previously required cost analysis.

> *will be used in all other instances to determine the reasonableness of the proposed contract price.*[19] (Emphasis added)
>
> (2) Grantees and subgrantees will negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where cost analysis is performed. To establish a fair and reasonable profit, consideration will be given to the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.
>
> (3) Costs or prices based on estimated costs will be allowable only to the extent that costs incurred or cost estimates included in negotiated prices are consistent with Federal cost principles (see 44 C.F.R. § 13.22). Grantees may reference their own cost principles that comply with the applicable Federal cost principles.
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> (4) The cost plus a percentage of cost and percentage of construction cost methods of contracting shall not be used.

2 C.F.R. § 215.45, which was applicable to Institutions of Higher Education (IHE), Hospitals and Other Non-Profit Organizations, provided the following:

> *Some form of* cost or price analysis shall be made and documented in the procurement files in connection with *every* procurement action.[20] *Price analysis may be accomplished in various ways, including the comparison of price quotations submitted, market prices and similar indicia, together with discounts. Cost analysis is the review and evaluation of each element of cost to determine reasonableness, allocability and allowability*.[21] (Emphasis added)

While the new *Uniform Rules* on cost or price analysis are similar to those standards that came before it, they are not entirely the same. Although the new standards are less proscriptive and excise specific guidance provided by the earlier regulations, the excised information generally represents basic tenets of cost or price analysis that are commonly used in procurement. As such, while not expressly required by the new cost or price analysis standards found in the *Uniform Rules*, the more specific information excised from the earlier cost or price analysis standards, remains useful as amplifying guidance as to when it may be appropriate to utilize cost

[19] This more proscriptive language has been removed from the new Federal procurement standards addressing cost or price analysis found at 2. C.F.R. § 200.323.

[20] Unlike the new *Uniform Rules* standards, cost or price analysis is required at all dollar thresholds, not just those procurements that exceed the Simplified Acquisition Threshold.

[21] While not specifically included in the new *Uniform Rules* standards for cost or price analysis, the examples provided here represent general concepts associated with the performance of cost or price analysis. Accordingly, the language here continues to provide useful information as to how to perform cost or price analysis and the situations in which they may arise.

(as opposed to price) analysis under the new Federal procurement standards that went into effect on December 26, 2014.

Implementing the Current Standards under the *Uniform Rules*.

The previous section compared the requirements in the new and old standards under the *Uniform Rules*. This section provides more details on cost or price analysis under the new Federal procurement standards.

(1) Contract Cost or Price: NFEs must perform a cost or price analysis in connection with every procurement action in excess of the simplified acquisition threshold, including contract modifications. 2 C.F.R. § 200.323(a) In other words, whenever a procurement exceeds the current simplified acquisition threshold, which is $150,000, the NFE must perform a cost or price analysis.

(2) Method and Degree of Analysis and Independent Estimate. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, the NFE must develop independent price or cost estimates before receiving bids or proposals. 2 C.F.R. § 200.323(a) In other words, besides the requirement to develop an independent estimate (at any dollar threshold), NFEs must determine for themselves, what the reasonable and appropriate form of analysis will take – whether that will be price or cost analysis – and the particular means of doing so. Under this scenario, the method and degree of analysis will be dictated by the complexity of the procurement and the facts and circumstances associated with it. For example, generally speaking, the less complex a procurement is, the more likely it will be reasonable and appropriate to utilize a form of price analysis to meet this requirement; while on the other hand, the more complex a procurement is, the more likely the situation will necessitate the use of a cost analysis to adequately determine a fair and reasonable price.

(3) Amplifying Guidance. FEMA provides the following amplifying guidance as to the meaning of cost or price analysis.

   a. Price Analysis. Price analysis is the most commonly used method to determine fair and reasonable price because it is less complex and time consuming than other methods. It involves the examination and evaluation of a proposed price without evaluating its separate cost elements (e.g. labor category rates, individual components of cost, etc.) and proposed profit (unless otherwise instructed to by the Uniform Rules).

i. When Used. This is the form of analysis typically used when acquiring commercial items (which are items that generally maintain similar standards or quality and differ only in price) or when using the procurement through sealed bidding method.[22]

ii. Techniques. NFEs are responsible for selecting and using whatever price analysis techniques will ensure a fair and reasonable price. NFEs may use various price analysis techniques and procedures to ensure a fair and reasonable price.[23] Examples of such techniques include, but are not limited to the following:

1. Comparing proposed prices received in response to the solicitation.[24] Normally, adequate price competition establishes a fair and reasonable price;

    a. Adequate price competition is dependent on the following:

        i. At least two responsible offerors/bidders respond to a solicitation;

        ii. Each offeror/bidder must be able to satisfy the requirements of the solicitation;

        iii. The offerors/bidders must independently contend for a contract to be awarded; and

        iv. Each offeror/bidder must submit priced offers/bids that are responsive to the expressed requirements of the solicitation.[25]

    b. If the four conditions outlined above are met, price competition is adequate unless:

[22] Under the new Federal procurement standards associated with the *Uniform Rules*, price analysis may be used in situations where adequate price competition is lacking and where non-competitive/sole source procurements exist, where price analysis techniques are available and use is appropriate. This was not the case under the previous cost or price analysis standards.
[23] See, FAR 15.404-1(b)
[24] For example, under sealed bidding, by virtue of opening each individual bid and comparing the associated prices to each other, a NFE will be considered to have conducted price analysis.
[25] See, FAR 15.403-1(c)(1)

i. The solicitation was made under conditions that unreasonably deny one or more known and qualified offerors an opportunity to compete;

ii. The low competitor has such an advantage over other competitors that it is practically immune to the stimulus of competition; and

iii. The lowest final price is not reasonable, and this finding can be supported by facts.

2. Comparing prior (historical) proposed prices and contract prices with current proposed prices for the same or similar goods or services.

   a. This scenario generally occurs where NFEs procure the same or similar supplies or services on a recurring or frequent basis, so that the prices proposed and ultimately accepted contain little variation.

   b. Changes in quantity, quality, delivery schedules, and the economy cause price variations. Each differing situation must be analyzed through trend analysis. Also ensure that the previous price was fair and reasonable. This determination must be based upon a review of the documentation contained in the previous files.

3. Comparing offers with competitively published catalog prices, published market prices, or similar indices.[26]

   a. Established Catalog Prices. The idea behind these types of prices is that a commercial demand exists and suppliers have been developed to meet that demand. This technique tries to ensure that NFEs receive at least the same price as other buyers in the market for the same or similar items. NFEs must ensure that such prices do not simply reflect

[26] Under this scenario, the key requirement is that the price lists, market prices, or similar indices, such as commercial price indexes, are published or publicly available for purposes of comparison and are not based upon internal documentation not available to the general public. This ensures that the proposed prices can be compared to actual prices paid for similar supplies or services, for what in essence is the going rate determined by the market place.

internal pricing documents and must establish the following:

i. Established catalog prices exist;

ii. The items are commercial in nature;

iii. They are sold in substantial quantities; and

iv. They are sold to the general public.

b. Established Market Prices. Similar to established catalog prices, except there is no catalog. A market price is a current price established in the usual or ordinary course of business between buyers and sellers free to bargain. These prices must be verified by buyers and sellers who are independent of the offeror.

4. Comparing proposed prices with independently developed price estimates prepared by, or on the behalf of the NFE.

a. Under this scenario, price estimates would be developed and used as the basis by which proposed prices would be evaluated against to determine whether a proposed price was fair and reasonable. In other words, the closer the proposed price is to the independently developed price estimate for the requirement, the more likely the proposed price would be considered to be fair and reasonable.

b. Verify the facts, assumptions, and judgments used. Have the estimator provide the method and data used in developing the estimate. For example, did prices come from current catalogs or industry standards? Be comfortable with the estimate before relying on it as a basis for determining a price to be fair and reasonable.

5. Comparing proposed prices with prices for the same or similar items obtained through market research. Under this scenario, a NFE performing adequate and sufficient market research in preparation for the solicitation and award of a potential contract,

can use information obtained concerning pricing for similar or identical goods and services as a basis by which to compare actually received prices submitted by offerors/bidders. *See also*, established market prices (above).

6. Prices set by Law or Regulation. Prices set by law or regulation are typically considered to be fair and reasonable. Adequately document the situation by acquiring a copy of the rate schedules set by the applicable law or regulation for your contract files. Once these schedules are obtained, verify that they apply to your situation and that the correct price is being charged.

iii. Tools for Price Analysis.

1. Competitor's Catalogs – ensure that compared catalogs are from the same time frame.

2. Newspaper Advertisements – ensure that the ad/s is/are current.

3. Government Catalogs – FEMA's Public Assistance Schedule of Equipment Rates.[27] Additionally, Federal Supply Schedules may be used for price comparison even though a NFE may not be able to fulfill its requirement through them.

4. Industrial Catalogs – for example, the National Mechanical Contractor Estimator (NMCE) is an excellent potential source for pricing mechanical items.

5. Government Price Index. Use as a comparison approach to price and cost analysis. An index can be used with historical prices to analyze, compare, and predict current prices for a specific product or service.

b. Cost Analysis. Cost analysis is the review and evaluation of the separate cost elements (i.e. labor hours, overhead, materials, etc.) and proposed profit or fee in an offeror's proposal in order to determine a fair and reasonable price. Cost analysis includes 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 differs from price analysis in that cost

[27] The Schedule of Equipment Rates is available at, https://www.fema.gov/schedule-equipment-rates.

analysis focuses on the reasonableness of each estimated cost element and adds a reasonable rate of profit/fee to arrive at the contract price.

i. When Used. This is the form of analysis typically used to establish the basis for negotiating contract prices when:

1. Using the procurement through competitive proposals method;

2. Using procurement through sealed bidding and price competition is not sufficient;

3. Any other case when price analysis, by itself, does not ensure price reasonableness; and

4. Procuring professional, consulting, and architectural engineering services contracts.

ii. Techniques. NFEs are responsible for selecting and using whatever cost analysis techniques will ensure a fair and reasonable price. While the Federal procurement standards under the Uniform Rules do not describe these techniques, if local, state or tribal (where applicable) procurement standards do identify and require the use of specific techniques, these requirements should be applied. In all other situations, examples of available techniques include, but are not limited to the following:

1. Verification of the cost or pricing data (a breakdown of costs);

2. Evaluation and verification of individual cost elements; and

   a. The elements add up to the total price;

   b. Understanding the need for each element of cost;

   c. The same thing does not appear in more than one statement of cost; and

   d. The general format compares with the breakdown for similar items or services from the same source.

3. Comparison of costs proposed for individual cost elements with previously incurred actual costs and independently developed estimates by the NFE.

iii. A Contractor's proposal should include comparisons of current estimated costs with:

1. Actual costs previously incurred;

2. The most recent cost estimate for the same or similar items or with a series of prior estimates;

3. Current cost estimates from other possible sources providing the same or similar supply or service; and

4. Independent forecasts of future costs.

iv. Tools for Cost Analysis. In addition to the tools for price analysis, NFEs may utilize the following tools for cost analysis:

1. Technical Evaluation. NFEs can use this method when evaluating offers by either price or cost analysis. While the technical evaluation is not directly related to price, it involves the NFE's assessment of quantitative and qualitative factors which influence the offered price. Technical evaluations allow the NFE to evaluate the functions that cause costs. Technically trained and experienced personnel are in the best position to assist in the analysis of hours, quantities, tooling, testing, head counts, productivity, and similar factors.

2. Accounting Records can show the cost of a job, but are of limited value in determining reasonableness. Technical skills and judgments are required to determine reasonableness and necessity of those costs.

3. When a technical evaluation is required prior to negotiations, it should address such things as:

    a. An estimate of necessary labor-hours with an indication as to where adjustments are desirable;

    b. Reasonableness of proposed material type, quantity, and necessity;

    c. The need for acquiring equipment and which equipment should be considered as general purpose or unique to the performance of a particular contract;

    d. The possibility and availability of recipient or subrecipient property;

    e. Number, location, and need for any recipient or subrecipient funded trips by contractor personnel;

    f. A summary statement as to whether or not labor, material, travel, and other cost elements are reasonable along with the evaluator's rationale.

4. Auditor Pricing Support. Provides verification of proposed costs and an examination of the vendor's estimates; for example, certain categories of materials, salaries of contractor personnel, or the actual cost elements may have contributed to an overhead rate. The auditor should also tell the NFE of all prohibited costs included in the contractor's proposal, as determined by the Uniform Rules Cost Principles, or cost principles applicable under the local, state and/or tribal procurement policies.

c. Negotiation of Profit. NFE's must negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where a cost analysis is performed. To establish a fair and reasonable profit, consideration must be given to:

    i. The complexity of the work to be performed;

    ii. The risk borne by the contractor;

iii. The contractor's investment;

iv. The amount of subcontracting;

v. The quality of the contractor's record of past performance; and

vi. Industry profit rates in the surrounding geographical area for similar work.[28]

d. Cost Plus Percentage of Cost Contracts. NFEs are prohibited from using the cost plus percentage of cost and percentage of construction cost (also referred to as "CPPC") methods of contracting. 2 C.F.R. § 200.323(d)

i. FEMA considers a CPPC contract to be a contract containing some element that obligates the NFE to pay the contractor an amount (in the form of either profit or cost), undetermined at the time the contract was made, to be incurred in the future, and based on a percentage of future costs. The inclusion of an overall contract ceiling price (vice a cap that specifically addresses the profit) does not make these forms of contracts acceptable.[29]

ii. This type of contract is prohibited because there is no incentive for the contractor to keep its incurred costs low. Instead, there is a reverse incentive for the contractor to continue to incur additional costs in order to continue to drive the contractor's percentage of cost up. In other words, increased spending by the contractor will yield higher profits. Consequently, this type of contract is most beneficial for a contractor, but less than ideal for an Applicant who may incur unnecessary costs up to

[28] 2 C.F.R. § 200.323(b)

[29] For example, all cost reimbursement type contracts generally include an overall contract cost ceiling that the contractor exceeds at its own risk. The inclusion and existence of such an overall cost ceiling, however, does not insulate a NFE from the possible adverse ramifications of the use of a CPPC contract. Compare and contrast this situation to one where not only does the cost reimbursement type contract include an overall contract cost ceiling, but also includes a cost ceiling or cap associated with the prospective profit tied to the contractor's actual incurred costs. Under this scenario, the NFE places a cap on the potential profit to be earned by the contractor on its actual incurred costs. For example, contractor is to receive 10% of actual incurred costs as profit, but the contract caps the potential profit at $40,000 on a $1 million dollar contract. Here, no matter how much the contractor incurs in actual costs, its associated profit will never exceed $40,000. Accordingly, there is no longer an inverse incentive for the contractor to continue to increase its actual incurred costs in order to continuously increase its profit. This situation is different from the aforementioned scenario involving only an overall contract cost ceiling, whereby the contractor can continue to increase its incurred costs and associated percentage of profit undeterred until the contract ceiling is reached, with no guarantee that the contract requirements are met when the overall contract ceiling is reached.

and including the contract cost ceiling, but may never receive the full benefit of the bargained for contract.

iii. Accordingly, FEMA will use the following four-part analysis to determine if a certain contract is a prohibited cost plus percentage of cost or percentage of construction cost contract:

1. Payment is made on a pre-determined percentage rate;

2. The pre-determined percentage rate is applied to actual performance costs;

3. The contractor’s entitlement is uncertain at the time of contracting; and

4. The contractor’s entitlement increases commensurately with increased performance costs.

iv. The prohibition against a cost plus percentage of cost and percentage of construction cost also applies to subcontracts of the contractor cases where the prime contract is a cost-reimbursement type contract or subject to price redetermination.[30]

e. Estimated Costs. Costs or prices based on estimated costs for contracts under the FEMA award are allowable only to the extent that costs incurred or cost estimates included in the negotiated prices would be allowable for the NFE under the Federal cost principles at 2 C.F.R. Part 200, subpart E. The Cost Principles identify and discuss what costs are allowable (permissible), allocable (associated with the contract), and reasonable (self-explanatory). The NFE may also reference its own cost principles that comply with the Federal cost principles.

[30] This is the case because a CPPC type subcontract would allow the subcontractor to pass along the improperly incurred costs and profits to the prime contractor, which in turn would be allowed under the cost-reimbursement type contract to recover the subcontractor costs under its own cost-reimbursement contract.

PRICING EXAMPLES

Price Analysis Examples: Note, scenarios are intended to identify cost or price analysis principles, and do not address other required Federal procurement standards that may apply.

I. **Adequate Price Competition:**

1. **Review**: This condition exists when two or more responsible offerors compete independently and submit proposals deemed responsive to a solicitation, and there is no evidence that competition was restricted or that the lowest price is unreasonable. *See also*, pg. 11, above.

2. **Proper Pricing**:

   a. Independent cost estimate - $500,000.

   b. Invitation for Bids (IFB) issued for school construction project.

   c. Award is to be made to the lowest priced, responsive and responsible bidder.

   d. Four bids were received in response to the IFB:

Bidder	**Price**
A	$510,000
B	$550,000
C	$495,000
D	$495,001

   e. All bids were reviewed and determined to be responsive at the time of bid opening.

   f. Award – Award is properly made to Bidder C as it submitted the lowest priced, responsive bid and was determined to be responsible (prior to contract award). Adequate price competition exists in this scenario by virtue of the receipt and comparison of four independently and competitively priced bids.

3. **Improper Pricing**:

   a. Identical Invitation for Bids (IFB) issued for school construction project.

   b. However, instead of receiving four bids, only one bid is received, from Bidder A.

Bidder	Price
A	$510,000
B	Declined to Bid
C	Declined to Bid
D	Declined to Bid

c. Bidder A's bid is reviewed and determined to be responsive at the time of bid opening.

d. Award – While award may go to Bidder A, where Bidder A is the only prospective contractor to submit a bid, the price cannot be determined to have been based on *adequate price competition*. There is no adequate price competition under this scenario because only one price was submitted and no competitive comparison is possible. Accordingly, a different method of price analysis is required to determine fair and reasonable pricing.

II. **Price Based Upon Previous Purchases:**

1. **Review**: Changes in quantity, quality, delivery schedules, and the economy can cause price variations. Each differing situation must be analyzed through trend analysis. Also ensure that the previous price was fair and reasonable. This determination must be based upon a physical review of the documentation contained in the previous files.

2. **Proper Pricing**:

a. Independent cost estimate: $1,000,000.

b. IFB issued for 1000 portable generators.

c. Award is made to the lowest priced, responsive, responsible bidder.

d. One bid was received in response to the IFB.

Bidder	Price
A	$985,000
B	Declined to Bid
C	Declined to Bid
D	Declined to Bid

e. The contracting authority had previously placed an order for 1,000 generators in Purchase Order ("PO") #5157. Review of the PO reveals the following:

i. The award price was $985 for each generator.

ii. The vendor was Bidder A.

iii. The order was placed six months previously.

iv. Four responses were previously received, ranging in unit price from $985 to $1,005 and price was previously determined to be fair and reasonable based on this competition.

f. No major fluctuations in the generator industry have occurred since the previous purchase.

g. Considering the circumstances of each requirement, Bidder A’s price may be determined fair and reasonable based on the recent previously competitive purchases.

3. **Improper Pricing**:

a. Identical situation and response as the above scenario.

b. The only known previous purchase, which is also six months old, reveals the following:

i. Award was made to Bidder A for $985 per generator, with adequate price competition cited to as the basis for a fair and reasonable price determination.

ii. However, upon closer inspection of the contract files, no bids other than Bidder A’s bid were in fact submitted to the contracting activity. Therefore, the earlier award did not involve adequate price competition supporting a fair and reasonable price determination.

Accordingly, award cannot yet be made to Bidder A, as it is impossible to determine price reasonableness of the previous purchase. While the previous price paid was identical to the instant price, the previous price was not accurately determined to be fair and reasonable because competition did not, in fact, exist. Therefore, some other form of pricing must be used in the instant case.

III. Price Based on Published Catalogs or Price Lists:

1. **Review**: The idea behind catalog prices is that a commercial demand exists and suppliers have been developed to meet that demand. Applicants attempt to ensure that they get at least the same price as other buyers in the market for these items. Efforts should be taken to ensure that the catalog is not simply an internal pricing document. Accordingly, establish catalog prices are dependent on the following: (1) established catalog prices exist; (2) the items are commercial in nature; (3) they are sold in substantial quantities; and (4) they are sold to the general public.

2. **Proper Pricing**:

    a. Independent cost estimate: $1,000,000.

    b. RFP issued for 1,000 portable generators.

    c. Award is made to the offeror whose offer represents the "best value" to the Applicant, in accordance with, the evaluation criteria established in the RFP.

    d. Three offers are received.

Offeror	Price
A	$985 per unit
B	$1000 per unit
C	$1010 per unit

    e. Offeror A submitted the lowest priced offer and states that their price of $985 per unit is published in the firm's current public sales catalog and attaches an electronic copy of the respective page, which accurately reflects a price of $985 per generator.

    f. Upon evaluation, Offeror A was awarded the contract.

    g. Award is rightly made to Offeror A, as its submitted price was determined to be fair and reasonable because it was in accordance with its published catalog price.

3. **Improper Pricing**:

    a. Identical situation and response.

b. Offeror A submitted the lowest priced offer and states that its submitted price conforms to its current internal sales pricing list, which is not available to the public at large.

c. Upon evaluation, Offeror A was awarded the contract.

d. Award should not be made based on Offeror A's submitted price because its price cannot be determined fair and reasonable on the basis of a published catalog or price list. Based on the information available, the price list in question appears to be an internal pricing document that does not accurately reflect the price at which the requested generators are normally sold to the general public.

IV. <u>Established Market Prices</u>:

1. **<u>Review</u>**: These prices are based on the same principle as catalog prices, except that there is no catalog. A market price is a current price established in the usual or ordinary course of business between buyers and sellers free to bargain. These prices must be verified by buyers and sellers who are independent of the offeror. If the NFE does not know the names of other commercial buyers and sellers, the NFE may obtain this information from the offeror.

2. **<u>Proper Pricing</u>**:

a. Independent cost estimate: $1,000,000.

b. RFP issued for 1,000 portable generators.

c. Award is made to the offeror whose offer represents the "best value" to the Applicant, in accordance with, the evaluation criteria established in the RFP.

d. Three offers are received.

	Price
A	$985 per unit
B	$1000 per unit
C	$1010 per unit

e. Offeror A states that the price they submitted is the "going rate" for the type of generator requested. As evidence, they submit invoices from several other sales, similar in size and scope, which demonstrate an identical price per unit.

f. Award is made to Offeror A on the basis that it offers the best value to the Applicant based on the evaluation criteria.

g. Award is rightly made to Offeror A and the price may be determined fair and reasonable based on established market prices.

3. **Improper Pricing**:

   a. Identical situation as above.

   b. Offeror A is unable to produce any record of commercial sales and can only locate one source for the generators.

   c. Award should not be made without further analysis, as price cannot be determined to be fair and reasonable based on established market price. This does not appear to be a commercial item sold in substantial quantities to the general public.

V. Prices Set by Law or Regulation:

1. **Review**: Prices set by law or regulation are determined to be fair and reasonable. NFEs should acquire a copy of the rate schedules set by the applicable law or regulation. Once these schedules are obtained, verify that the rates apply to the situation and that the charges are the correct price. For utility contracts, this policy applies only to prices prescribed by an effective independent regulatory body.

2. **Proper Pricing**:

   a. Independent cost estimate: $165,000 for 8,250 cubic yards of refuse at $20 per cubic yard.

   b. IFB issued for temporary refuse collection and delivery to, and storage at a remote transfer site for a period of three months.

   c. Four bids were received. The bid from Bidder A was for a price of $150,562.50 or $18.25 per cubic yard.

Bidder	Price per Cubic Yard	Total Price
A	$18.25	$150,562.50
B	$19.00	$156,750.00
C	$20.00	$165,000.00
D	$22.50	$185,625.00

d. The local utility regulatory commission has set refuse collection rates based on mileage from City Hall for a radius which includes the transfer site. (The regulated rate for the site is $18.25 per cubic yard)

e. Award is made to Bidder A and the price was determined to be fair and reasonable, based on the local utility regulatory commission's rate schedule for refuse collection.

3. **Improper Pricing:**

a. Identical Situation as above.

b. The local utility regulatory commission has set refuse collection rates for a radius 30 miles away from City Hall with the highest rate being $18.25 per cubic yard at the 30 mile point.

c. The transfer site is 50 miles from City Hall, and unaccounted for in the local utility regulatory commission rates.

d. Award should not be made without further analysis, because refuse collection prices for the area in questions (the transfer site) are not controlled by law or regulation.

VI. Prices Based on Comparison with a Valid Recipient or Subrecipient Estimate:

1. **Review**: Verify the facts, assumptions and judgments used. Have the estimator give the method and data used in developing the estimate. For example, did prices come from current catalogs or industry standards? Be comfortable with the estimate before relying on it as a basis for determining a price to be fair and reasonable.

2. **Proper Pricing**:

a. RFP issued for 1,000 feet of fiber optic cabling, estimated to cost $220.00 per foot for a total estimated cost of $220,000.

b. Three responses are received, as follows:

Offeror	Price per Foot	Total Price
A	$215	$215,000
B	$220	$220,000
C	$230	$230,000

c. The subrecipient estimate must be used for price analysis in this case as all other forms of price analysis have failed.

d. The subrecipient contacts the office responsible for the subrecipient's estimate and learns the following:

   i. The fiber optics are to be used for the new replacement High School and the subrecipient's engineer consultant provided the figure of $220.00 per foot.

   ii. The engineer consultant stated that this figure came from the current issue of Fiber Optics and You Magazine, a trade journal; and the same price is currently used in local Corps of Engineers contracts for which the engineer consultant has received a copy.

   iii. The Corps of Engineers contract number and a copy of the trade journal are provided to the subrecipient.

e. Award is made to Offeror A, and the price is determined to be fair and reasonable through comparison with the validated subrecipient estimate.

3. **Improper Pricing**:

   a. Identical situation, with all other forms of price analysis failing to provide a valid pricing basis.

   b. Upon contacting the office responsible for the estimate, the subrecipient learns the following:

      i. The engineering consultant had used this figure in a recent construction estimate and when questioned, was fairly certain this was the price that had been paid in a recent contract, but the consultant could not remember the contract number, when it was accomplished, or exactly what it was for.

ii. Since the engineering consultant had provided the price, the office generating the estimate had simply passed it on to contracting, as the engineering consultant is considered an expert in fiber optic cabling.

c. Award should not have been made without further analysis, as the estimate (pricing basis) cannot be validated and therefore cannot be used to determine a fair and reasonable price.

<u>Cost Analysis Examples</u>: Note, scenarios are intended to identify cost or price analysis principles, and do not address other required Federal procurement standards that may apply.

<u>I. Limited Cost Analysis</u>:

1. **<u>Review</u>:** This scenario involves situations where a NFE decides not to evaluate all elements of cost in conducting its cost analysis. Instead, the NFE limits its cost analysis to certain specified elements of cost in order to maximize its effective use of time and resources. However, the same principles identified below for limited cost analysis, may be used for full cost analysis where all elements of cost are evaluated to determine whether a fair and reasonable price is obtained.

2. **<u>Proper Cost Analysis</u>:**

    a. Independent Cost Analysis: See, Figure 2 on page 30.

    b. RFP issued for construction of two concrete ramps estimated to cost a total of $32,106.

    c. Three responses are received as follows:

Offeror	**Price**
A	$35,000 (Lump Sum)
B	$40,000 (Lump Sum)
C	$42,000 (Lump Sum)

    d. Detailed cost estimates are obtained from the subrecipient and the contractor (see Figures 1 and 2, p. 30).

e. Negotiation results in a compromise figure of $34,000 based on revised material costs.

f. File is documented to fully explain how the negotiated price was established.

3. **<u>Improper Cost Analysis</u>:**

a. Identical RFP and response.

b. Contractor provides a cost breakdown delineating total cost for labor, material, profit, and overhead, and offers a voluntary price reduction resulting in a proposal of $34,000.

c. The subrecipient estimator concurs in this price and forwards a Purchase Request to decrease funds to the amount of $34,000.

d. Award is made and the file is documented to show that price reasonableness is based on the subrecipient's acceptance of the voluntary price reduction offered by the contractor.

e. This is improper because nothing has been done to ensure the price is actually fair and reasonable.

Figure 1: Contractor Cost Estimate – Construction of 2 Concrete Ramps

Labor Category	Est. # of Hours	Hourly Rate	Est. Cost
Carpenter	40 hours	$ 17.50	$ 700.00
Concrete Mason	100 hours	$ 20.00	$ 2,000.00
Apprentices	140 hours	$ 10.00	$ 1,400.00
Laborers	560 hours	$ 7.00	$ 3,920.00
Project Manager	140 hours	$ 25.00	$ 3,500.00
		TOTAL	$ 11,520.00

Material Category	Quantity	Price	Est. Cost
Concrete	140 cu. yd.	$ 55.00	$ 7,700.00
Reinforcing Rods	560 units	$ 10.00	$ 5,600.00
Wood	80 units	$ 7.00	$ 560.00
		SUB-TOTAL	$ 13,860.00
Overhead (Including G&A) @ 15%			$ 3,807.00
Profit @ 10%			$ 2,918.70
		TOTAL	$ 32,105.70

Figure 2: Subrecipient Cost Estimate – Construction of 2 Concrete Ramps

Labor Category	Est. # of Hours	Hourly Rate	Est. Cost
Concrete Mason	100 hours	$ 25.00	$ 2,500.00
Mason’s Apprentice	50 hours	$ 12.50	$ 625.00
Carpenter	50 hours	$ 20.00	$ 1,000.00
Apprentices	25 hours	$ 10.00	$ 250.00
Laborer	840 hours	$ 5.00	$ 4,200.00
Project Manager	150 hours	$ 30.00	$ 4,500.00
		TOTAL	$ 13,075.00

Material Category	Quantity	Price	Est. Cost
Concrete Mix	200 bags	$ 5.00	$ 1,000.00
Sand	10 loads	$ 25.00	$ 250.00
Small Stone	30 loads	$ 50.00	$ 1,500.00
Reinforcing Rods	560 units	$ 10.00	$ 5,600.00
Mixer Rental	8 days	$ 150.00	$ 1,200.00
		SUB-TOTAL	$ 9,550.00
G&A @ 25%			$ 5,656.00
Other Overhead @ 10%			$ 2,262.50
Profit @ 15%			$ 4,581.56
		TOTAL	$ 35,125.31

DEFINITIONS

Actual Cost: A cost which has been incurred and can be substantiated with factual documentation.

Adequate Price Competition: This condition exists when two or more responsible offerors compete independently and submit proposals deemed responsive to a solicitation, and there is no evidence that competition was restricted or that the lowest price is unreasonable.

Allocable Cost: A cost is allocable if it is assignable or chargeable to one or more elements of work or final cost objectives (accounts, contracts, etc.) according to the relative benefits received from those objectives.

Commercial Item: Any item of supply or service that is regularly used for other than government purposes and is sold or traded in the course of conducting normal business operations.

Competition: An environment of varying dimensions relating to buy-sell relationships in which the buyer induces, stimulates, or relies on conditions in the marketplace that cause independent sellers to contend confidently for the award of a contract.

Contract: A term used to describe a variety of agreements or orders for the procurement of supplies or services.

Contract Pricing: A series of actions used to obtain, assess, verify, and adjust cost or pricing information and to record the steps taken to ascertain that prices agreed to have been determined fair and reasonable.

Cost Analysis: The evaluation of each cost element which makes up a total price. This evaluation may include obtaining certified cost or pricing data, the appropriate verification of cost data, evaluation and projection of specific cost elements to determine cost necessity, allowance for contingencies, and the basis used for allocation of overhead costs.

Cost or Pricing Data: Data consisting of all facts existing up to the time of agreement on price, which prudent buyers and sellers would expect to have a significant effect on price negotiations. Being factual, these data are types that can be verified. They do not reflect the accuracy of the contractor's judgment about estimated future costs or projection; they do, however, reflect the data upon which the contractor based his/her judgment.

Direct Cost: Any cost that is specifically identified with a particular final cost objective (contract, account, etc.) but not necessarily limited to items that are incorporated in the end product as material or labor.

Economic Price Adjustment: An alteration permitted and specified by contract provisions for the upward or downward revision of a stated contract price upon the occurrence of certain contingencies that are defined in the contract.

Established Catalog Price: A price included in a catalog, price list, schedule, or other form that (1) is regularly maintained by a manufacturer or vendor; (2) is published or made available for inspection by customers, and (3) states prices at which sales are currently or were last made to a significant number of buyers from the general public.

Fair and Reasonable Price: A price that is fair to both parties, considering the agreed-upon conditions, promised quality, and timeliness of contract performance. Although generally a fair and reasonable price is a function of the law of supply and demand, there are statutory, regulatory, and judgmental limits on the concept.

General and Administrative Expenses: Expressed normally as G&A. Indirect expenses, including a company's general and executive offices, executive compensation, the cost of staff services such as legal, accounting, public relations, financial and similar expenses, and other miscellaneous expenses related to the overall business.

Indirect Cost: Any cost not directly identified with a single final cost objective but identified with two or more final cost objectives, or with at least one intermediate cost objective. Also referred to as overhead or burden.

Price: A monetary amount given, received, or asked in exchange for property or services, expressed in terms of a single item or unit of measure for such property or services.

Price Analysis: The comparative process of evaluating total price without regard to the individual elements that make up the total price.

Reasonable Cost: A cost is reasonable if, in its nature or amount, it does not exceed what would be incurred by an ordinarily prudent person in the conduct of competitive business.