

Determining Price Reasonableness in Energy Savings Performance Contracts

Background

One of the primary responsibilities of a federal contracting officer – and indeed, of any federal employee who participates in the procurement process – is to ensure that the prices the government pays for goods and services are fair and reasonable. All branches of the government have experience in implementing traditional appropriations-funded contracts, and over the years a number of effective methods have been developed to ensure price reasonableness in these contracts. Alternative financing mechanisms such as Energy Savings Performance Contracts (ESPCs) on the other hand are a relatively new, and fundamentally different method of procuring goods and services, and as such present challenges for those who must ensure the reasonableness of the prices received. For example, in an ESPC contract it is common for a single Energy Services Contractor (ESCO) to develop a firm, fixed price proposal at about the 30% design stage. There are no multiple bids to compare, and at this level of detail it is difficult for the government to perform traditional cost analysis or to develop an independent cost estimate with which to compare the ESCO's proposal.

Because of these differences, some government agencies have struggled with how to perform timely, cost-effective price review of ESPC projects. This has been noted by audit agencies and program oversight organizations. While instances of truly excessive pricing are largely anecdotal, the perception that there is a problem is shared by many within the government. For this reason, the Federal ESPC Steering Committee authorized the formation of a Price Reasonableness Task Force, consisting of representatives from the four Armed Services, the Department of Energy, and the National Laboratories. The objectives of the Task Force were to:

- Identify the approaches agencies have used for price review in ESPC projects, and the lessons learned
- Document the options and the “best practices” in implementing those options
- Develop consensus across the various federal ESPC IDIQ programs on how price review will be performed by all going forward

Accordingly, the first action of the Task Force was to survey its members to determine their current approaches for ensuring price reasonableness in ESPC contracts. Review of the approaches submitted found a high level of agreement with each other, and with Federal Acquisition Regulation (FAR) 15.404-1, Proposal Analysis Techniques. While FAR 15.404-1 was intended to provide price reasonableness guidance in traditional multi-bid, appropriations-funded contracts, many of the techniques it specifies are also useful in ensuring price reasonableness in alternatively-financed contracts. Essentially,

each of the agencies surveyed had adapted FAR 15.404-1 for that purpose. For this reason it was decided that FAR 15.404-1 could form the basis for a consensus policy on price reasonableness.

Existing Price Reasonableness Guidance in Federal Contracting

Federal Acquisition Regulation section 15.404-1, Proposal Analysis Techniques, describes four main methods for ensuring that the prices paid under contract for goods and services are fair and reasonable. The methods are:

- **Cost realism analysis:** the process of independently reviewing and evaluating specific elements of each offeror's proposed cost estimate to determine whether the estimated proposed cost elements are realistic for the work to be performed; reflect a clear understanding of the requirements; and are consistent with the unique methods of performance and materials described in the offeror's technical proposal.
- **Price analysis.** The process of examining and evaluating a proposed price without evaluating its separate cost elements and proposed profit.
- **Cost analysis.** 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 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.
- **Technical analysis.** Review by personnel having specialized knowledge, skills, experience, or capability in engineering, science, or management of the proposed types and quantities of materials, labor, processes, special tooling, facilities, the reasonableness of scrap and spoilage, and other associated factors set forth in the proposal in order to determine the need for and reasonableness of the proposed resources, assuming reasonable economy and efficiency.

Many of the techniques provided under each of these methods apply to ESPC contracts as well, and are currently being used by agencies to ensure price reasonableness in ESPC contracts. Table 1 lists the proposal analysis techniques contained in FAR 15.404-1, and discusses the suitability of each one for ensuring price reasonableness in ESPC.

Note that the FAR does not require that all of the techniques listed in section 15.404-1 be used to determine price reasonableness. Paragraph 15.404-1 (3) states:

The contracting officer is responsible for evaluating the reasonableness of the offered prices. The analytical techniques and procedures described in this subsection may be used, singly or in combination with others, to ensure that the final price is fair and reasonable. The complexity and

circumstances of each acquisition should determine the level of detail of the analysis required.

Recommendations

Contract Officers should use FAR 15.404-1 as their primary guidance for ensuring price reasonableness in ESPC. In selecting the technique to be used to make the price reasonableness determination, consider the applicability of each technique to ESPC, as outlined in Table 1. The technique employed in each case will of course depend also on the particular mix of ECMs to be installed. For common ECMs, an agency may decide to compare the proposed pricing to previously-awarded contracts and/or parametric costing information developed by the agency itself or other organizations. Less-common ECMs such as geothermal heat pumps may require assistance from national laboratories or other experts. Agencies with available funding and access to expertise may also choose to perform independent government estimates as necessary.

Table 1: FAR 15.404-1, Proposal analysis techniques

Proposal Analysis Technique	Comments
Price Analysis: the process of examining and evaluating a proposed price without evaluating its separate cost elements and proposed profit.	Overall, this technique is generally applicable to ESPC, and is commonly employed. However, some individual techniques do not apply due to the nature of ESPC.
(i) Comparison of proposed prices received in response to the solicitation.	Not applicable to ESPC, since only one firm, fixed price proposal received by a single ESCO
(ii) Comparison of previously proposed prices and previous Government and commercial contract prices with current proposed prices for the same or similar items.	Applies to ESPC, however, must be performed carefully to ensure that the previously contracted work has nearly identical scope, and that the prices include the same or similar cost elements. Prices must also be adjusted for location and general inflation.
(iii) Use of parametric estimating methods/application of rough yardsticks (such as dollars per pound or per horsepower, or other units) to highlight significant inconsistencies that warrant additional pricing inquiry	Applies to ESPC. Again, however, developing parametric estimating methods (price benchmarks) requires careful attention to detail to ensure similarity of scope. Prices must also be adjusted for location and continually updated to account for general price inflation.
(iv) Comparison with competitive published price lists, published market prices of commodities, similar indexes, and discount or rebate arrangements	Applies to ESPC. An example would be the use of R.S. Means cost handbooks.
(v) Comparison of proposed prices with independent Government cost estimates.	Some organizations, notably the Army Corps of Engineers, routinely develop IGEs for ESPC projects. Where funding and expertise are available for development of IGEs, they can certainly be used to ensure price reasonableness in ESPC.
(vi) Comparison of proposed prices with prices obtained through market research for the same or similar items.	Applies to ESPC. Similar to item (iv) above.
(vii) Analysis of pricing information provided by the offeror.	Could apply to ESPC.
Cost analysis: 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 the application of judgment to determine how well the proposed costs represent what the cost of the contract	The technique is generally applicable to ESPC, although less so than price analysis due to the level of detail provided in ESPC price proposals.

should be, assuming reasonable economy and efficiency.	
<p>(i) Verification of cost or pricing data and evaluation of cost elements, including-</p> <p>(A) The necessity for, and reasonableness of, proposed costs, including allowances for contingencies;</p> <p>(B) Projection of the offeror's cost trends, on the basis of current and historical cost or pricing data;</p> <p>(C) Reasonableness of estimates generated by appropriately calibrated and validated parametric models or cost-estimating relationships; and</p> <p>(D) The application of audited or negotiated indirect cost rates, labor rates, and cost of money or other factors.</p>	Applicable to ESPC, though the level of detail in the ESCO's proposal may not be sufficient to support detailed cost analysis.
<p>(ii) Evaluating the effect of the offeror's current practices on future costs.</p>	Not applicable to ESPC, since ESCO makes a fixed price proposal.
<p>(iii) Comparison of costs proposed by the offeror for individual cost elements with-</p> <p>(A) Actual costs previously incurred by the same offeror;</p> <p>(B) Previous cost estimates from the offeror or from other offerors for the same or similar items;</p> <p>(C) Other cost estimates received in response to the Government's request;</p> <p>(D) Independent Government cost estimates by technical personnel; and</p> <p>(E) Forecasts of planned expenditures</p>	(A) and (B) are applicable to ESPC. (C) does not apply since there is only one offeror. (D) does not apply since the level of detail is usually insufficient to develop an independent cost estimate. (E) may be applicable to ESPC.
<p>(iv) Verification that the offeror's cost submissions are in accordance with the contract cost principles and procedures in Part 31 and, when applicable, the requirements and procedures in 48 CFR Chapter 99 (Appendix to the FAR looseleaf edition), Cost Accounting Standards.</p>	Applicable to ESPC.
<p>(v) Review to determine whether any cost or pricing data necessary to make the contractor's proposal accurate, complete, and current have not been either submitted or identified in writing</p>	Applicable to ESPC, though the level of detail in the ESCO's proposal may not be sufficient to identify any omissions.

by the contractor.	
(vi) Analysis of the results of any make-or-buy program reviews, in evaluating subcontract costs (see 15.407-2).	May be applicable if the facility has developed make-or-buy plans that cost activities related to the design, installation and operation of energy conservation measures.
Cost realism analysis: the process of independently reviewing and evaluating specific elements of each offeror's proposed cost estimate to determine whether the estimated proposed cost elements are realistic for the work to be performed; reflect a clear understanding of the requirements; and are consistent with the unique methods of performance and materials described in the offeror's technical proposal.	Applicable to ESPC.
Technical Analysis: The contracting officer may request that personnel having specialized knowledge, skills, experience, or capability in engineering, science, or management perform a technical analysis of the proposed types and quantities of materials, labor, processes, special tooling, facilities, the reasonableness of scrap and spoilage, and other associated factors set forth in the proposal(s) in order to determine the need for and reasonableness of the proposed resources, assuming reasonable economy and efficiency.	Applicable to ESPC. Requires expertise from engineering staff and national laboratories in case of some advanced technologies.