

Value Engineering In M&O Contracts

[Reference: FAR Part 48]



Guiding Principle

The structure of the Department's major contracts includes general conditions that mitigate against achieving equitable cost sharing under standard FAR value engineering initiatives. Consequently, it is prudent to select carefully the situations to which FAR value engineering concepts should be applied.

What is the Purpose and Applicability of this Guide Chapter?

The purpose of this Guide Chapter is to provide Contracting Officers guidance on the application of value engineering (VE) to management and operating contracts and other contracts for the performance of work at current or former management and operating contract sites and facilities that would require or benefit from VE, where the requirements of the prescribed FAR clauses are inappropriate (hereinafter referred to as "major contracts").

What is the Background?

Section 4306 of the Clinger-Cohen Act of 1996, P.L. 104-106, amended the Office of Federal Procurement Policy Act, 4 USC 401 et. seq., by adding a new section 36, entitled "Value Engineering." Section 36 requires each executive agency to establish and maintain cost effective VE procedures and processes. Office of Management and Budget (OMB) Circular A-131 states that agencies shall use VE as a management tool, where appropriate, to ensure realistic budgets, identify and remove nonessential capital and operating costs, and improve and maintain optimum quality of program and acquisition functions. OMB Circular A-131 also requires agencies to report annually on the status of their VE Programs.

In DOE, the Office of Engineering and Construction Management, within the Office of Management, Budget and Evaluation, is responsible for VE policy. The Under Secretary for Energy, Science, and Environment and the Administrator, National Nuclear Security Administration are responsible for VE implementation. DOE Order 413.3, Program and Project Management for the Acquisition of Capital Assets, commits DOE to use value engineering to derive the lowest life-cycle cost of a capital asset. The Order states that value engineering yields the greatest cost savings when applied to the planning and design phases of a project. It also states value engineering should be used during the construction phase of a project. Additionally, DOE O 430.1A, Life-Cycle Asset Management, establishes the requirement to perform VE in the maintenance and infrastructure arenas.

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I. What is Value Engineering?

Section 36 of the Office of Federal Procurement Policy Act further defines value engineering as “the analysis of the functions of a program, project, system, product, item of equipment, building, facility, service, or supply to improve performance, reliability, quality, safety, and life-cycle costs.” In FAR 48.101(a), value engineering is defined as the formal technique by which contractors may (1) voluntarily suggest methods for performing more economically and share in any resulting savings or (2) be required to establish a program to identify and submit to the Government methods for performing more economically. Value engineering attempts to eliminate, without impairing essential functions or characteristics, anything that increases acquisition, operation, or support costs.

There are two VE approaches described in FAR Part 48, the “incentive” (also known as voluntary) and the “mandatory program.”

- ✓ In the incentive approach, the contractor participates voluntarily and uses its resources to develop and submit value engineering change proposals. If the Government accepts a value engineering change proposal, the contractor shares in savings and receives payment for its allowable proposal costs.
- ✓ In the mandatory program approach, the Government requires and pays for a specific VE effort. The contractor must perform VE of the scope and level of effort required by the contract. The contractor shares in savings, but at a lower percentage than under the incentive approach.

FAR Part 48 also prescribes three clauses, 52.248-1, 52.248-2, and 52.248-3. These clauses apply to contracts in general, architect-engineer contracts, and construction contracts, respectively. Procedures are slightly different and sharing of savings are more restricted for architect-engineer contracts and construction contracts. FAR 52.248-1 has three Alternates. Alternate I applies if the contracting officer chooses the mandatory program approach. Alternate II applies if the contracting officer chooses both the incentive approach and the mandatory program approach. Alternate III applies if collateral savings are not to be included.

II. How does Value Engineering apply to Major Contracts?

A. DOE major contracts are different than those envisioned by the authors of FAR Part 48.

The structure of the Department’s major contracts includes general conditions that mitigate against achieving equitable cost sharing. They are:

- a lack of firm cost estimates;
- requirements covered by award fee that already require the contractor to identify and institute practices to improve performance;

- requirements covered by a contract clause, such as the “Performance Improvement and Collaboration clause,” DEAR 970.5203-2;
- accounting systems that do not separately track the benefits and costs of VE efforts;
- costs of unsuccessful VE proposals are direct costs (under the cost accounting standards) to the contract, while in the existing FAR Value Engineering policy these costs are indirect costs; and
- some contracts are a composite of dissimilar work and contract types.

B. Cost savings can be achieved through various mechanisms.

We expect our major contractors to help us save money in three ways, two of which are value engineering, as FAR defines the term. The three ways are:

- We agree to fairly consider the contractor’s suggestions to replace specifications, standards, etc. that are stipulated for the contractor to follow. This is the FAR incentive approach. This concept does not apply where the contractor has participated in determining the specifications, standards, etc., of the contract.
- We direct the contractor to perform value engineering. This is the FAR mandatory program approach.
- We require the contractor to identify and institute practices that will improve performance. This is not value engineering under the FAR definition. It does not allow the contractor a share of the cost savings that result. Examples are the “Performance Improvement and Collaboration” clause or the subjective evaluation of the contractor’s performance efforts under award fee.

C. The FAR incentive approach may apply to portions of a major contract.

The general conditions present in a major contract mean the incentive approach, as prescribed in FAR Part 48, will only apply to those portions of a major contract where the particular conditions described below exist, and even then only in a modified form (also described below):

The particular conditions that must exist for the incentive approach to apply are:

- DOE dictated the specification, design, process, etc., that the contractor must follow.
- the contractor’s cost reduction effort is not covered under award fee (or any other incentive).
- the contracting officer has confidence in the cost estimate for the work at issue; that is, confidence in the cost estimate is similar to that which would be achieved under normal FAR

pricing conditions. While obtaining cost and pricing data and performing cost analysis are not required, the contracting officer must have adequate rationale for concluding the cost estimate is reliable enough to merit sharing savings based on the contractor performing at less than the estimate.

- the proposal, if accepted, must require a change to the contract and result in overall savings to DOE after implementation.

When all of the particular conditions listed above exist, a modified incentive approach is applicable.

Modified incentive approach means:

- costs of unsuccessful proposals are not allowable unless approved in advance by the contracting officer.
- a lower percentage of savings is provided to the contractor than permitted by FAR (typically no more than 20 percent), based on the contracting officer's confidence in the cost estimate.
- the HCA must approve the VE proposal.
- savings are not recognized until the affected work is completed satisfactorily and the contracting officer confirms the contractor has successfully accounted for the costs and benefits of the VE effort.

D. The FAR mandatory program approach may apply to portions of a major contract.

Because the Government decides when to require VE effort in the mandatory program approach, the contractor's allowable, allocable and reasonable proposal costs are reimbursed. The Government would, however, only share savings where the particular conditions described above for the incentive approach exist, and, even then, only at a lower percentage than the FAR permits.

When all of the particular conditions described above exist, a modified mandatory program approach is applicable. Modified mandatory program approach means:

- a lower percentage of savings is provided to the contractor than permitted by FAR (typically no more than 10 percent), based on the contracting officer's confidence in the cost estimate. In some cases the percentage should be zero.
- the HCA must approve the VE proposal.
- savings are not recognized until the affected work is completed satisfactorily and the contracting officer confirms the contractor has successfully accounted for the costs and benefits of the VE effort.

E. Both the mandatory and incentive approaches can be used in the same major contract.

In certain circumstances, one or more value engineering approaches may apply to different portions of a major contract. You can “mix and match” the value engineering approach and the affected contract effort. The deviations to FAR clauses authorized by the attached class deviation are attached in redline/strike-out format. Examples of different approaches are:

- under one major contract, for example, the FAR “Value Engineering–Architect-Engineer” clause may apply to a Architect-Engineering effort, a modified FAR “Value Engineering” clause may apply to the acquisition of a large capital asset, and a modified FAR “Value Engineering Alternate I” clause may apply to a significant and costly project.
- under another major contract no FAR value engineering approach may be appropriate because the reliability of the cost estimates does not merit cost sharing.
- under another major contract the modified mandatory program approach may be appropriate for a specific project, and the contractor’s share of savings should be only 5 percent.
- under another major contract DOE may direct the contractor to subcontract for a value engineering analysis of a costly and complex project; this situation is not a FAR value engineering approach and does not merit cost sharing.

F. VE provisions flow-down to subcontracts.

The attached deviations to the clauses at FAR 52.248-1 and 52.248-3 retain the FAR standard clauses’ requirement of flow down to subcontracts. Major contractors should extend VE provisions to their subcontractors, where appropriate, by granting them a percentage of whatever share of savings the major contractors receive from DOE. The deviations to paragraph (a) of the FAR standard clauses will be reflected in subcontracts, so major contractors will be required to approve subcontractors’ requests to perform value engineering analyses in advance. Agreements between the major contractors and their subcontractors do not affect the contractual relationship between major contractors and DOE; DOE’s share of savings, for example, is not affected by the major contractor’s agreement to provide a portion of its share of savings to a subcontractor.

III. What Is the Relationship Between Value Engineering and Award Fee/Incentive Structures?

FAR 48.102 (e) states that value engineering incentive payments do not constitute profit or fee within the limitations imposed by 10 U.S.C. 2306(d) and 41 U.S.C. 254(b). FAR 48.105 states the benefits of an accepted value engineering change proposal should not be rewarded both as value engineering shares and as incentives under performance, design-to-cost, or similar incentives of the contract. It

further states that only those benefits of an accepted value engineering change proposal not rewardable under other incentives are rewarded under a value engineering clause.

Many of DOE's major contracts (particularly management and operating contracts) use award fee structures to provide incentives to the contractor to meet or exceed performance and other requirements. In using the award fee approach, it may not be possible to establish specific cost reduction/constraint incentives. However, DOE still expects its major contractors to perform under the contract in a cost-efficient manner. Accordingly, where the award fee approach is used, the contract should provide an incentive to contractors to achieve cost efficiencies. As appropriate, the award fee provisions are to contain language that has the same effect as the following:

Expectation: The contractor is expected to ensure that the work performed under the contract is performed in a cost efficient manner. To this end, the contractor shall have a cost efficiency process in place. Part of this process shall include the review and evaluation of all work being performed under the contract on a continuing basis to ensure that it is being performed in the most cost efficient manner possible. Where it is found that the work is not being performed in the most cost efficient manner, the contractor shall effect the necessary changes to ensure that it will be performed in the most cost efficient manner without adversely impacting the quality and timeliness of the work.

Measure: At the conclusion of each Award Fee evaluation period, the contractor will be evaluated regarding the extent to which it was able to effect cost efficiencies in the performance of the work during the period. The contractor must demonstrate where cost efficiencies were achieved which directly resulted in its ability to perform more work within the funds provided. If no cost efficiencies are achieved during the evaluation period, the contractor must demonstrate that such failure is due to the time period required (longer than the evaluation period) in order to realize any cost efficiency or that there are no meaningful cost efficiencies to be found.

The Performance Evaluation Management Plan (or similar document) should provide that award fee may be earned or taken away (depending on the contract's fee construction) based on the level of performance achieved. Expected performance levels and associated fee amounts are to be tailored to the specific contract requirements.

IV. What Guidance is Provided by this Chapter?

When the particular conditions that must exist for one of the value engineering approaches to apply are present, Contracting Officers should consider inserting and applying to appropriate portions of existing major contracts one or more of the following clauses (after first removing the clause at 48 CFR 970.5215-4, Cost reduction, if present): (1) FAR 52.248-1 (DEVIATION) (attached in redline/strike-out format); (2) FAR 52.248-3 (DEVIATION) (attached in redline/strike-out format); and (3) FAR 52.248-2. Contracting officers should not include the clause at 48 CFR 970.5215-4, Cost reduction, when using the VE clauses in this Chapter. It will be removed from DEAR in a upcoming rulemaking.

Attachment #1

Authorized Deviations To FAR 52.248-1 and FAR 52.248-3

FAR 52.248-1 Value Engineering (Feb 2000) (DEVIATION)

(a) *General.* The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily. The Contractor shall share in any net acquisition savings realized from accepted VECP's, in accordance with the incentive sharing rates in paragraph (f) below.

(1) The Contractor may request the Contracting Officer's approval to perform value engineering analyses for those portions of the contract where:

- (i) DOE dictated the specification, design, process, or work method.
- (ii) DOE is not making award fee (or any other incentive) available for cost reduction efforts.
- (iii) the cost estimate is extremely reliable.
- (iv) the Contractor can separately track the costs of any proposed savings.

(2) After obtaining the Contracting Officer's approval to incur value engineering development and implementation costs, the Contractor is encouraged to submit value engineering change proposals (VECP's) and shall share in any net acquisition savings realized from accepted VECP's in accordance with the incentive sharing rates in paragraph (f) below. The decision on which rate applies is a unilateral decision made solely at the discretion of the Government.

(b) *Definitions.*

"Acquisition savings," as used in this clause, means savings resulting from the application of a VECP to contracts awarded by the same contracting office or its successor for essentially the same unit. Acquisition savings include--

(1) Instant contract savings, which are the net cost reductions on this, the instant contract, and which are equal to the instant unit cost reduction multiplied by the number of instant contract units affected by the VECP, less the Contractor's allowable development and implementation costs;

(2) Concurrent contract savings, which are net reductions in the prices of other contracts that are definitized and ongoing at the time the VECP is accepted; and

(3) Future contract savings, which are the product of the future unit cost reduction multiplied by the number of future contract units in the sharing base. On an instant contract, future contract savings include savings on increases in quantities after VECP acceptance that are due to contract modifications, exercise of options, additional orders, and funding of subsequent year requirements on a multiyear contract.

"Collateral costs," as used in this clause, means agency cost of operation, maintenance, logistic support, or Government-furnished property.

"Collateral savings," as used in this clause, means those measurable net reductions resulting from a VECP in the agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition

cost changes.

"Contracting office" includes any contracting office that the acquisition is transferred to, such as another branch of the agency or another agency's office that is performing a joint acquisition action.

"Contractor's development and implementation costs," as used in this clause, means those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP. If the VECP is rejected these costs are unallowable, unless the Contracting Officer has approved them in advance.

"Future unit cost reduction," as used in this clause, means the instant unit cost reduction adjusted as the Contracting Officer considers necessary for projected learning or changes in quantity during the sharing period. It is calculated at the time the VECP is accepted and applies either--

- (1) Throughout the sharing period, unless the Contracting Officer decides that recalculation is necessary because conditions are significantly different from those previously anticipated; or
- (2) To the calculation of a lump-sum payment, which cannot later be revised.

"Government costs," as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistics support. The term does not include the normal administrative costs of processing the VECP or any increase in this contract's cost or price resulting from negative instant contract savings.

"Instant contract," as used in this clause, means this contract, under which the VECP is submitted. It does not include increases in quantities after acceptance of the VECP that are due to contract modifications, exercise of options, or additional orders. If this is a multiyear contract, the term does not include quantities funded after VECP acceptance. If this contract is a fixed-price contract with prospective price redetermination, the term refers to the period for which firm prices have been established.

"Instant unit cost reduction" means the amount of the decrease in unit cost of performance (without deducting any Contractor's development or implementation costs) resulting from using the VECP on this, the instant contract. If this is a service contract, the instant unit cost reduction is normally equal to the number of hours per line-item task saved by using the VECP on this contract, multiplied by the appropriate contract labor rate.

"Negative instant contract savings" means the increase in the cost or price of this contract when the acceptance of a VECP results in an excess of the Contractor's allowable development and implementation costs over the product of the instant unit cost reduction multiplied by the number of instant contract units affected.

"Net acquisition savings" means total acquisition savings, including instant, concurrent, and future contract savings, less Government costs.

"Sharing base," as used in this clause, means the number of affected end items on contracts of the contracting office accepting the VECP.

"Sharing period," as used in this clause, means the period beginning with acceptance of the first unit incorporating the VECP and ending at a calendar date or event determined by the contracting officer for each

VECP.

"Unit," as used in this clause, means the item or task to which the Contracting Officer and the Contractor agree the VECP applies.

"Value engineering change proposal (VECP)" means a proposal that--

(1) Requires a change to this, the instant contract, to implement; and

(2) Results in reducing the overall projected cost to the agency without impairing essential functions or characteristics; *provided*, that it does not involve a change--

(i) In deliverable end item quantities only;

(ii) In research and development (R&D) end items or R&D test quantities that is due solely to results of previous testing under this contract; or

(iii) To the contract type only.

(c) *VECP preparation.* As a minimum, the Contractor shall include in each VECP the information described in paragraphs (c)(1) through (8) of this clause. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

(1) A description of the difference between the existing contract requirement and the proposed requirement, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, the effect of the change on the end item's performance, and any pertinent objective test data.

(2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.

(3) Identification of the unit to which the VECP applies.

(4) A separate, detailed cost estimate for (i) the affected portions of the existing contract requirement and (ii) the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under the Subcontracts paragraph of this clause, below.

(5) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.

(6) A prediction of any effects the proposed change would have on collateral costs to the agency.

(7) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.

(8) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(d) *Submission.* The Contractor shall submit VECP's to the Contracting Officer, unless this contract states otherwise. If this contract is administered by other than the contracting office, the Contractor shall submit a copy of the VECP simultaneously to the Contracting Officer and to the Administrative Contracting Officer.

(e) *Government action.* (1) The Contracting Officer will notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer will notify the Contractor within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it will not be liable for any delay in acting upon a VECP.

(2) If the VECP is not accepted, the Contracting Officer will notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

(3) Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a modification to this contract citing this clause and made either before or within a reasonable time after contract performance is completed. Until such a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of the Contracting Officer.

(f) *Sharing rates.* If a VECP is accepted, the Contractor shall share in net acquisition savings according to the percentages shown in the table below. If a VECP is accepted, the Contractor shall share in net acquisition savings up to the percentages shown in the table below. The Contracting Officer will determine the exact percentage as early as the date of approving the Contractor's request to perform value engineering analyses and incur value engineering development and implementation costs, but no later than the date of accepting the VECP. In making this determination, the Contracting Officer will decrease the Contractor's share as the reliability of the cost estimate decreases. For the "Incentive" sharing arrangement for cost-reimbursement contracts, the Contractor's share will typically be no greater than 20 percent. For the "Program Requirement" sharing arrangement for cost-reimbursement contracts, the Contractor's share will typically be no greater than 10 percent and may be zero. The decision on which rate applies is a unilateral decision made solely at the discretion of the Government. The percentage paid the Contractor depends upon--

- (1) This contract's type (fixed-price, incentive, or cost-reimbursement);
- (2) The sharing arrangement specified in paragraph (a) of this clause (incentive, program requirement, or a combination as delineated in the Schedule);-and
- (3) The reliability of the cost estimate; and
- (4)The source of the savings (the instant contract, or concurrent and future contracts), as follows:

CONTRACTOR'S SHARE OF NET ACQUISITION SAVINGS (Figures in Percent)				
CONTRACT TYPE	SHARING ARRANGEMENT			
	INCENTIVE (VOLUNTARY)		PROGRAM REQUIREMENT (MANDATORY)	
	Instant Contract Rate	Concurrent and Future Contract Rate	Instant Contract Rate	Contract and Future Contract Rate
Fixed-price (includes fixed-price-award-fee; excludes other fixed-price incentive contracts)	*50	*50	*25	25
Incentive (fixed-price or cost) (other than award fee)	(**)	*50	(**)	25
Cost-reimbursement (includes cost-plus-award-fee; excludes other cost-type incentive contracts)	***25	***25	15	15

* The Contracting Officer may increase the Contractor's sharing rate to as high as 75 percent for each VECP.

**Same sharing arrangement as the contract's profit or fee adjustment formula.

***The Contracting Officer may increase the Contractor's sharing rate to as high as 50 percent for each VECP

(g) *Calculating net acquisition savings.* (1) Acquisition savings are realized when (i) the cost or price is reduced on the instant contract, (ii) reductions are negotiated in concurrent contracts, (iii) future contracts are awarded, or (iv) agreement is reached on a lump-sum payment for future contract savings (see subparagraph (i)(4) below). Net acquisition savings are first realized, and the Contractor shall be paid a share, when Government costs and any negative instant contract savings have been fully offset against acquisition savings.

In no case are savings realized until the Contracting Officer confirms that the Contractor has both completed the affected work satisfactorily and accounted for the costs and benefits successfully.

(2) Except in incentive contracts, Government costs and any price or cost increases resulting from negative instant contract savings shall be offset against acquisition savings each time such savings are realized until they are fully offset. Then, the Contractor's share is calculated by multiplying net acquisition savings by the appropriate Contractor's percentage sharing rate (see paragraph (f) of this clause). Additional Contractor shares of net acquisition savings shall be paid

to the Contractor at the time realized.

(3) If this is an incentive contract, recovery of Government costs on the instant contract shall be deferred and offset against concurrent and future contract savings. The Contractor shall share through the contract incentive structure in savings on the instant contract items affected. Any negative instant contract savings shall be added to the target cost or to the target price and ceiling price, and the amount shall be offset against concurrent and future contract savings.

(4) If the Government does not receive and accept all items on which it paid the Contractor's share, the Contractor shall reimburse the Government for the proportionate share of these payments.

(h) *Contract adjustment.* The modification accepting the VECP (or a subsequent modification issued as soon as possible after any negotiations are completed) shall--

(1) Reduce the contract price or estimated cost by the amount of instant contract savings, unless this is an incentive contract;

(2) When the amount of instant contract savings is negative, increase the contract price, target price and ceiling price, target cost, or estimated cost by that amount;

(3) Specify the Contractor's dollar share per unit on future contracts, or provide the lump-sum payment;

(4) Specify the amount of any Government costs or negative instant contract savings to be offset in determining net acquisition savings realized from concurrent or future contract savings; and

(5) Provide the Contractor's share of any net acquisition savings under the instant contract in accordance with the following:

(i) Fixed-price contracts--add to contract price.

(ii) Cost-reimbursement contracts--add to contract fee.

(i) *Concurrent and future contract savings.* (1) Payments of the Contractor's share of concurrent and future contract savings shall be made by a modification to the instant contract in accordance with subparagraph (h)(5) above. For incentive contracts, shares shall be added as a separate firm-fixed-price line item on the instant contract. The Contractor shall maintain records adequate to identify the first delivered unit for 3 years after final payment under this contract.

(2) The Contracting Officer shall calculate the Contractor's share of concurrent contract savings by--

(i) Subtracting from the reduction in price negotiated on the concurrent contract any Government costs or negative instant contract savings not yet offset; and

(ii) Multiplying the result by the Contractor's sharing rate.

(3) The Contracting Officer shall calculate the Contractor's share of future contract savings by--

(i) Multiplying the future unit cost reduction by the number of future contract units scheduled for delivery during the sharing period;

(ii) Subtracting any Government costs or negative instant contract savings not yet offset; and

(iii) Multiplying the result by the Contractor's sharing rate.

(4) When the Government wishes and the Contractor agrees, the Contractor's share of future contract savings may be paid in a single lump sum rather than in a series of payments over time as future contracts are awarded. Under this alternate procedure, the future contract savings may be calculated when the VECP is accepted, on the basis of the Contracting Officer's forecast of the number of units that will be delivered during the sharing period. The Contractor's share shall be included in a modification to this contract (see paragraph (h)(3) of this clause) and shall not be subject to subsequent adjustment.

(5) *Alternate no-cost settlement method.* When, in accordance with subsection 48.104-4 of the Federal Acquisition Regulation, the Government and the Contractor mutually agree to use the no-cost settlement method, the following applies:

(i) The Contractor will keep all the savings on the instant contract and on its concurrent contracts only.

(ii) The Government will keep all the savings resulting from concurrent contracts placed on other sources, savings from all future contracts, and all collateral savings.

(j) *Collateral savings.* If a VECP is accepted, the Contracting Officer will increase the instant contract amount, as specified in paragraph (h)(5) of this clause, by a rate from 20 to 100 percent, as determined by the Contracting Officer, of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. If a VECP is accepted, the Contracting Officer will increase the instant contract amount, as specified in paragraph (h)(5) of this clause, by a rate from 0 to 100 percent, as determined by the Contracting Officer, of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. Typically, for cost-reimbursement contracts, the rate will not exceed 10 percent and may be zero. However, the Contractor's share of collateral savings will not exceed the contract's firm-fixed-price, target price, target cost, or estimated cost, at the time the VECP is accepted, or \$100,000, whichever is greater. The Contracting Officer will be the sole determiner of the amount of collateral savings.

(k) *Relationship to other incentives.* Only those benefits of an accepted VECP not rewardable under performance, design-to-cost (production unit cost, operating and support costs, reliability and maintainability), or similar incentives shall be rewarded under this clause. However, the targets of such incentives affected by the VECP shall not be adjusted because of VECP acceptance. If this contract specifies targets but provides no incentive to surpass them, the value engineering sharing shall apply only to the amount of achievement better than target.

(l) *Subcontracts*. The Contractor shall include an appropriate value engineering clause in any subcontract of \$100,000 or more and may include one in subcontracts of lesser value. In calculating any adjustment in this contract's price for instant contract savings (or negative instant contract savings), the Contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs, and any value engineering incentive payments to a subcontractor, clearly resulting from a VECP accepted by the Government under this contract. The Contractor may choose any arrangement for subcontractor value engineering incentive payments, *provided*, that the payments shall not reduce the Government's share of concurrent or future contract savings or collateral savings.

(m) *Data*. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

These data, furnished under the Value Engineering clause of contract _____, shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations.

If a VECP is accepted, the Contractor hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, the Government shall have the rights specified in the contract modification implementing the VECP and shall appropriately mark the data. (The terms "unlimited rights" and "limited rights" are defined in Part 27 of the Federal Acquisition Regulation.)

(End of clause)

Alternate I (Apr 1984). If the contracting officer selects a mandatory value engineering program requirement, substitute the following paragraph (a) for paragraph (a) of the basic clause:

(a) *General*. The Contractor shall (1) engage in a value engineering program, and submit value engineering progress reports, as specified in the Schedule and (2) submit to the Contracting Officer any resulting value engineering change proposals (VECP's).

In addition to being paid as the Schedule specifies for this mandatory program, the Contractor shall share in any net acquisition savings realized from accepted VECP's, in accordance with the program requirement sharing rates in paragraph (f) below. The decision on which rate applies is a unilateral decision made solely at the discretion of the Government.

Alternate II (Feb 2000). If the contracting officer selects both a value engineering incentive and mandatory value engineering program requirement, substitute the following paragraph (a) for paragraph (a) of the basic clause:

(a) *General*. For those contract line items designated in the Schedule as subject to the value engineering program requirement, the Contractor shall (1) engage in a value engineering program, and submit value engineering progress reports, as specified in the Schedule and (2)

submit to the Contracting Officer any resulting VECP's. In addition to being paid as the Schedule specifies for this mandatory program, the Contractor shall share in any net acquisition savings realized from VECP's accepted under the program, in accordance with the program requirement sharing rates in paragraph (f) below. For remaining areas of the contract, the Contractor is encouraged to develop, prepare, and submit VECP's voluntarily; for VECP's accepted under these remaining areas, the incentive sharing rates apply. For the remaining areas of the contract, the Contractor may request the Contracting Officer's approval to perform value engineering analyses for those portions of the contract where: DOE dictated the specification, design, process, or work method; DOE is not making award fee available for cost reduction efforts; the cost estimate is extremely reliable; and the Contractor can separately track the costs of any proposed savings. After obtaining the Contracting Officer's approval to incur value engineering development and implementation costs, the Contractor is encouraged to submit value engineering change proposals (VECP's) and shall share in any net acquisition savings realized from accepted VECP's in accordance with the incentive sharing rates in paragraph (f) below. The decision on which rate applies is a unilateral decision made solely at the discretion of the Government.

Alternate III (Apr 1984). When the head of the contracting activity determines that the cost of calculating and tracking collateral savings will exceed the benefits to be derived in a contract calling for a value engineering incentive, delete paragraph (j) from the basic clause and redesignate the remaining paragraphs accordingly.

FAR 52.248-3 Value Engineering--Construction (Feb 2000) (DEVIATION)

(a) *General.*-The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily. The Contractor shall share in any instant contract savings realized from accepted VECP's, in accordance with paragraph (f) of this clause.

(1) The Contractor may request the Contracting Officer's approval to perform value engineering analyses for those portions of the contract where:

- (i) DOE dictated the specification, design, process, or work method.
- (ii) DOE is not making award fee (or any other incentive) available for cost reduction efforts.
- (iii) the cost estimate is extremely reliable.
- (iv) the Contractor can separately track the costs of any proposed savings.

(2) After obtaining the Contracting Officer's approval to incur value engineering development and implementation costs, the Contractor is encouraged to submit value engineering change proposals (VECP's) and shall share in any net acquisition savings realized from accepted VECP's in accordance with the incentive sharing rates in paragraph (f) below. The decision on which rate applies is a unilateral decision made solely at the discretion of the Government.

(b) *Definitions.* "Collateral costs," as used in this clause, means agency costs of operation, maintenance, logistic support, or Government-furnished property.

"Collateral savings," as used in this clause, means those measurable net reductions resulting from a VECP in the agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.

"Contractor's development and implementation costs," as used in this clause, means those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP. If the VECP is rejected these costs are unallowable, unless the Contracting Officer has approved them in advance.

"Government costs," as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.

"Instant contract savings," as used in this clause, means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable Contractor's development and implementation costs, including subcontractors' development and implementation costs (see paragraph (h) of this clause).

"Value engineering change proposal (VECP)" means a proposal that --

(1) Requires a change to this, the instant contract, to implement; and

(2) Results in reducing the contract price or estimated cost without impairing essential functions or characteristics; *provided*, that it does not involve a change--

(i) In deliverable end item quantities only; or

(ii) To the contract type only.

(c) *VECP preparation*. As a minimum, the Contractor shall include in each VECP the information described in paragraphs (c)(1) through (7) of this clause. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

(1) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.

(2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.

(3) A separate, detailed cost estimate for (i) the affected portions of the existing contract requirement and (ii) the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (h) of this clause.

(4) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.

(5) A prediction of any effects the proposed change would have on collateral costs to the agency.

(6) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.

(7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(d) *Submission*. The Contractor shall submit VECP's to the Resident Engineer at the worksite, with a copy to the Contracting Officer.

(e) *Government action*. (1) The Contracting Officer will notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer will notify the Contractor within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process

VECP's expeditiously; however, it will not be liable for any delay in acting upon a VECP.

(2) If the VECP is not accepted, the Contracting Officer will notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

(3) Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a modification to this contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Contractor a notice to proceed with the change. Until a notice to proceed is issued or a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of the Contracting Officer.

(f) *Sharing--(1) Rates.* In no case are savings realized until the Contracting Officer confirms that the Contractor has both completed the affected work satisfactorily and accounted for the costs and benefits successfully. The Contracting Officer will determine the Contractor's exact percentage share of savings as early as the date of approving the Contractor's request to perform value engineering analyses and incur value engineering development and implementation costs, but no later than the date of accepting the VECP. In making this determination, the Contracting Officer will decrease the Contractor's share as the reliability of the cost estimate decreases. The decision on which percentage applies is a unilateral decision made solely at the discretion of the Government. The Government's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by at least-- The Government's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by--

(i) 45 percent for fixed-price contracts; or

(ii) 75 percent for cost-reimbursement contracts.

(2) *Payment.* Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a modification to this contract to--

(i) Accept the VECP;

(ii) Reduce the contract price or estimated cost by the amount of instant contract savings; and

(iii) Provide the Contractor's share of savings by adding the amount calculated to the contract price or fee.

(g) *Collateral savings.* If a VECP is accepted, the Contracting Officer will increase the instant contract amount by 20 percent of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset.-If a VECP is accepted, the Contracting Officer will increase the instant contract amount by up to 20 percent of

any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. Typically, for cost-reimbursement contracts, the rate will not exceed 10 percent and may be zero. However, the Contractor's share of collateral savings will not exceed the contract's firm-fixed-price or estimated cost, at the time the VECP is accepted, or \$100,000, whichever is greater. The Contracting Officer is the sole determiner of the amount of collateral savings.

(h) *Subcontracts*. The Contractor shall include an appropriate value engineering clause in any subcontract of \$50,000 or more and may include one in subcontracts of lesser value. In computing any adjustment in this contract's price under paragraph (f) of this clause, the Contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs clearly resulting from a VECP accepted by the Government under this contract, but shall exclude any value engineering incentive payments to a subcontractor. The Contractor may choose any arrangement for subcontractor value engineering incentive payments; *provided*, that these payments shall not reduce the Government's share of the savings resulting from the VECP.

(i) *Data*. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

These data, furnished under the Value Engineering-- Construction clause of contract _____, shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations.

If a VECP is accepted, the Contractor hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, the Government shall have the rights specified in the contract modification implementing the VECP and shall appropriately mark the data. (The terms "unlimited rights" and "limited rights" are defined in Part 27 of the Federal Acquisition Regulation.)

(End of clause)

Alternate I (Apr 1984). When the head of the contracting activity determines that the cost of calculating and tracking collateral savings will exceed the benefits to be derived in a construction contract, delete paragraph (g) from the basic clause and redesignate the remaining paragraphs accordingly.

DEPARTMENT OF ENERGY

DETERMINATION AND FINDINGS

FEDERAL ACQUISITION REGULATION (FAR) CLASS DEVIATION
REGARDING FAR 52.248-1 and FAR 52.248-3

FINDINGS:

1. There are two Value Engineering (VE) approaches described in FAR Part 48, the “incentive” (also known as voluntary) and the “mandatory program.” In the incentive approach, the contractor participates voluntarily and uses its resources to develop and submit value engineering change proposals. If the Government accepts a value engineering change proposal, the contractor shares in savings and receives payment for its allowable proposal costs. In the mandatory program approach, the Government requires and pays for a specific VE effort. The contractor must perform VE of the scope and level of effort required by the contract. The contractor shares in savings, but at a lower percentage than under the incentive approach.
2. The structure of the Department’s major contracts (management and operating contracts and other contracts for the performance of work at current or former management and operating contract sites and facilities that would require or benefit from VE, where the requirements of the prescribed FAR clauses are inappropriate) includes general conditions that involve mitigating factors that preclude equitable cost sharing. They are: a lack of firm cost estimates; requirements covered by award fee that already require the contractor to identify and institute practices to improve performance; requirements for performance improvements covered by other contract clauses; accounting systems that do not separately track the benefits and costs of VE efforts; costs of unsuccessful VE proposals are direct costs (under the cost accounting standards) to the contract, while in the existing FAR Value Engineering policy these costs are indirect costs; and some contracts are a composite of dissimilar work and contract types.
3. The general conditions present in a major contract mean the incentive approach as prescribed in FAR Part 48 will only apply to those portions of a major contract where particular conditions exist, and even then only in a modified form.
4. The particular conditions that must exist for the incentive approach to apply are: DOE dictated the specification, design, process, etc., that the contractor must follow; the contractor’s cost reduction effort is not covered under award fee (or any other incentive); the contracting

officer has confidence in the cost estimate for the work at issue; and the proposal, if accepted, must require a change to the contract and result in overall savings to DOE after implementation. When all of the particular conditions exist, a modified incentive approach is applicable. Modified incentive approach means: costs of unsuccessful proposals are not allowable unless approved in advance by the contracting officer; lower percentage of savings given to the contractor than permitted by FAR (typically no more than 20 percent), based on the contracting officer's confidence in the cost estimate; the Head of the Contracting Activity must approve the VE proposal; and savings are not recognized until the affected work is completed satisfactorily and the contracting officer confirms the contractor has successfully accounted for the costs and benefits of the VE effort.

5. For the mandatory program approach, the Government would only share savings where the particular conditions described above for the incentive approach exist, and even then only at a lower percentage than the FAR permits. When all of the particular conditions described above exist, a modified mandatory program approach is applicable. Modified mandatory program approach means: lower percentage of savings given to the contractor than permitted by FAR; the Head of the Contracting Activity must approve the VE proposal; and savings are not recognized until the affected work is completed satisfactorily and the contracting officer confirms the contractor has successfully accounted for the costs and benefits of the VE effort.

6. In accordance with FAR 1.404, consultation with the Civilian Agency Acquisition Council Chairman before approving this class deviation to the FAR has been accomplished. The appropriate consultation and approval have been completed under the authority granted to the civilian agencies under Civilian Agency Acquisition Letter 2002-01.

DETERMINATION:

Based upon these findings, I hereby determine that it is necessary to deviate from the clauses at FAR 52.248-1 and FAR 52.248-3 to reflect fairly the structure of DOE's major contracts as it affects equitable cost sharing in value engineering arrangements.

APPROVAL _____

DATE _____

Director, Office of Procurement and
Assistance Management
Department of Energy