

AWARD FEE PERFORMANCE RATING AND FEE EARNING METHODOLOGY

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OUTSTANDING 95 % TO 100%

Performance exceeds expected levels of performance in all areas with only minor weaknesses or negative comments and without any deficiencies. Innovative approaches have been identified and are being implemented successfully. Management has addressed problems and issues proactively both with employees and customers as is appropriate for a multi-programmatic laboratory.

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EXCEEDS 56% TO 94%

Performance consistently meets levels of performance and in most areas exceeds expected levels of performance. Identified weaknesses do not indicate a trend to serious, systemic problems and can be addressed in the near term without impacting operational or programmatic goals. There are no noteworthy deficiencies, operational excellence continues to be the foundation of all work activities and development of the laboratory missions continues.

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SATISFACTORY 16% TO 55%

Performance meets expected levels of performance in the majority of areas. Identified weaknesses may indicate a trend to serious systemic problems but there has been no operational situation resulting in serious injury or fatality. Milestones are being met for the most part but there is concern for future milestones. Identified deficiencies are few and can be rectified early with appropriate management attention with minimal impact to operations and programmatic goals.

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MARGINAL 1% TO 15%

Performance is not meeting expected levels of performance in multiple areas or serious weaknesses have been identified in critical areas. Deficiencies have been identified and recovery from weaknesses and/or deficiencies could impact programs and operations. Trending is indicating serious problems in achieving operational excellence.

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UNSATISFACTORY - 0 -

Performance has failed to meet expected levels of performance in critical areas with serious ramifications to Departmental commitments. Deficiencies and weaknesses are numerous indicating failure of management systems. Serious safety and/or environmental violations have resulted in major impacts. Recovery will be lengthy, difficult and costly.

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DEFICIENCY – Any part of the contractor’s performance that fails to satisfy a Government requirement

WEAKNESS – A feature of contractor performance that will cause or contribute to less than optimal performance

ATTACHMENT B - Grading Table

The following chart shows the percentage spread available based on performance.

Performance description	Percent of Fee Earned
Performance substantially exceeded expected levels of performance. All AOP milestones or goals were met or exceeded and costs were within approved budget. Although problems may have been encountered, the relative magnitude and significance were reasonably expectable based upon the size and complexity of operations.	96 - 100
Performance exceeded expected levels and some notable achievements exist. Most milestones or goals were met or exceeded and costs were within approved budget. Although some milestones/goals were not met, reasonable justification exists for the failures and no major impact on cost or site operations occurred.	66 - 95
Performance met expected levels. Minimum standards were exceeded and "good practices" were evident in contract operations. Most milestones and goals were met or exceeded. Although some failures occurred, reasonable justification exists for missing the major milestones/goals and there was no substantial impact on cost or site operations.	40 - 65
Performance was less than expected. Many milestones/goals were not met and some adverse impact on site operations and cost occurred.	2 - 39
Unacceptable performance against milestones/ goals	0

## **Chapter Nine**

# **Motivating the Performance of Research and Development**

This chapter discusses what is meant by the term “Research and Development” (R&D) for purposes of this guide, the appropriateness of fee for the operation of the Department’s laboratories performing R&D, the effectiveness of fee as a motivator for the performance of R&D, and other potential motivators for the performance of R&D.

### **What is meant by the term “Research and Development”?**

The term R&D, for purposes of this guide, encompasses both the pursuit of science and technology, and includes basic and applied science and technology and may include technology deployment. It is R&D performed primarily at the Department’s laboratories, of which the majority are Federally Funded Research and Development Centers (FFRDC’s).

### **Is it necessary to pay the institutions and organizations which operate the Department’s R&D laboratories a fee?**

Until 1994, few of the Department’s educational institutions received a fee for the operation of the Department’s laboratories. However the non-profit and “for profit” contractors operating the Department’s laboratories did receive a fixed fee. In lieu of a fee, the educational institutions received what was known as a “Management Allowance” which was a fixed amount to compensate them for the support provided to them by their parent institutions (e.g., support provided by the University of California administration to the Lawrence Livermore National Laboratory). Often, due to the subjectiveness of what support would be required from the parent organization, the amount established as “Management Allowance” was adequate to cover support costs and some undefined costs. With the introduction of Contract Reform and the revision to the M&O fee policy, the use of a Management Allowance was discontinued. Support costs previously covered by Management Allowance are now to be considered a direct or indirect cost, if appropriate. Unallowable costs can never be reimbursed.

Prior to revision of the fee policy, the Department increased the liability assumed by the institutions and contractors operating the laboratories by increasing their accountability for a significant range of costs which the Department had previously reimbursed. This change has

resulted in the majority of institutions and contractors operating the Department's laboratories to request some fee. The amount of the total available fee, as calculated under the new fee policy, reflects the added risk and accountability assumed by the institutions and contractors for the potential liabilities they may incur.

The revised fee policy also requires that, unless fee is tied to increased potential liability and accountability, it be tied to performance. This has led the institutions and contractors operating the Department's laboratories to request an increase in the amount of the total available fee. This request is based on their need to receive adequate fee to cover their risk associated with the assumed liability and accountability, while recognizing that the potential exists that not all of the fee available will be earned.

### **Is there a distinction between science and technology?**

While science is primarily pursued to meet the desires of customers interested in new ideas and technology is primarily pursued to meet the desires of customers interested in meeting the needs of industry (both in the commercial and government sectors), there is little difference in how performance is measured and judged between them when they are in the basic stage of performance. However, from the Department's stand point, technology may differ from science, in that the Department may more often be seeking specific achievements within given time frames (applied technology). Further, in some instances the Department may not be seeking just the development and/or demonstration of technology, but also its actual deployment.

Due to the nature of basic science and technology, performance does not lend itself to objective evaluation, but is assessed primarily using peer evaluations. The evaluation focuses largely on the quality of the science performed. However, to the extent there are specific applications to be demonstrated by specific dates in the applied science/technology area, objective incentives may be appropriate. Again, when it comes to demonstration (and eventual deployment) the Department's emphasis may be more on applied technology given its focus on environmental clean-up and energy efficiency. Where fee is associated with specific performance by specific dates, the risk associated with earning the fee is higher than it would be if just the performance of the quality of science were being evaluated. Therefore, institutions are going to want more total available fee, if part of it is to be associated with objective, high risk, performance objectives.

### **What is the relationship between the performance of support functions and performance of science and technology and their association with fee?**

In moving to performance based award fee contracts, the Department has emphasized the need to create objective performance measures for the performance of support functions (such as facilities management, property management, financial management, etc.) , but has de-emphasized

associating those measures with fee. The rationale for this is that while it is important to have measures in place for the performance of support functions as a management tool, the major focus of the contractor should be on mission specific work, and it is with this fee should be associated. Further, often in order to successfully perform mission work, the support work must be performed to at least a satisfactory level. This applies to all the Department's contractor's including those managing and operating the Department's laboratories (in the case of the laboratories the mission work is science and technology). Therefore, unless there is a problem with a support area or a need to emphasize a critical support area, fee should only be associated with the performance of support functions in a general subjective award fee fashion.

### **Is fee an effective motivator for the performance of R&D?**

The Department's experience is that while the institutions and contractors operating the Department's laboratories want fee to cover their potential costs associated with increased accountability and that while most fees provided are tied to performance, fee is not necessarily a motivator for the performance of R&D. In fact, the research laboratories and their scientific staff may even view fee as detracting from mission accomplishment, by diverting scarce funds away from the operating budget for research to a fee pool.

While in some of the support areas, such as construction projects, specific expectations are definable, the use of performance fee as a motivator may also be of limited value. What tends to drive timely and cost efficient performance is the need to have projects completed on time and within funding in order to have the resources available to perform the R&D.

The R&D performance of the Department's laboratories has consistently been rated as excellent to outstanding regardless of the type or amount of the fee provided. Further, the performance of the support effort at the laboratories has, in all but very few instances, been excellent to outstanding irrespective of the type or amount of the fee. In those few instances where performance has been less than desired, it has been management action, more so than fee incentives, that has motivated corrective action.

The Department's experience has led it to apply its approach to performance based fee differently at its laboratories than at its other sites. At the laboratories, in the majority of cases performance expectations, whether objective or subjective, are established at the excellent to outstanding level. Fee adequate to meet the specific needs of the institution or contractor operating the laboratory are established and linked to these levels of performance, with fee primarily subject to adjustment downward if the established levels of performance are not achieved. Fee is not viewed necessarily as a motivator of performance, but rather linked to performance so that the Department is not in the position of paying fee when less than desired performance is achieved.

### **If fee is not necessarily a motivator, what things are?**

The quality of the science and technology performed is primarily a function of the interest of the institution/contractor overseeing the performance and the capabilities of those performing it and the tools available to them. In general, it has been demonstrated that “excellent science” can not be defined in the quantitative/objective terms dictated by Performance Based Incentives (PBIs), but can only be effectively assessed through the use of the peer review process. Peer recognition is often cited as a major motivator. In-line accomplishments which merit continued funding and permit further research towards an envisioned goal or objective are also a primary motivator. Other motivators tend to be things within the control of the Department’s R&D program offices.

#### At the institution/contractor level:

The operation of the Department’s laboratories provides institutions/contractors the opportunity to pursue objectives not related to earning fee. They are motivated to achieve excellent to outstanding performance in order that they may continue to operate the laboratories (with the associated funding) and receive the knowledge, acclaim and prestige that accrue to them from such operation. Institution/contractor objectives other than fee may include:

1. Development opportunities for their students and/or employees
2. Knowledge gained which may have direct applicability to other institution/contractor endeavors
3. Ability to continue to push the state-of-the-art knowledge in fields of interest
4. Access to state-of-the-art facilities, equipment, and talent

#### At the individual level:

The quality of the science and technology performed is primarily a function of the capabilities of those performing it and the tools available to them. The motivators at the individual level may include:

1. Adequate funding provided for specific projects
2. Availability of the necessary resources with which to perform the R&D, including state-of-the-art facilities and equipment and research material.
3. Access to peers including opportunities to participate in peer group meetings
4. Ability to present findings and receive peer group recognition
5. Compensation including salaries, work environment, opportunities to pursue personal interests.

### **How should incentives be provided for the performance of R&D effort?**

Because many of the incentives that may result in better performance of R&D effort are within the control of the program offices providing the funding and authorizing the work, the program offices should develop procedures for motivating and rewarding the performance of excellent R&D. Incentives must be developed with program office input to ensure that envisaged goals and objectives are considered in determining whether incentives are appropriate given the current nature of the effort.

## **SECTION 2**

# ***RELATED PERFORMANCE-BASED CONTRACTING ISSUES***



## Topic One

### ***Cost Reduction Incentives***

*This Topic defines Cost Reduction Incentives (CRIs), provides the minimal criteria to be considered when preparing and reviewing them, identifies the minimum content, provides the calculation of the Net Savings, and lists some of the considerations for determining the contractor's share of any cost reduction.*

The definitiveness of the work scope and the capability of the infrastructure to define the baseline effort/cost, identify and track cost savings associated with cost reduction incentives, and validate such savings will vary greatly from site to site and from task to task at a specific site. Cost reduction incentives must be tailored accordingly. Cost reduction initiatives in areas where the scope of work is not well defined or the infrastructure is not well developed should be considered for award fee incentivization only.

Due to the nature of the Department's M&O contracts, only two structured categories of cost reduction incentivization are allowed:

- 1) a specific cost reduction effort for work that is broken out from other efforts and negotiated on a cost plus incentive fee, fixed price incentive, or firm fixed price basis, with a specific incentive arrangement (target costs, target fees, share lines, ceilings, profit, etc.) set forth in the contractual document; or
- 2) a specific cost reduction effort established as a cost savings sharing arrangement for a change to a design, process or method which has an established baseline and is: innovative; defined; subject to a formal control procedure; initiated by the contractor; and applied to a specific project or program.

Cost reduction incentives established on a cost plus incentive fee or fixed price incentive basis in accordance with the FAR and DEAR 915 should be established as stand-alone efforts and are not subject to the total available fee limitations contained in DEAR 970. When such cost reduction incentives are established on a stand-alone basis, the cost originally associated with the effort at the related portion of the total available fee, as determined in accordance with DEAR 970, must be adjusted downward.

To the extent that cost reductions occur in the immediate fiscal year, or the year directly following, cost reductions may be subject to a cost sharing agreement with the contractor. To the extent that cost reductions occur outside this time frame, they should not be considered cost reductions that are subject to cost sharing, but may be subject to award fee incentives.

To the extent that cost reduction approaches are established as a cost savings sharing arrangement for changes in design, process, or method do not constitute fee and accordingly, statutory or regulatory fee limitations will not apply. However, such cost reductions are subject to this guidance.

The type and number of incentives associated with the work effort subject to a cost reduction incentive must be controlled to the maximum extent possible. The more the work effort can be subject to a cost reduction incentive only (conditioned on the acceptable performance of the effort), the less likely the possibility for confusion between conflicting incentives. However, to the extent the work effort, which is subject to cost reduction incentives, is also subject to other incentives (performance, schedule, etc.), care must be taken to ensure that one does not conflict with the other. The danger of multiple incentives applied to a single effort is that when taken together, they may conflict with each other. Ideally, cost and performance incentives should complement each other.

The operations and field offices are to take the lead in developing and implementing appropriate cost reduction incentives. Working closely with their site contractors, they are to identify areas where cost reductions and savings can be best achieved. The operations and field offices are to ensure that the necessary resources and infrastructure exist within both the contractor's and government's organization to prepare, evaluate, and administer cost reduction incentives prior to their implementation.

#### **A. Implementation**

Normally, the work scope for the total site will not be well defined, or Departmental operations/field offices or site contractors may not possess the necessary infrastructure to fully implement cost reduction incentives. However, the ability may exist to implement cost reduction incentives at the specific project, design, process or method level. Such partial implementation can result in cost reductions which will benefit the DOE. Those DOE operations/field offices with limited resources or special contractual circumstances should consider partially implementing cost reduction incentives in the appropriate situations. Using a partial implementation approach will accommodate the varying conditions at the different sites. These conditions will impact the extent to which cost baselines can be established for the work scope and the degree to which actual cost savings from these baselines can be measured and validated. Partial implementation will permit the use of different methods of contractual implementation

appropriate to the circumstances such as fixed price incentive, cost plus incentive fee, cost plus award fee, and cost sharing or a combination thereof.

The degree to which the contractor shares in any cost savings should be in direct correlation to the degree the effort can be defined, managed and validated and reflect its complexity and risk of achievement. When such definition is lacking, the contractor could, if merited, be rewarded through incentive programs outside of the structured cost incentive process, such as through the award fee process.

### **B. Goal of Cost Reduction Incentives**

The goal of cost reduction is to achieve measurable and verifiable cost savings from a defined baseline without adversely affecting the performance of the work. Before implementing cost reduction incentives, written procedures should be developed at the appropriate level of detail.

### **C. Identification of Cost Reduction Initiatives**

A proposed cost reduction initiative should have the potential to generate fully documented and validated cost savings resulting from the adoption of new or modified work methods, technique etc. (“design/process/method change”) or from a fully definitized cost plus incentive fee /fixed price incentive/firm fixed price arrangement, not necessarily tied to a design/process/methods change.

In the case of fully definitized CPI or FPI arrangements, the negotiated target cost and fee, cost and profit, or price should be less than the original estimated cost and fee of performing the effort under the award fee arrangement in order to be implemented as a cost reduction effort. Any net savings shared with the contractor will be pursuant to the negotiated arrangement and not the difference between the original estimated cost under the original contractual arrangement and the actual cost.

To ensure that cost reduction initiatives are cost effective, a minimum threshold of cost reduction savings may be established in order to qualify for sharing of such cost savings. To be eligible for an incentive fee, the resulting cost savings should be or have the potential to be returned to the direct control of DOE.

### **D. Development of Cost Reduction Proposals**

CRPs for design/process/method type changes submitted by the contractor should contain, at a minimum, the following:

- o Current Method (Baseline) - A verifiable description of the current scope of work, cost and schedule to be impacted by the initiative and supporting documentation.

- o New Method (Baseline) - A verifiable description of the new cost, work scope, and schedule; how the initiative will be accomplished; and supporting documentation.
- o Feasibility Assessment - A description and evaluation of the proposed initiative and benefits, risks, and impacts of implementation. This evaluation should include an assessment of the difference between the current baseline and proposed new method less implementation costs.

CRPs for the establishment of stand alone cost plus incentive fee/fixed price incentive/firm fixed price programs not specifically related to design/process/method type changes should contain, at a minimum, the following:

- o Current Method (Baseline) - A verifiable description of the current scope of work, cost and schedule to be impacted by the initiative; and supporting documentation.
- o New Method (Baseline) - A verifiable description of the new cost, work scope and schedule and how the initiative will be accomplished along with supporting documentation.
- o Feasibility Assessment - A description and evaluation of the proposed initiative, and benefits, risks, and impacts of implementation. This evaluation should include an assessment of the difference between the current approach and proposed approach less implementation costs.
- o Proposed Contractual Arrangement - The proposed contractual arrangement and the justification for its use.
- o Estimated Cost and Supporting Data - A detailed cost estimate and supporting rationale. If the approach is proposed on an incentive basis, minimum and maximum cost estimates should be included along with any proposed sharing arrangements.

## **E. Evaluation and Decision**

Once a cost reduction initiative is identified, the contractor or subcontractor should be responsible for a preliminary evaluation of such initiative. For all initiatives a proposal must be prepared, submitted, and negotiated with DOE before actually commencing the work. Included in the information provided by the CRP must be the extent the proposed cost reduction initiative may:

- 1) pose a risk to the health and safety of workers and the community, or to the environment;

- 2) result in a deviation from DOE requirements, such as DOE Orders and joint oversight agreements;
- 3) require a change in other contractual agreements;
- 4) result in significant organizational and personnel impacts;
- 5) create a negative impact on the cost, schedule, or scope of work in another area;
- 6) pose a potential negative impact on the credibility of the Contractor or the DOE; and
- 7) impact successful and timely completion of any of the work in the baseline.

Some Departmental operations/field offices may consider conducting preliminary evaluation of CRPs to ensure that they satisfy the above criteria before their implementation. These offices may

consider establishing CRP review thresholds for those proposals that are subject to a preliminary evaluation.

DOE may approve or disapprove all or only part of a CRP. Acceptance or rejection of a CRP is a unilateral determination made by the CO. The contractor should be afforded timely notification that a CRP has been accepted, rejected, or deferred. The only CRPs that should be considered for acceptance are those which the contractor can demonstrate at a minimum will: (1) result in savings (in the sharing period if a design, process, or method change); (2) not reappear as costs in subsequent periods; and (3) not result in any impairment of essential functions. The failure of the CO to notify the contractor of the acceptance, rejection, or deferral of a CRP within the specified time shall not be construed as acceptance.

The contractor should begin implementation of a CRP only after receiving the appropriate approvals. CRPs that affect the established baseline or an approved design, process, or method should be processed through the normal change control methodology. Reporting processes agreed to by the parties and approvals necessary before implementation should include those associated with that process.

#### **F. Adjustment to Original Estimated Cost and Fee**

If a CRP is established on a cost-plus-incentive-fee, fixed-price-incentive or firm fixed price basis, the original fee and total estimated cost of the effort will be reduced by that portion of fee and estimated cost associated with the CRP effort.

## **G. Reporting of Results**

Upon completion of a specific initiative, the contractor should provide a final report with appropriate supporting documentation sufficient to permit a technical assessment of the completed work, and independent validation of the reported cost savings. At the time the cost savings report is submitted to DOE, the reported savings should be transferred to a management reserve account controlled by DOE for disposition (if such transfer has not occurred earlier). See Disposition of Savings for further discussion.

## **H. Validation of Results**

An independent DOE verification of the reported results should be conducted using all available records. Audit of a particular CRP may be conducted if necessary. This validation of savings should reflect both programmatic and financial assessments. It should be determined whether the savings were actually achieved without compromise to the planned schedule and scope of work. Full consideration should be given to any offsetting negative impacts on cost, schedule, and scope of work in all areas that are directly attributable to the achievement of the savings.

Cost reduction incentives have been and will continue to be the subject of internal and external reviews. The staff assigned to administer cost reduction incentives should maintain records of the evaluation, acceptance, and validation of the specific cost reduction incentives. Such records should be well documented to support the basis for payment of incentive savings.

Determination of cost savings achieved on specific initiatives should be identified only to the extent that such cost savings are also realized at the total program cost line. However, it should be kept in mind that costs not directly subject to cost reduction incentives nor impacted by their performance may increase for valid reasons which have nothing to do with the costs subject to the cost reduction incentives. In such instances, credit should be given to the cost savings associated with the cost reduction incentives.

## **I. Calculation of Shared Net Savings**

### For Design, Process or Methods Change:

Shared savings will only be those savings which become available for deobligation in the immediate fiscal year or which will become available for deobligation in the following fiscal year.

Estimated shared net savings shall be calculated by subtracting the total costs of the proposed CRP (to the Contractor and DOE) from the total costs of the existing requirements.

$$\text{Estimated Shared Net Savings} = \text{Current Cost Baseline} - (\text{New Method Costs} + \text{Contractor's Development Costs} + \text{Contractor's Implementation Costs} + \text{Administrative Costs (Optional)} + \text{DOE Costs (Optional)})$$

For CPIF or FPI:

$$\text{Shared Net Savings} = \text{Target Cost less Actual Cost}$$

## **J. Disposition of Savings**

After validation of specific cost reduction savings, the total verified cost savings for the current sharing period should be placed in a separate account, such as the "Management Reserve Account," for disposition by DOE. The transfer of savings should be effected by an approved Change Request, or other suitable funds management documentation. (An alternative is to transfer savings into a "Management Reserve Account" controlled by DOE when they are initially projected. In this instance care must be taken in reallocating such savings before their validation.) The contractor's share of savings will then be paid out of this account. Future savings not already identified in the budget for the current or following fiscal years from contractor cost reduction initiatives should not be placed in the Management Reserve Account, but should be reflected as reduced requirements in future budget submissions.

The contractor should be provided the opportunity to propose projects or initiatives through the appropriate change control process, to be funded from the savings held in the Management Reserve Account by DOE. These proposals may include performance of additional program scope; investments in improvements to health and safety, and environmental protection; long-range mission capabilities; and productivity improvements.

There are also significant issues relating to initiatives specifically designed to reduce indirect costs. In such cases, consideration should be given to the ability to identify the specific funding sources, and the proper application of the reduction in accordance with Cost Accounting Standards. Such indirect cost reductions should not be subject to any sharing with the contractor under a cost reduction incentive beyond the extent to which the reduction can be validated.

## **K. Determination of Cost Reduction Incentives**

To be eligible for full sharing in realized cost savings, the contractor must perform the subject effort at the level of performance reflected in the statement of work modified to include the latest work authorization document. Further, the contractor's overall performance must be as stipulated in any type of conditional payment provision in the contract. Normally, such

provision will stipulate that effort not specifically incentivized must be performed at a level so as not to jeopardize the overall performance of the contract, otherwise any fee determined to be earned may be adjusted downward. In determining the contractor's share of shared net savings, operations/field offices should consider at a minimum, the following factors:

- o Source of incentive identification (contractor-initiated, DOE-directed, shared information, etc.)
- o Degree of difficulty to implement
- o Degree of innovation
- o Impact on out year budgets (may be considered under award fee)
- o Applicability to other government programs, facilities, and contracts
- o Incentives received under other incentive programs for the same initiative (incentives should not be received under more than one program)
- o Ability to track and validate savings

## **Topic Two**

### **Achieving Cost Efficiencies by Incentivizing the Performance of Unfunded Work Scope**

This topic addresses incentivizing unfunded work scope as a means to encourage the contractor to achieve cost savings in the performance of funded work scope.

#### **What is the specific cost efficiency approach which is the subject of this Topic?**

The cost efficiency approach, which is the subject of this Topic, is designed to motivate the contractor to identify and achieve cost efficiencies by incentivizing the performance of unfunded work. Specific work tasks which are not funded, but planned for the current or out years are identified and fee, in addition to the Total Available Fee, is established for their performance. In order to earn the fee the contractor must find the funding (to cover both the cost and fee) through identifying and achieving cost savings in the funded work necessary to perform the unfunded



effort and then perform it to the specified performance level. Incentives of this nature have been termed “Super Stretch”.

**Is this type of incentive covered by the M&O fee policy in the DEAR?**

The fee policy, at DEAR 970.15404-4-6 (b) (9) specifically prohibits the use of funds previously used in an established fee base from being used again. This section, in addressing costs to be excluded from the fee base, includes: “Any cost of work funded with uncosted balances previously included in a fee base of this or any other contract performed by the contractor”. The “Super Stretch” incentive is considered an interim cost reduction incentive only and must receive the approval of the Procurement Executive prior to being used.

**How does this cost efficiency incentive differ from the cost reduction approaches discussed in Topic One?**

Topic One discussed two structured categories of cost reduction approaches:

- 1) The first involves a specific cost reduction effort involving an identified task(s) that is specifically spelled-out in the contract and which, in accordance with the FAR, has been negotiated on a cost plus incentive fee, fixed price incentive, or firm fixed price basis.
- 2) The second category or approach to a structured cost reduction program is a cost sharing arrangement resulting from a contractor initiated, innovative, well defined, value added engineering effort change to a design, process or method associated with a specific project or program. .

The cost efficiency approach which is subject of this topic is less structured and contains two steps:

- 1) The first step requires the contractor to identify and achieve cost savings in its approach to performing funded work scope.
- 2) The second step requires that the contractor utilize these cost savings to perform direct work scope which was previously unfunded.

The cost savings may result from the introduction of a more efficient technology, process, or methodology of performing the work scope. The technology, process, or methodology being changed may or may not have a well defined baseline. The cost savings may also result from the contractor reexamining the work scope to be performed and identifying areas which need only to

performed at a minimally acceptable level or not at all. The source of these cost savings need only be identified as the result of contractor action in order to be applied to this approach.

### **Why is there a need for this type of cost efficiency approach?**

The two cost reduction approaches discussed in Topic One require well defined, negotiated technical and cost performance baselines or in the case of the second category, DOE critical acceptance of the technical baseline. Any cost savings are shared with the contractor based upon a negotiated sharing arrangement, with the contractor's share potentially being a significant (ranging up to 40% - 50% in the case of fixed price incentive arrangements in the instance of the first category and up to 25% in the instance of the second category) portion of the savings depending on the type of contractual arrangement negotiated and risk and complexity of the work being performed. The need for the level of definition, negotiation, or critical acceptance on the part of the DOE is due to the high potential share of the cost savings which might be earned by the contractor. The DOE does not want to provide the contractor a significant share of the cost savings that are achieved due to the contractor's poor initial technical, process, or method approach or poor cost estimating.

Often, there are no well defined baselines established for the work scope or the technical, process, method, or cost baselines that are established for the work scope have not been critically challenged by the DOE. In these instances, it is recognized that the DOE would benefit if the contractor could perform the work scope more efficiently. In order to incentivize the contractor to achieve the potential cost savings in these instances, while not providing it with a significant share of the savings which may result due to the contractor's poor initial estimating, the cost efficiency approach which is the subject of this topic is suggested. Under this approach, the contractor is motivated to identify and achieve cost savings based on incentives placed on the performance of additional work which is unfunded.

The conditions associated with the origin of the cost savings used to fund the additional work are less stringent under the cost efficiency approach discussed in this topic than they are for the cost savings discussed under Topic One. This is because the contractor does not receive a share of the cost savings achieved, but may receive additional fee only for the performance of additional work funded with the cost savings.

### **What is funded work scope?**

For most of the work to be performed at the sites operated for the DOE, the DOE has established technical, cost and schedule baselines, with the notable exception of the R&D work at the laboratories which does not lend itself to baseline management. For the work being performed for Environmental Management (EM), program and project baselines have been

developed as part of the “Paths to Closure” strategy. For work being performed for Defense Programs (DP), program and project baselines are identified in the “Green Book” and related documentation. The baselines developed for EM tend to be multi-year, going to the end point of closure projects. The baselines for DP are tend also to be multi-year, however, only going out as far as planning is appropriate.

The baselines are predicated on a number of assumptions including the availability of funding, the magnitude and complexity of the work scope and the estimated technical approaches, processes and methodologies which will be utilized. Often these assumptions are based on initial estimates which may or may not reflect the most efficient way of performing the work. It is often not until a specific fiscal year’s estimate of the work scope which can be performed for the funding approved by Congress is received from the contractor performing the work that the actual work to be performed within a fiscal year can be finally established. This may or may not match the amount of work and schedule contained in the Program Office’s planning documents.

The effort to be performed by the contractor and the degree to which it will be completed in the current evaluation period, is based on the contractor’s best estimate and will fall within the confines of the money available to the contractor to perform the work during the period. The DOE and the contractor will reach agreement on the work scope to be performed within the funding and it will be identified in the annual operating plan, or similar document which reflects funded work scope for the period. This work scope is said to be *funded*, i.e., each identified task to be performed within the funding period has an amount of estimated cost and appropriate funding identified with it. All other work, whether in the funding year (work included in the program/project baseline planning, but not covered by the funds received) or in out years, is considered unfunded.

#### **What sources of funding are considered appropriate for this cost efficiency incentive?**

This cost efficiency incentive is primarily directed at getting the contractor to perform the funded work more efficiently than was estimated. This can occur in several ways including the introduction of new technologies, processes, or methods; through more efficient management; by eliminating unnecessary work, (including that found to be unnecessary based on recently completed work experience); by “bare-boning” support type effort to a satisfactory level only; and by integrating requirements such that there is a reduction in overall requirements while still achieving the same objective.

The contractor’s ability to perform (either due to re-estimating the effort or actual savings during performance) funded requirements at less cost than initially estimated will result in newly available funds with which unfunded work can be performed in the current period. Using such funds, critical unfunded tasks may be accelerated to the current period. Funds made available

from any of the actions cited above are considered as appropriate sources for funding this incentive.

It should be noted that in situations where the DOE directs a change which results in lower costs or a descoping of effort and the cost and total available fee of the contract are not adjusted, the availability of funds from such action to perform other work shall not result in any additional fee.

### **What is an appropriate amount of fee for the “Super Stretch” incentive?**

There is no clear answer regarding an appropriate amount of fee to be established for the performance of a “Super Stretch” incentive. This is because, on the one hand, the fee is to reward the contractor for performing work, while on the other hand, it is to reward the contractor for performing work more efficiently. The apparent answer regarding the appropriate amount of fee would seem to be that it should be whatever the amount of fee is which is normally associated with performing work, let's say 5% plus the amount of cost savings normally shared with the contractor, let's say 25% of the actual savings. Therefore, the appropriate fee amount should be approximately 30% of the cost for performing the “Super Stretch” effort. This, in fact, may well be the answer if one of the cost reduction approaches discussed in Topic One were used, with the DOE using its share of the savings to fund additional work scope. However, where the definition and rigor required in Topic One is lacking, the cost reduction approaches indicated in Topic One are not appropriate and the “Super Stretch” incentive should be used. Where we have not critically challenged/negotiated the cost baseline, either of the funded work or the unfunded work, it is inappropriate to provide as much fee for achieving cost savings and performing work as it would be if we have critically challenged/negotiated them.

The concern is that if we were to critically challenge/negotiate the baselines for the work to be performed, we may well get that unfunded work we are trying to incentivize the contractor to perform within the funded work effort. We can not be sure if it was not included in the funded work scope because conservative or poor estimates or the use of inefficient processes or methods resulted in a high cost estimate for the work we wanted performed. The contractor should not be rewarded for estimating or processing inefficiencies which the fee on the funded effort assumes will be corrected as part of the contractor's normal management of the contract. Lacking a critical challenge or negotiation of the contractor's estimate, we are still confronted with trying to motivate the contractor to seek ways to perform the desired work more efficiently, without providing the contractor with too little or too much incentive to achieve such efficiency.

In establishing the fee it must be kept in mind that the “Super Stretch” incentive is both a cost efficiency incentive and a performance incentive.

It may be easiest to start with the performance aspect of the “Super Stretch” Incentive first:

- If this effort was included with the funded work scope, it would be added to all other similar work, with the maximum fixed fee amount established using the appropriate fee schedule. For instance, if this was an EM task with a cost of \$20 M and all other EM tasks had a cost of \$80 M, when added together the total cost of \$100 M would have a fixed fee of 3.53 % associated with it. Assuming a task factor of 2, then the maximum total available fee would be 7.06% (\$ 7,060,000) for the EM effort. (In this instance, the effective fixed fee rate for the \$20 M effort is 2.49 % due to the regressive nature of the fee schedule. When multiplied by the task factor 2, its maximum effective fee rate would be 4.98%)
- However, if the effort was considered distinct, then the fixed fee for the \$20 M task would be 5.18% and for all of the other \$80 M in EM tasks, the fee would be 3.79%. Again assume a task factor multiplier of 2. This would result in a maximum total available fee of 8.14% (\$8,135,996).

It must be kept in mind that in both of the above examples, the contractor would receive fees exceeding the maximum total available fee calculated from the fee base associated with the funding of \$80 M. (With no adjustments: a fixed fee of 3.79% times the task factor of 2 would equal 7.58% or \$6,064,000).

The caveat, when considering the performance aspect, is that due to the uncertainty associated with the estimating process, it is not a given assumption that the unfunded work should be considered as added scope exceeding the funding. Therefore, it should normally not bear fees greater than what the fee would be if it were funded (funds of \$100 M provided) and in no case greater than if it was considered a stand alone funded effort.

Next, considering the “Super Stretch” incentive as a cost efficiency incentive:

In order to motivate the contractor to achieve cost reductions, it is normal to provide the contractor a share of the actual costs saved. The share (percent) of costs saved which the contractor will receive is normally dependent on how well established the technical, cost and schedule baselines are and the extent to which the cost estimate has been critically challenged or negotiated. The more defined (specificity of work and schedule, critical challenge or negotiation of costs) the baselines, the more difficult it will be to achieve cost reductions to them. Additionally, the more complex and risky the work, the more difficult it may be to achieve cost reductions. While there are no hard rules regarding the appropriate share a contractor should receive, often when negotiating FAR contracts, cost-plus-incentive-fee contracts would normally not provide more than a 25% maximum share up to a fixed ceiling with many shares between 15% - 25%. To justify a greater share to the contractor, there

must be a greater definition of the work and costs which should lead to a fixed price incentive type of arrangement.

If the maximum share for the contractor is 25%, where there is a critical challenge or negotiation of work scope and costs, then the share should be less when a critical challenge or negotiation does not occur. The amount establishing the contractor's share should be a reflection of how good the estimates to perform the work are. Where there is no critical challenge or negotiation of the estimate, historical data should provide information on how close the contractor's actual costs have been to its estimated costs. The appropriateness of this data will, in part, rely on how similar (complexity, risk, unknowns, etc.) future work and the environment it is being performed in is to the historical work and environment. Normally, the further actual costs have been off from the estimated costs, the lower the contractor's share of savings should be. (This applies where the contractor has over run its estimates, as well as to where it has under run them). This is because the divergence may be an indication of poor estimating techniques, and the amount of divergence not so much dependent on the contractor's control and management of costs as a reflection of its poor estimating abilities. The contractor should not be provided fee due to estimating fluctuation.

Finally, consideration should be given to the value of performing the effort:

When establishing "Super Stretch" incentives, there is one other benefit that derives from their performance in addition to the achievement of cost savings and performance of unfunded work. That is the value the DOE receives by having the unfunded work performed earlier. For example, if a building can be Decommissioned and Demolished (D&D) a year earlier than scheduled, the DOE may realize a cost savings associated with any reduction in security, maintenance, and surveillance that occurs due to that building no longer being there a year earlier than anticipated. In some instances the value of reduced out year costs earlier than anticipated is significant.

So, given these considerations, what is an appropriate amount of fee to associate with "Super Stretch" incentives? It will vary depending upon the specific circumstances of the effort. What is important is that in establishing an amount, the above considerations be addressed. The lack of critical challenge or negotiation of estimates, the lack of historical data regarding how actual costs have compared to initial estimates, a change in the environment which may make it easier for the contractor to reduce costs, etc., all contribute to the fact a lower fee amount should be associated with the "Super Stretch" incentives. Where there is critical challenge of the estimates, where not only does a historical data base exist, but it has been employed to constantly tighten the work estimates, where the contractor has "bare-boned" its support costs, etc, all contribute to support a higher fee amount to be associated with the "Super Stretch" incentives.

**What is the relationship between Total Available Fee and the “Super Stretch” incentive discussed in this Topic?**

It is recommended that a portion (up to 15% - 20%) of the Total Available Fee calculated for the funding year be used to incentivize the contractor to perform some of the unfunded work.

The recommendation is based on a belief that, because there normally is not a critical challenge in the negotiation of the estimate of the work to be performed for the funding provided, some contingency exists in the estimate due to the nature of the estimating process. As the DOE gains more confidence in the accuracy of the estimate for the work to be performed, the amount of the Total Available Fee allocated to unfunded work should decrease.

Consideration should be given to tying the portion of Total Available Fee allocated to unfunded work to any unfunded work in the funding year (work included in the program/project baseline planning, but not covered by the funds received) followed by unfunded critical path work in the out years. A fee exceeding the Total Available Fee may be established (with the approval of the Procurement Executive) to incentivize performance of any additional unfunded work scope using the “Super Stretch” incentive.

**What are the mechanics of “Super Stretch” Incentives and is there a potential “Anti-deficiency” problem?**

The following example is provided to demonstrate how the government may obtain more work for the funding provided and the contractor may earn more fee than the total available fee.

Assume a budget of \$550,000. The fee base is \$525,000 and the total available fee is \$25,000. Let's now assume that due to a reevaluation of the initial cost estimate by the contractor, or based on actual work performed, the estimated cost of the funded work is revised to \$425,000. The newly available funds of \$100,000 (\$525,000 less \$425,000), which when added to the revised cost of \$425,000 and the original fee of \$25,000, amounts to \$550,000. Of the \$100,000 for purposes of illustration, \$95,000 may be used for funding additional work, with which an available fee of \$5,000 is associated. The calculations before and after the new funding is as follows:

	<u>Before</u>	<u>After</u>
Budget	<u>\$550K</u>	<u>\$550K</u>

Estimated Cost of Work	\$525K	\$425K (revised estimate of original work) 95K (new work)
Available Fee		25K (on original work) 5K (on new work)
	<u>25K</u>	<u>5K</u>
	\$550K	\$550K

Based on the contractor's estimated cost reduction, which enables previously unfunded work to now be accomplished, the contractor's available fee has increased from \$25,000 to \$30,000, while the work scope has increased and been accelerated forward.

It must be kept in mind that the funded work is an estimate by the contractor of the amount of work which it can perform given the funding provided, adjusted for the fee amount. This is not a fixed price contract where the DOE must pay the contractor this amount for the performance of the work. Further, it is not an amount which is critically challenged or negotiated, it is an estimate by the contractor. The purpose of the "Super Stretch" incentive is to motivate the contractor to do more work than it initially estimated it could do for the same amount of funding. For cost type contracts, the DOE is required to have adequate funds available to cover what DOE expects the cost and fee to be of the work authorized. Therefore, when "Super Stretch" incentives are authorized, the DOE must believe that based on the cost of actual work performed or a re-estimation of the work to be performed, there is adequate funds to cover the cost and fee of the additional work scope added by "Super Stretch" incentives being authorized. The contractor must achieve adequate cost savings to not only fund the cost of the additional work, but also the total available fee associated with it. The contract should contain the "Limitation of Funds" or "Limitation of Cost" clause which precludes the contractor from creating a contingent liability on the DOE, including one associated with the "Super Stretch" incentives.

### **Must a "Super Stretch" incentive be performed within a given time frame?**

The underlying premise of the "Super Stretch" incentive is that more work can be performed within the funding provided for a given year if the contractor aggressively manages costs, reevaluates its estimates, introduces new technologies, processes, and methods, and reduces expenses to the minimum necessary to perform the work. This means that early in the performance period, the contractor must have an idea where and in what amount cost savings can be achieved, and when and what resources it will have available to perform that effort identified as "Super Stretch". All effort subject to "Super Stretch" incentives must be performed in the year it is established, otherwise it becomes part of the funded work in the following year. This is not to say that a 100% of a "Super Stretch" incentive needs to be performed for any of the incentive to be earned. Many efforts subject to "Super Stretch" incentives may be partially



performed, with the incentive earned for that portion performed. All remaining unperformed work will then become normal work scope in the following year.

### **Is the contractor capable of performing the “Super Stretch” Incentives?**

Prior to establishing “Super Stretch” incentives, a determination must be made that the contract can actually perform them. These incentives are unique in that both a cost savings must be identified and achieved and additional work performed. However, in order to perform additional work, the contractor must have the right resources available to do it. This includes equipment, material, and manpower. If the right resources are not available, nor can they be made available, there is no point in creating the “Super Stretch” incentive. Contractors should be requested to provide detailed planning documents which indicate how they plan to achieve the necessary cost savings and perform the additional work at the time the “Super Stretch” incentives are established.

Another consideration when determining the viability of performing “Super Stretch” incentives whether or not there are any limitations placed on the use of the type of funds made available as a result of the cost savings achieved. This is a contract financing question and when establishing “Super Stretch” incentives and evaluating the potential source of cost savings and uses for such savings the CFO should be involved. It should also review the source and use of funds every time a “Super Stretch” incentive is authorized.

### **Should a special contract provision be created for the implementation of the “Super Stretch” incentive and, if so, what should it contain?**

Because of the unique nature of the “Super Stretch” incentive, it is important that a clause or clauses be established in the contract regarding them. Not only should the clause(s) provide for the procedure for establishing, administering, and evaluating the incentives, but it must make provision for changing potential incentives and address the contractor’s recourse, i.e., if it achieves cost savings in anticipation of earning additional fee in the performance of “Super Stretch” incentives, but DOE directs other uses of the savings which are not directly linked to fee. The clause should make it clear that the “Super Stretch” incentives are subject to the same terms and conditions of the contract as the funded incentives, including the “Conditional Payment of Fee” clause. See the attachment hereto for sample provisions used by Rocky Flats. This is provided as a sample for ideas only.

### **What is the format for a “Super Stretch” incentive?**

“Super stretch” measures or tasks, while recognized in the contract, are not part of the contract’s requirements because they are associated with unfunded activities and, therefore, the contractor is not charged with performance without further action by the contracting officer.

The “Super stretch” concept requires:

1. That critical work, which is unfunded in the current period, or work identified for performance in a subsequent period:
  - be identified
  - be assigned a priority on a site wide priority list.
  - indicate a “must start by” date in the workscope
  - indicate any precedent conditions prior to its commencement
  - indicate any conditions/assumptions its performance (technical, cost, and schedule) are predicated on
  - indicate the potential impact on performance (technical, schedule, and cost) if the work is or is not performed.
2. An estimate of the cost, by task, be established for the work.
3. An appropriate amount of fee be allocated to each task..
4. That provision be made for adding, deleting, or changing “Super Stretch” incentives during the performance period.
5. That a contractual provision be created for the “Super Stretch” incentives
6. The actual “Super Stretch” incentive be formatted and contain the same information as the funded Performance Based Incentives (PBIs) unless inappropriate.

**Are there any special management controls or systems required  
in order to establish the “Super Stretch” incentive approach?**

Because the contractor’s estimates are not normally subjected to critical challenge or negotiation, there is potential that there could be significant errors or inefficiencies in the estimates. The intent of the “Super Stretch” incentive is to motivate the contractor to tighten its estimates, allowing the performance of more work. However, by the nature of the incentive, the contractor may be motivated to inflate its estimates of the cost of performing work in order to receive the additional fee associated with the “Super Stretch” incentives. It is therefore, imperative that the DOE establish its own estimate of the cost of the work it wants performed and have systems in

place to ensure in each succeeding year the estimating of the cost of the work to be performed is more accurate. It is also important that management systems be in place to ensure that the critical work is what gets the funding and that there is an appropriate process to manage and direct costs and funding. To this end, some suggestions are made below. These are only suggestions and each office utilizing “Super Stretch” incentives must decide what specific management systems it wants in place to manage this type of incentive.

- An organization to maintain a site wide priority list of unfunded work, including work associated with the “Super Stretch” incentives.
- A system to track available funding and cost commitments, including:
  - changes from the initial budget submission as a result of the approved budget
  - work scope changes reflecting a reduction to costs against the approved budget due to:
    - deferred work
    - deleted work
    - reduced scope
  - cost efficiencies resulting from:
    - performance of actual work
    - DOE validated revisions to the estimated cost of performing the work scope
  - work scope changes reflecting an increase in costs against the approved budget due to:
    - deferred work implemented
    - emerging new work scope
    - increased scope
    - unfunded work scope associated with “Super Stretch” incentives
  - allocation of funds freed due to cost reductions and cost efficiencies to commitment for cost increases.
- A Site Change Control Board (CCB) or similar appropriate board with responsibility, in addition to the normal CCB responsibilities, to direct the utilization of funds freed due to cost reductions and cost efficiencies to commitments for cost increases focusing on trade-offs between “Super Stretch” incentives and all other demands for funding. Consideration should be given to, among other things, the priority of the “Super Stretch” incentives vs. that of the other demands, the required start dates of the “Super Stretch” incentives, and overall impact to site, program and project baseline achievement. Where other demands take precedent over the funding of “Super Stretch” incentives senior management should be advised and impacts identified.

- An organization to track the performance of the “Super Stretch” incentives authorized: which identifies the source of the cost efficiency, determines the impact of the cost efficiency on out year estimates, establishes actual performance achieved, determines why incentivized performance was or was not achieved, determines the impact of the performance on out year estimates and makes appropriate adjustments in the baseline.

### **To what extent should “Super Stretch” Incentives be used and for how long?**

The “Super Stretch” incentive is unique because it is designed for use where the initial estimates to perform the work scope are not subjected to critical challenge or negotiation. In order to be effective and not subject to gaming, the appropriate organizations and systems must be in place on the DOE side to manage and administer a baseline system and account for the impact of the performance of the “Super Stretch” incentives. It is envisioned that after use for several years, this incentive will no longer be appropriate and one of the approaches discussed in Topic One will be more appropriate.

A field office experienced with the super stretch approach has provided comments which we repeat here. The comments address certain limitations of the super stretch approach.

- DOE must have the ability to conduct independent cost estimates for the baseline work scope, or be able to critically review the contractor’s budget. In addition to cost baselines, DOE must also have the ability to determine if the processes and technical approach utilized by the contractor are the best and most efficient. DOE’s limitations in cost estimating and critical (technical) review can be balanced somewhat by placing stringent terms and conditions on both the baseline and the super stretch incentives, as well as carefully considering and balancing the overall potential of the contractor to earn both baseline and super stretch fee.
- The complex nature of the major DOE sites and the tendency of contractors to aggressively pursue super stretch work can lead to appropriations concerns. The contract and work management systems must contain a number of controls to keep the contractor from performing fee bearing work that is not funded. While the “limitation of funds” clause helps, it is also necessary to maintain adequate controls associated with baseline change proposals to ensure changes are of value from a strategic objective standpoint (critical mission requirements) as well as from a cost perspective. Specific language should be included in each change proposal that restricts the contractor from performing fee bearing work until the funding for the fee has been set aside.

- Controls are also needed to keep the contractor from performing super stretch work in lieu of like for like work under regular performance incentives. The use of the gateway concept can be used to ensure that super stretch work is not performed in lieu of regular work. While the contractor may begin super stretch work, and even complete the work before all regular work is completed, super stretch fee is withheld pending completion of all regular work in a given category of work effort.

#### **Attachment**

#### **Example Super Stretch Performance Incentive clause:**

##### Super Stretch Performance Measures

a.. Over the course of this Contract the parties may agree to negotiate SuperStretch Performance Measures (SSPMs) for certain unfunded activities. Candidate SuperStretch PMs are not a part of the contract, and should not be pursued by the contractor unless and until funds are provided for the scope of such PMs through an approved Site Change Control Board (SCCB) action. It is acceptable for the contractor to perform limited, preparatory efforts toward unfunded SuperStretch PMs so long as such work is clearly within the scope of the existing, approved funding baseline.

b. Candidate SuperStretch PMs will be negotiated in advance, including associated fees, Rating Plans, and earnings schedules. As a general rule, SuperStretch PMs should include provisions for incremental payments for partial performance, as discussed earlier.

c. SuperStretch PM may be activated by modification to the contract when its work scope is partially funded or fully funded.

d. If a SuperStretch PM is funded because the contractor is able to redirect resources from other work which is being accomplished satisfactorily at costs below the established baseline for such work, the contractor will be entitled to earn the full fee negotiated for that SuperStretch PM. If a SuperStretch PM is funded by DOE providing additional funding above the established baseline, the contractor will be entitled to earn half of previously set fee for that SuperStretch PM. If a SuperStretch PM is funded by both methods, a reasonable fee representing the proportional funding provided by each party (greater than 50%, but less than 100% of the previously set SSPM fee) will be negotiated by the parties. The Rating Plan will be amended to reflect the negotiated fee prior to the incorporation of the SuperStretch PM into the Contract. In the event that the parties cannot agree, the matter will be resolved by Contracting Officer determination which will be subject to the “Disputes” clause of the Contract.

e. For FY98 SuperStretch Performance Measures, the following language applies:

Each Baseline Change Proposal (BCP) submitted to the Site Change Control Board (SCCB) to direct (or redirect) funds to contractor activities will identify the “recipient” Detailed Project Baseline Summary (dPBS) as falling into one of the following categories:

(1) Underfunded dPBS (i.e. where the current Estimate at Completion exceeds the original Estimate At Completion or Budgeted Cost of Work Scheduled);

(2) An item on the Priority Unfunded List that is *not* designated as a SuperStretch Performance Measure (SSPM); or

(3) SSPM.

The BCP shall identify which dPBS will receive the funds, and the rationale for selecting that dPBS. DOE will approve or reject the BCP as part of the SCCB process. As a general rule, when the underfunded dPBS condition is caused by DOE direction to perform additional scope, DOE shall provide the additional funds for the specific activity. This condition/situation would not take priority over the funding by the contractor of SSPMs when the contractor identifies

funds through cost savings or other redirection of resources. In addition, DOE work authorization is exempted from the provisions of this section.

If the contractor identifies funds through cost savings or other redirection of resources, any underfunded dPBS' (item #1, above) ordinarily must be fully funded by the contractor unless the under funding is caused by DOE direction to perform additional work scope. the contractor will ordinarily be given flexibility to prioritize the funding of the underfunded PBS'. If funds remain they may be redirected to SSPMs (item #3, above). However, there may be situations where circumstances warrant the funding of SSPMs prior to funding an underfunded dPBS. In these cases, the contractor may fund a SSPM prior to an underfunded dPBS with the prior written consent of the Contracting Officer.

If DOE provides new Budget Authority (BA), these funds will ordinarily be directed first to Unfunded Priority List items not designated as SSPMs (item # e (2), above). However, when circumstances merit, DOE BA may be directed to SSPMs or to fund an emerging issue. Examples of situations where circumstances might merit such an action.

When new BA comes with restrictions as to usage, such as from DP funds and the logical application of those funds would be an SSPM.

When an “emerging” issue of significant importance arises unexpectedly. However, an emerging issue may not always be identified as an SSPM.

At the time an SSPM is funded by the SCCB, the Board will designate whether the SSPM to receive “full” fee (i.e. 100% of the amount identified to that SSPM) or “negotiated” fee (reduced amount negotiated between 50% and 100% of the identified fee), based on the source of the funds directed to the SSPM (KH or DOE BA). The amount of any negotiated fee (within the 50% - 100% parameters) will depend on the circumstances.

Example: the contractor identifies resources and suggests fully funding SSPM “X” about the same time DOE suggests providing “fenced” funds that can only be used to fund the same SSPM activity. Due to funding restrictions, the SCCB directs DOE funds to the SSPM activity. If the contractor identified resources are redirected to other SSPMs, the impact on the contractor’s fee earning potential is positive (i.e. they can still earn a portion of the fee identified to SSPM “X”, plus 100% of the fees identified to the other SSPMs that are now funded), so a negotiated fee on SSPM “X” less than 100% may be appropriate. However, if the contractor identified resources are directed to non-fee-bearing items from the Priority Unfunded List, the contractor’s fee earning potential is impacted negatively. To mitigate that impact, a negotiated fee for SSPM “X” closer to 100% of the fee originally identified to that SSPM could be justified.

If the SCCB determines a negotiated fee to be appropriate, the full 100% of the fee will be funded until the fee is actually negotiated. After negotiations, any unallocated fee will be unfunded from the SSPM. If SSPMs are incrementally funded, the SCCB will designate the fee be incrementally funded at the same proportion as the costs are incrementally funded. As additional funds are identified for incrementally funding the SSPM, the contractor will review the status of performance and ensure the original cost estimates and fee are accurate, and that adequate funds will be available to cover all costs, including fees.

f. There may be instances where an emerging issue might require the contractor identify resources being applied to non-fee bearing dPBS' other than underfunded dPBS'; or might even require the unfunding of a SSPM. In such an instance, DOE and the contractor shall negotiate, and DOE shall authorize, the payment of an appropriate fee for negatively impacting the fee earning potential of the contractor.

g. At the end of the fiscal year, the parties will review the total amount of dollars identified by the contractor over the entire fiscal year to fund SuperStretch Performance and underfunded dPBS'. If it is demonstrated by this review that the contractor has actually provided sufficient dollars to fund both categories (including the increase in potential fees), the amount of potential fee attributable to SuperStretch Performance Measures incorporated into the contract will revert to 100% of the amount originally identified for those SuperStretch Performance Measure.

## **Topic Three**



## **Models and Examples**

*The objective of this topic is to provide several examples of performance measures to assist in the implementation of performance based contracts and the establishment and administration of performance based incentives. To the extent possible, our intent is to supplement this section as new measures are developed that we believe might be of value in structuring performance measures in your own organization. It should not be implied that the examples contained in this section constitute best practices. The three examples presented have been chosen for inclusion in the Guide because they illustrate the structuring of performance requirements (1) around highly defined outcomes which are evaluated objectively, (2) broadly defined measures which are evaluated subjectively and (3) more closely defined measures which are also subjectively evaluated. As noted, this section will be updated with additional examples as well as model performance requirements and measures. The authors of this Guide welcome any contributions you may wish to have considered as an addition to this section. Our primary objective is to keep this document current with the best ideas and examples that are developed by our field offices. While the best individual practices may not be applicable universally, they may be a good starting point for someone else.*

### **SECTION 1 - Incentive Structure & Examples**

The objective of this section is to provide guidance regarding the structure of both subjective and objective performance incentives along with examples developed at DOE sites. The following discussion addresses the establishment of the requirements and the development of the incentive structure. The discussion is then followed by several examples of model incentive measures. When considered of value, references are made to the actual and sample documents found at the end of the section. Where possible, specific comments will be keyed to the document.

#### **1. Effective use of Performance Measures Requires Planning**

##### **A. Introduction and The Planning Process**

As discussed more fully in Chapter Five, Performance Measures and Incentives, program offices develop their strategic plans to cascade the DOE strategic plan. In turn site strategic, five year, annual, and project plans are developed to reflect the various program office plans as appropriate. The objectives of these plans are conveyed to the site contractors as requirements

via the SOW and work authorization documents incorporated into the contract. Each year, the contractor should be included in the planning process by assisting in defining what needs to be accomplished, in both the near and long-term. As one might suspect, the requirements set forth in the immediate and subsequent annual work authorization documents should be defined succinctly. Out-year projects will often be less well defined than current requirements, but should be written to the highest level of definition.

## **B. The Performance-Based Contract**

The contract is the legal document that sets forth the objectives, obligations and responsibilities of the DOE and the contractor. The Government promises to pay the contractor to accomplish certain tasks which have been identified and defined in the planning process. Payment will include compensation for the costs incurred and a fee or profit. However, all tasks are not equal in importance, relative to the annual requirements, nor are all tasks equally important relative to each other. Some tasks, in fact, may not be particularly important at all in absolute or stand-alone terms, but are necessary to be performed in a satisfactory manner to ensure the infrastructure is in place to support other objectives to be accomplished, now and in the future. With the introduction of performance-based contracting, the fee or profit to be paid is often associated with the performance of the mission critical work and allocated to the performance of specific tasks in amounts reflecting their priority and value to the government. Much of the remaining work, i.e., work that is not mission critical, may not have fee directly associated with it, but have any fee paid contingent upon it being performed at a satisfactory level.

Thus the payment of fee (incentives) for the performance of objectives (requirements), and their associated expectations and measures becomes a tool by which the government conveys to the contractor its priorities and desired levels of performance.

## **C. Establishing Performance Objectives (Requirements)**

How does the contractor know what is expected of him? Specifically, what are the performance objectives and the performance measures? Where and how can the contractor earn the maximum available fee that is fair and reasonable? How will performance be evaluated and success in meeting performance objectives be determined? A prerequisite is well defined statement of work requirements which identifies to the government the value of the contractor's accomplishments and a measure of the fee the contractor is entitled to.

The contract itself must incorporate all of the performance objectives (requirements) which stipulate the level of performance that DOE requires. Where the contract is current, this can be done by modifying the Statement of Work or otherwise contractually incorporating the work authorization document as they are generated. If a specific level performance is not contractually

stipulated, then the contractor may not be under any obligation to perform it. Separately, the government must establish the amount of fee that is available, define the tasks associated with the fee and the conditions under which it may be earned. If fee is to be earned based on success, the association must be clearly specified in the contract. Where fee is to be earned for the performance of subjective requirements, then the requirements and the amount of fee associated with them must be stated in the contract as well as the fact that fee will be determined by a subjective evaluation in accordance with the clause of the contract entitled "Total Available Fee Base Fee Amount and Performance Fee Amount". If fee is to be earned for the performance of objective requirements, with defined output requirements, then the requirements including any levels of performance incentivized and the amount of fee associated with the requirements or their specified levels of performance must be stated in the contract. Work requirements or specific levels of performance which are to be incentivized may be specified directly in the fee plan or contract or they may be identified by reference.

The majority of the Department's major site facility contracts will contain both subjectively and objectively incentivized requirements. However, some contracts may be structured solely on either subjective or objective performance requirements. In all circumstances, the applied categories of incentives are to be included in a Performance Evaluation Measurement Plan (PEMP), or similar document. The PEMP will usually be divided between an administrative section detailing the evaluation process and panels primarily associated with subjective incentives, a performance-based incentive section detailing objective performance incentives and an award fee section where subjectively evaluated incentives are grouped. In the latter case, the subjective incentive may describe in broad terms of the final outcome, or may be more specific listing a number of sub-elements with specific outcomes which the contractor will strive to achieve. Broad subjective measures may also provide specific emphasis areas so as to provide the contractor with better instructions as to what is considered important. This provides the contractor with further guidance as to what specific areas relating to an objective will receive particular attention in the evaluation process. Careful consideration should be given to the wholesale incorporation of all elements of the PEMP into the contract. One should not incorporate those aspects of the PEMP which contain administrative information which may need to be revised from time to time and therefore requiring continuous modifications to incorporate those changes.

In addition to citing the specific measures (either subjective or objective) tied to each performance objective, the PEMP will also provide an earning schedule, i.e., the amount of fee that may be earned for specific levels of performance. In the case of subjectively evaluated incentives, the PEMP will provide a description of how the evaluations will be conducted and how a rating will be arrived at to form the basis for the fee amount determined by the Fee Determination Official. Some subjective measures may be constructed such that the maximum available fee is defined for

each measure. In other cases, the subjective incentive may be broadly stated, covering several aspects of performance and requiring an adjectival description of performance. Adjectival descriptions may have specific fee amounts associated with them or a range of fee amounts requiring that the adjectival rating be translated into a point score which is then converted to an amount of fee earned via a fee conversion table or other conversion methodology.

#### **D. Selection of Requirements for Incentivization**

The requirements selected for incentivization should meet certain criteria. The criteria are applicable regardless of whether or not the requirements are to be objectively or subjectively incentivized. The criteria may include:

- 1) critical path or key requirements whose accomplishment represents significant value to the government.
- 2) exceeding the requirements as set forth in the annual work authorization/requirements document such that the government receives significant benefit owing to accelerated completion of future requirements or more efficient ways to achieve future performance.
- 3) requirements which have been performed below the required level of performance and it has become necessary to focus the contractor's attention on them by associating their performance with fee.

#### **E. Considerations**

There are a number of considerations which should be addressed when establishing objective measures and incentives.

- 1) The first consideration is a definition of the requirements . The better we can define the work scope, the more precise we can develop work authorization documents used to direct the contractor's efforts. The more precise the work breakdown structure, or the statement of work, can be, the better the performance incentive can match the value of the contractor's work. Where requirements are well defined, objective performance measures and incentives may be developed. On the other hand, where there is less certainty as to what the output should be, in terms of technical, schedule, quality, quantity, cost, etc., establishing measures and associated incentives that are fair and reasonable become more difficult. In these cases, subjective measures are generally used. However, there are no hard and fast rules in creating performance incentives. Award fee incentives may be broad or they may approach the specificity found in objective performance incentives by including special emphasis areas detailing specific performance outcomes desired of the contractor.

- 2) An incentive, whether objective or subjective should contain three basic components: (1) technical performance requirements (quality and quantity), (2) schedule (to be completed by when) and (3) estimated cost/actual cost at completion. With regard to estimated cost, the contractor's and the DOE's accounting system should be capable of segregating and tracking costs associated with each incentivized requirement at the requirement level. It is recognized that not all costs, particularly those associated with award fee incentives, can be tracked at the requirement level. Generally, the better defined and project oriented (task order accounting) the performance objective incentive is, the more accurately costs can be accumulated at the task level thereby allowing a cost incurred baseline to be developed. Where costs cannot be captured at the incentivized requirement level, costs should be tracked at the lowest level possible above the incentivized requirement level. The ability to relate cost of performance to fee earned based on actual performance provides an invaluable baseline to measure contractor cost performance and a valid justification to support the payment (or denial) of fee.
- 3) The contractor's progress may require monitoring to ensure work is being performed as anticipated and required, in addition to validation at the point of completion. It is important to communicate to the contractor how the validation process will be performed and at what intervals, especially if incremental reviews will occur at intermediate points prior to completion. The example provided later in this section includes the requirements related to verification of completion in the rating plan for each incentive measure. An alternative approach might be to include the method, as well as frequency, of validation associated with each measure in the PEMP. Where completion validation is detailed, possibly requiring inputs from more than one validation source, such as state environmental requirements, the verification of completion process may be best detailed in the rating plan for that incentive measure. The performance section of the PEMP is referenced in the contract. Another approach is to include the validation process in the site's quality plan which is incorporated into the contract by reference. However, one must be cautious in considering alternative approaches to binding the contractor to a performance methodology. For instance, including the validation requirements in the administrative section of the PEMP would not be enforceable in that this portion of the PEMP is generally not incorporated into the contract.
- 4) Related requirements (i.e., related to a specific incentive) should be identified for each performance incentive. Related requirements should be identified for the subsequent evaluation period as well. This allows the contractor to place the proper emphasis on current work knowing that subsequent work is contingent on performance in the current period. Any related requirements either in the previous period or in the current period require completion prior to earning fee on a current specific requirement should also be identified; this provides the contractor with better focus on the critical tasks that must be

completed within a certain order or time frame. One example provided in this section addresses Rocky Flat's best practice of utilizing "gateway" measures which require completion of related requirements before fee may be earned on a single performance measure.

## **F. Structure**

### **1. Incentive Structure**

As appropriate, the structure for both objective and subjective incentives should include:

- performance objectives which are to be directly incentivized and are well defined (may be a specific performance objective or a group of performance objectives),
- by reference to the appropriate annual work authorization/ requirements document citation(s) or by a restatement of the requirement,
- by establishing higher or lower levels of performance than are in the annual work authorization/requirements document, so long as they are or will benefit future requirements or are at least at the minimally acceptable performance level,
- all of the expectations and measures along with any related sub-elements of the measures of the performance objectives,
- performance objectives which are directly related to the performance objectives incentivized,
- all prerequisite objectives which must be met prior to any fee being earned by performance of any related incentive,
- the definition of what constitutes the successful completion of performance
- the process by which performance will be verified,
- the documentation required of the contractor to support claims for earned fee,
- The operational assumptions,
- definition of any terms which may be unclear,
- any formulas or calculations which will be used to measure performance,
- the cost constraint placed on the performance,
- the level at which the cost of performance is to be segregated from other costs and tracked,
- the earnings (fee payment) schedule associated with the requirement and each of the sub-elements,
- the budgeted cost of (incentivized) work scheduled (BCWS),
- the Work Authorization number,
- the Budget and Review (B&R) code for billing,

- the Work Breakout Structure element number(s),

## 2. Justification for the Incentive

Both objective and subjective incentives should be supported by appropriate documentation. Such documentation should include:

- the identification of the incentive.
- the estimated cost (and references to an independent cost estimate or the contractor proposal).
- The DOE organization or individual with cognizance over performance objectives.
- the recommended fee amount for the incentivized performance objective providing
  - the rationale for the amount,
  - if a base fee is provided in the contract, what portion, if any, of the performance of the incentivized performance objective is covered by such fee,
  - if the period of performance exceeds the fiscal year or if the incentivized performance objective is an intermediate milestone objective:
    - when and how final fee earned is to be determined,
    - how earned fee will be funded and paid,
    - how any provisional payment of fee will be made,
- a description of the performance objective including all measures of performance.
- the objective data or subjective criteria used to determine the appropriate target for each performance objective.
- the period of performance for the incentivized performance objective and the rationale for such a period.
- identification of all performance objectives which directly support the incentivized performance objective.
- potential adverse impact (technical, cost, schedule, etc.) on other performance.
- The importance of the incentivized performance objective in relation to the other performance objectives.
- the relationship between the incentivized performance objective and any appropriate baseline, plan or annual work authorization (e.g., life-cycle baseline, project baseline site maintenance plan, etc.).
- an explanation if there is a difference between the incentivized performance objective and what is required by the baseline or plan during the time frame covered by the incentivized performance objective.
- if performance exceeding that required in the annual work authorization is incentivized, an explanation of the additional benefit received by the DOE which would justify the payment of greater fee.

- if the incentivized performance objective is only in an annual work authorization document and not addressed in a longer term baseline or other planning document, an explanation as to why it is not linked and why it is important.
- the rationale for selecting the incentivized performance objective (requirement), including:
  - the intent of the incentivized performance objective including expectations and measures,
  - the contribution the performance of the incentivized performance objective makes to the site's overall goals,
  - if the incentivized performance objective is not the final requirement, but an intermediate milestone for a final requirement, why it is a good indicator of the potential final performance of the end requirement,
- administrative information to include:
- date performance objective was communicated to the contractor,
- percent of effort complete at the time the incentive was formally established and the ability at that time for the contractor to still be able to influence its outcome.

## 2. **Examples**

### A. Model No. 1- Objective Performance Measures

#### (1) **Background**

The following discussion relates to the 1998 fiscal year modification of the Kaiser-Hill Company (KHC) contract at the Rocky Flats (RF) Environmental Technology Site in Golden Colorado. The contract with KH was created to meet the site closure of the facility by a certain date. Projects are designed sequentially to meet that objective. Given the known parameters of the operation, i.e., site closure by year 20xx, the development of a set of well defined performance measures to meet specific performance objectives was facilitated. The effort under this contract is not to maintain ongoing operations of a site where the longer term baseline is usually less well defined, but a well defined closure plan with specific closure to occur by a specified date. In a closure situation,

specific key performance objectives are identified along a critical path leading to site closure; each critical point along the path being dependent on the previous.

The estimated cost for the contract for the 1 year period beginning October 1, 1997, was \$530,810,152 with a total available fee that may be earned amounting to \$24,000,000. The



modification provided for a base fee of \$3,600,000, which was 15% of the total available fee, and a performance fee amounting to \$20,400,000. Total fee represented 5% of the estimated cost.

The example of the objectively evaluated performance measure described in this section relates to a group of four closely related performance measures in the SNM (nuclear material) functional area. Each of the four measures were dependent upon completion of the measure prior to it. The four measures are presented in the Performance Breakdown Structure Matrix, **attachment 2-1**. There are a total of 28 performance measures in 13 functional areas. The total available fee relating to performance measure example is \$2,244,000 which represented nearly 10% of the total available fee.

Performance under this measure was considered to be highly critical to the overall accomplishment of site closure. A prerequisite to the effective development of performance measures was a clear tie-in of the performance measures to the site baseline which defined critical points of performance along the way. The measures were weighted to provide a clear signal as to their priority in completing the baseline effort as well as their relative priority to other incentivized efforts. An important aspect of the performance measures developed for the RF was the conditional nature of the fee availability, i.e., the payment of earned fee was conditioned on the satisfactory performance of related measures in place either in the prior evaluation period or concurrently in the same evaluation period. This type of structuring of performance incentives contingent upon performance in other related areas has been labeled as a “Gateway” RF. Earning fee under performance measure 98-01R was contingent upon a gateway measure in the prior evaluation period. This measure was also a gateway measure for FY 1999 performance in this functional area. This will be discussed in greater depth.

## **(2) Overall Structure and Documentation**

The establishment of performance based incentives flowed from the Closure Project Baseline which detailed the multi-year effort to effect closure of the RF site. Projects for individual years were structured into a Fiscal Year Baseline from which flowed performance measures associated with the performance objectives of the current Fiscal Year Baseline. The criteria for earning performance fee consisted of specific, objective and measurable performance components (incentive fee components) and the associated incentive fee. The incentive fee goals were designated as “standard” goals and/or “superstretch” goals and were limited to a specific period of time within the term of the contract. Areas where the contractor was incentivized to maximize performance were detailed in the Contractor’s Performance Breakdown Structure (PBS) matrix. A copy of this document is found at **attachment 2-1**.

Each performance measure was clearly detailed providing 1) a description of the incentive component in clear and well defined language; 2) a statement of performance which indicated what would constitute the “earning” of fee for that incentive component; 3) the amount of the fee available for that component; and 4) the period of performance. Each component was to have a highly detailed Rating Plan developed for it. The Rating Plan provides the following information:

- The budgeted cost of work scheduled (BCWS)
- Maximum fee available for the measure
- The B&R code for billing
- The WBS element number(s)
- Previous year Gateways
- The performance measure and related sub-elements of that measure
- The earnings schedule associated with each of the sub-elements as well as any impact on fee due to cost restrictions
- Highly detailed performance requirements (what the contractor is to accomplish)
- The documentation required of the contractor
- Definition of terms
- The signatures of responsible senior management at RF and KHC.

An example of a Rating Plan associated with the objectively evaluated measure relating to the drainage of SNM liquids is shown as **attachment 2-2**.

In addition, for each performance measure, a Performance Measure Justification and Development was developed. This multi-page document contained:

- A statement of the performance measure and the sub-elements
- A description of the objective data to tie the performance measure and its elements to the Project Baseline
- An impact statement describing any undesirable secondary affects which might result from a failure to complete the performance objective
- The difference between the funding for this measure and the funded scope from the Closure Plan
  - The rationale and intent for each measure and sub-element and how the measure is tied to closure
  - The baseline cost
  - Cost, schedule and performance data
  - The allocation of % of fee to each sub-element of the measure
  - The detailed negotiating strategy for each performance measure.

An example of this document is found as **attachment 2-3**.

### **(3) Performance Based Incentive Fee Structure**

The RF/KCH site closure contract incorporated a number of management tools to help enable DOE to control performance under the contract while maintaining cost controls. These tools included the use of a limited number of standard and superstretch performance measures, the gateway concept, cost restrictions and highly detailed documentation and data relating to each performance measure. Each of these tools are detailed below with references made to the actual forms taken from the FY 1998 modification for FY 1998 work.

#### **(a) Critical Few**

The contract incorporated relatively few, meaningful performance measures. The rule of thumb used at Rocky Flats in developing a performance measure is that if successful achievement of a given measure does not warrant payment of at least 1% to 2% of the total fee in a given evaluation period, the effort should not be incentivized. The benefit of limiting the number of performance measures to a critical few is that it better enables KCH to focus on the truly important projects to the government without prioritizing, in some cases, literally hundreds of performance measures and elements. Secondly, because each of the "critical few" measures has associated with it a higher amount of available fee, satisfactorily achieving the desired performance for that measure is financially rewarding to the contractor. A third advantage of limiting the number of performance measures is that it allows for the development of a range of performance levels with a meaningful amount of fee associated with each level.

#### **(b) Performance Measures - Standard and Superstretch**

The RF contract distinguished between a standard measure and a superstretch measure. A standard measure refers to a current period performance measure which is funded and must be completed in its entirety before any fee is awarded. A superstretch measure earns fee for partial completion. A second type of measure is labeled "superstretch #1 or #2". With respect to superstretch #1, the measure is for unfunded work that must be accomplished in the current period to complete the baseline work required when funds are directed to that functional area as a performance measure. In the case of superstretch #2, effort may be directed to an unfunded area to be accomplished in the subsequent evaluation period. Where a standard measure is associated with a superstretch measure, funds will not be allocated to the superstretch measure unless the standard measure, or that related portion of a standard measure, is first completed satisfactorily.

Normally, standard and superstretch measures are associated or connected when both exist, although it may be appropriate in certain instances to have a standard and superstretch measure with only an arbitrary connection. In some instances, a superstretch measure may have no connection with any other measure. Further, multiple superstretch measures may be associated with a single standard measure. Depending on the amount of fee allocated to a superstretch measure, the contractor will be incentivized to achieve a standard measure at the satisfactory level with expectations of earning significantly more fee at the superstretch level. RF's ability to relate and weigh standard and superstretch measures provides considerable flexibility in how contractor efforts may be directed.

As noted above, the RF contract incorporates "superstretch" measures. Superstretch measures are not considered part of the contract in that they are negotiated for activities which are currently unfunded. The contractor is precluded from initiating any substantial work on an unfunded measure until such time that either 1) DOE funds the activity, or 2) savings are realized and funds may be redirected from a currently funded activity whose work has been performed satisfactorily at below the cost baseline. Where KH has been able to redirect funds to a superstretch measure, they are entitled to earn the full fee negotiated. When DOE funds the activity, KH is entitled to earn up to one-half of the fee that had been previously negotiated.

#### c) Site Change Control Board

An action to direct or redirect funds is the function of the Site Change Control Board (SCCB), which includes DOE approval/disapproval of any action relating to direction or redirection of funds. Destination of new or redirected funds, pursuant to the decision made by the SCCB, will be to 1) an under funded project (where the current estimate at complete exceeds the original estimate at completion or the budgeted cost of work scheduled), 2) a non-superstretch measure on the site's Priority Unfunded List, or 3) to fund a superstretch measure. The SCCB's rationale regarding disposition of excess funds must be fully supported and documented by the SCCB. Work effort initiated on any measure(s) is in strict accordance with the FY Project Baseline. An example of a rating plan for a superstretch measure (superstretch #1), relating to SNM Liquids, measure 98-01R, is shown as **attachment 2-4**.

It is important to bear in mind that when a performance measure is achieved at less than budgeted costs, the contractor has still earned a fee negotiated that was based on a higher estimated cost base, when the estimated cost at completion, or the budgeted cost of work schedule, was initially established. When an underrun occurs, funds can be directed to a superstretch measure where the contractor may earn additional fee on costs utilizing those same funds. If an underun occurs because work was deleted, and the funds were deobligated, those funds may be directed to new

work in the current period. Where an underrun has occurred because the contractor initiated efficiencies which can be demonstrated and verified, the additional funds available can be directed to new work. If the underrun is as a result of an initially inflated estimated cost, the contractor should not be not entitled to any additional fee for performing the superstretch measure in the current evaluation period. Where the contractor has achieved an underrun condition due wholly or in part, to efficiencies, fee will be based on that portion of the saved costs resulting from verified efficiencies. Unless it can be determined how an underrun condition developed, i.e., efficiency or bad estimating, adding additional fee to an unfunded superstretch measure should be avoided. The approval of the Procurement Executive is required before additional fee may be negotiated, as required by the contractor's internal requirements relating to the SCCB process.

(d) Cost Restrictions

Each rating plan should detail cost restrictions (or cost baseline) for that particular measure. Details are found in section III, Earnings Schedule, of each rating plan. The restrictions cited in **attachment 2-2** are typical to Rocky Flats. The restrictions for measure ranged from a reduction in earned fee of 1% for every 1% of cost overrun within the range of -11% to a -15% to 5% for every 1% negative cost variance exceeding a -20%. Hypothetically, if KH were to overrun the estimate at completion for this measure by 30%, reference to the cost restriction schedule in the rating plan for measure 98-01R indicates a reduction of 70% to the fee otherwise earned. This example is unusual in the sense that costs could be estimated and sequentially tracked at the incentive level. In most cases, it may not be possible to capture costs at that level of the WBS.

(e) Gateway Concept

The Rocky Flats contract employed the gateway concept for certain mission oriented performance measures. Gateway measures were defined in the contract as individual performance measures or groups of measures within the same functional area which had to be 100% completed as defined in the rating plan prior to the contractor being paid any incentive fee for related performance measures in the subsequent year. Performance measure 97-C4.06R from the 1997 modification to the contract served as a gateway to the current measure, 98-01R. In addition, performance measure 97-C6.06R, also from the 1997 modification, had to be completed entirely before KC may earn fee on the current measure, 98-01R. a copy of both 1997 measure is seen as **attachments 2-5 and 2-6**. The relationship between the 1997 gateways and the 1998 SNM Liquids measure is keyed with the number "1" on **attachments 2-2, 2-5 and 2-6**.

The 1997 gateways, agreed to by KH to be grouped, essentially required the contractor to complete both gateways before fee was earned on the 1998 measure. Further, the 1998 measure had to be completed before fee may be earned on a 1999 measure. If the current gateway was

substantially completed in 1998, no 1999 performance measure fee would be earned until the balance of the 1998 gateway was completed, in 1999. However, no fee was earned on that portion of the 1998 gateway that remains to be completed in 1999.

With the rating plan quite specific as to what constituted “complete”, DOE was able to exercise considerable control as to what was completed in what time frame, within budget, and in strict accordance with the Site Closure Baseline. Further, through use of stretch measures, dependent on completion of the standard measures first, DOE was able to exercise control over how quickly it wishes to accelerated project baseline performance in any functional area.

a blank copy of the rating rate and the justification and development form is provided as an attachment (2-7 and 2-8).

## **B. Model No. 2 - Subjective Performance Measure**

### **(1) First Example**

The DOE Savannah River Operations Office (SR) and the Westinghouse Savannah River Company (WSRC) 1997 CPAF contract incorporated performance-based incentive areas and award fee which amounted to a \$61.5 million annual total available fee pool. Incentive fee, amounting to \$36.9 million, was allocated to six broad functional areas which were further defined into 15 specific subfunctional areas. Award fee, which amounted to \$24.6 million, was allocated to the six broad functional areas. Depending on the functional area, the life cycle baseline of the contract spanned from five to 30 years.

For 1998, the modification to the contract incorporated eight award fee incentive areas amounting to \$42.65 million and 12 objective incentive areas amounting to \$18.85 million for a total fee pool of \$61.5 million, the same as the year prior.

For all areas other than objective incentive areas, the primary management tool used to evaluate WSRC performance was the Annual Operating Plan (AOP). The AOP may be equated to the RF Fiscal Year Baseline discussed in the first example. The AOP provided the programmatic guidance and established the scope of all programs and activities for the Savannah River Site (SRS) including the funding allocation to accomplish the tasks. The AOP at SR was also the basis of the award fee performance evaluation plan. Unless evaluated separately under a Performance Based Incentive, all programs and activities were evaluated utilizing the scope, milestones, and funding allocations contained in the AOP.

The SR Performance Evaluation Plan (PEP) sets forth the performance areas, each relating to a functional area. Each area was weighted to reflect their relative importance. Functional Area B, titled “Non-Proliferation” was weighted highest with a weight of 28% in the 1997 modification and essentially entailed the planning and implementation of the Nuclear Materials Stabilization Program, including storage, deactivation, disposition, spent fuels, in accordance with DOE priorities. The amount of fee allocated to this area in 1997 was \$6.9 million, and \$11.3 million in 1998. This area was further defined in terms of performance goals. There are four performance objectives relating to Functional Area B:

- B.1 Plan and implement the Nuclear Materials Stabilization Program in accordance with the AOP and DOE directives.
- B.2 Plan and implement the spent fuels program
- B.3 Provide planning support for stabilization, storage and disposition activities.
- B.4 Plan and implement deactivation activities.

The contractor’s performance in these four areas was subjectively evaluated, and the fee determination made by the Fee Determination Officer (FDO). In the above example, Performance Area B in 1997 carried a weight of 28% of the available award fee pool, or approximately \$6.9 million (28%X a pool of \$24.6 million). In 1998, the same performance area carried a weight of 26.6%. The contractor’s performance was then categorized into five ranges:

- |  |            |
|--|------------|
| - Substantially exceeded levels              | 96 to 100% |
| - Exceeded levels w/some notable achievement | 66 to 95%  |
| - Met expected levels                        | 40 to 65%  |
| - Less than expected                         | 2 to 39%   |
| - Unacceptable                               | 0%         |

In making a fee determination, the FDO utilized the semi-annual reports prepared by each of the DOE Lead Evaluators, each of whom were responsible for a specific performance area identified in the PEP, and the semi-annual recommendations made by the Award Fee Board (AFB) which are based on the Board’s review of the evaluation reports. The evaluation reports were based on physical monitoring and evaluation of WSRC’s performance against the AOP objectives and criteria. The evaluators also utilized other sources of information as part of their evaluation including audit reports, appraisals and other sources of information as applicable. Note that it is within the purview of the FDO to agree or disagree with the AFB’s recommendations and may change the Board’s recommended fee amount. The FDO may utilize other sources of information relating to the contractor’s performance in addition to the evaluator reports and AFB recommendations. The ultimate fee amount is not based on any mathematical formula or

summing of points earned, but is solely subjectively determined with regard to the five broad categories of performance listed above as well as the percent spread within each category.

Each member of the DOE principal staff will evaluate the programs and activities within their scope of responsibility utilizing the performance criteria and considerations which include:

Accuracy	Ingenuity	Thoroughness	Responsiveness
Timeliness	Perceptiveness	Proactive	Planning
Organization	Problem Solving	Staffing	Innovation
Cooperation	Adequacy	Utilization of Resources	Efficiency
Compliance	Within Budget	Accepted Practices	Completion
On Schedule			

In addition to the performance criteria listed above, the evaluation teams will apply subjective consideration to the following:

- Did the contractor fully complete tasks and accomplishment milestones on schedule?
- Was the work correct in accordance with the requirements?
- Were deliverables provided on schedule?
- Did the contractor promptly respond to requirements or technical direction?
- Did the contractor apply skillful, simple and straight-forward solutions to problems?
- Were personnel used in an effective manner?
- Were too many or too few people assigned to a task?
- Remain within budget?
- Are the contractor's reimbursable costs and projected costs remaining within the cost estimate negotiated for the task?
- Were problems anticipated? Was DOE notified timely? Action taken to resolve the problem to the benefit of the Government?
- Did contractor self-initiate appropriate corrective action to problems?
- Did the contractor raise unnecessary issues and amplify problems?

Did the contractor assure training and qualification readiness to support safe facility operation? The contract specified that the ES&H program had to be implemented within each of the Work Authorization Directives to receive any incentive fee payment within the directive. Fees are to be reduced if a serious incident (such as a fatality) or catastrophic event occurs which results in significant damage to the environment or which endangers the safety and health of workers or the public. The Conditional Payment of Fee clause, which provides for fee reduction, up to the amount earned, for events such as a fatality or for performance which might negatively impact overall performance is included in the 1998 modification.



## **(2) Second Example**

In the above example, the performance areas were broadly defined. The following example, taken from the same 1998 modification to the SR contract, is more specific in that it provides the contractor with special emphasis areas within the broader performance area.

In this example, Performance Area F, General Site Management (which is weighted with 24% of fee) provided four performance objectives which were further defined into a number of more specific criteria. In the example that follows, performance objective F2 consisted of three criteria (criterion F.2.1 is cited in this example) with nine special emphasis areas (several criteria examples cited). Differing from the prior example, the contractor, in this instance, was given more detailed direction while still maintaining the elements of a subjectively evaluated performance objective.

**PERFORMANCE AREA F:** Manage and operate the SR Common Support Programs in a cost effective and efficient manner in accordance with the priorities of DOE.

**OBJECTIVE F2:** Manage and operate the [site] to provide the necessary scientific and technology underpinnings to allow execution of SR programs in a technically relevant, cost effective and efficient manner in accordance with the priorities of DOE.

**CRITERION F.2.1:** Maintain and advance [site's] technical core competencies and technical capabilities to provide the necessary technology for SR programs to be executed in accordance with approved AOP's and supplemental guidance documents approved by cognizant DOE Lead Evaluators.

### **SPECIAL EMPHASIS AREAS:**

(nine special emphasis areas - three provided as an example)

- (1) Establish a SR progress and performance measurement system to concisely demonstrate implementation of the SR Strategic Plan (i.e., linkage from planning through budgeting).
- (2) Integrate Geographic Information System capabilities with site use permitting activities to increase efficiency and reduce requirements.
- (3) Propose detailed plans for re-engineering planning functions to consolidate related activities and increase efficiency.

In this example, the performance objective was broadly written. The criterion better defined what the contractor was to accomplish and was linked directly to the AOP. The special

emphasis provides a lower level of detail to the point of being quite specific yet still allowing for a subjective evaluation of contractor performance..

The performance area is quite broad - “manage and operate the SR Common Support Programs...”.

There are then a series of more specific objectives, as provided above, which related to the performance plan as well as being tied to the AOP. a criterion is then provided, with additional direction related to the objective and the performance area. Lastly, direction is taken further down by providing the specific task to be accomplished, e.g. “Propose detailed plans for re-engineering...”. Both SR examples are subjective award fee models, the latter, however, requires specific output from the contractor whereas the first SR example was more outcome oriented.

### **3. Conclusion**

The preceding three examples demonstrate how two sites utilized performance measures and incentives to direct the contractor to perform specific critical tasks, each of which are tied to the life cycle baseline of the site. The RF’s use of gateways (where related prior period requirements had to be accomplished to a predetermined level of expectation before fee could be earned in the current period on a related measure) served to focus the contractor on the importance of the current requirements and its relative importance to work scheduled for the subsequent period. Because fee was dependent, not only on current performance, but also on prior performance, the incentive to the contractor was not isolated to one evaluation period, but extended beyond the current scope of work. In addition, through use of superstretch measures, the contractor was encouraged to initiate cost savings which could be added to the fee base for additional work, and thus earn additional fee. The value to the government, of course, is that the completion of critical tasks, all towards closure in the case of Rocky Flats, is accelerated.

In the case of SR, two subjective measures were presented. Although subjectively evaluated, the contractor was guided by special emphasis areas which essentially communicated to the contractor those specific elements of the tasks carrying the greatest weight. The contractor’s efforts relating to the special emphasis areas, while contributing to the accomplishment of the task itself, also complemented related tasks to be accomplished in a subsequent evaluation period. In these examples, the measures incentivized the contractor not only in the current period but also on a longer term basis. In the case of SR, while the tasks were broadly stated, the special emphasis areas directed the contractor in much the same manner as an objective performance measure would.

The intent of presenting these examples was to demonstrate how two facilities utilized measures, not solely as a means of completing tasks in the current period, but as a tool to commit the

contractor to the longer term success of the overall effort. The contractor's performance during the current period becomes the basis for performance in the next period.

## Performance Measure Justification and Development Record

### *1.) General Information*

PM#	Short Title:	Recommended/Actual Fee:	
Responsible AM:	extension:	SME:	extension:

a) Briefly state the overall PM and each Element. Include target(s):
b) Explain the intent of the overall PM and each Element. How does this PM achieve site closure?
c) Explain how quantities, scope, dates, etc, were selected for each element (funding/drivers/benchmark or historical, baseline performance data/etc):
d) State recommendation and rationale for PM fee allocation - why are some elements of more value to the government?
e) Describe Change made during negotiation & reason for change:
<b>2.) Performance Information - Cost</b>

For Cost Restriction PMs only: <b>Original BCWP:</b>	<b>Final BCWP/S</b>
<b>Period of Performance:</b> (defined as date scope was funded thru final scheduled completion date as recorded on PM Rating Plan)	<b>List WBS elements included in direct PM scope:</b>

## SECTION I - ACCOUNTING INFORMATION

Initial Budgeted Cost of Work Scheduled (BCWS) under this PM:		Maximum Available Incentive Fee Associated with this Measure:
PBS No.	WBS Element No(s).	Fee Billings should reflect B&R Code No.

## SECTION II - CLOSURE PROJECT WEIGHTING

Closure Project Impact Rating (4=High, 2=Medium, 1=Low)

Critical Path:

Cost:

Technical Difficulty:

Safety / Risk:

This Performance Measure supports site **closure in** \_\_\_\_\_.

## SECTION III - PERFORMANCE MEASURE

### Short Title

1. Metric #1 (Short desc w/quantity and due date)
2. Metric #2

## SECTION IV - PERFORMANCE REQUIREMENTS

**PREVIOUS YEAR'S GATEWAY** *Describe previous year's gateway (if applicable) that must be completed before fee can be paid under this performance measure.*

**Previous year's metrics  
that must be completed before fee is paid in the current year  
– These need to relate to this year's metrics in some way.**

(References – Last years Performance Measure # and title)

**DEFINE COMPLETION** *Specify Performance Elements and describe indicators of success (quality/progress). Include baseline documents/data against which completion documentation should be compared.*

7, Part 2 Metric #1.

Detailed description of what has to be done to earn fee. Include any reference requirements that define the work to be completed and especially the quality attributes of the work. This will be what is most legally binding to the government.

Metric #2

Cost Restriction Calculations: Cost Variance (CV) will be calculated using the BCWP developed from the earned value method and BCWS approved by \_\_\_\_\_ at the measurement point(s) compared with the ACWP at the measurement point(s).

### DEFINITIONS:

Include any terms that need to be precisely defined in order to assure clarity, or items that have DOE or site unique definitions.

**TECHNICAL BOUNDARY CONDITIONS:** (Fundamental technical assumptions that must be maintained in order to accomplish the work scope associated with this Performance Measure.)

Include any fundamental conditions that must be met in order to provide at least a reasonable chance for the contractor to achieve the result. This may include government furnished equipment or receiver sites, etc.

**COMPLETION DOCUMENTS LIST:** *(In addition to the Completion Report, the document(s) that should be submitted/ data that should be available/ actions to be taken by evaluator, to determine actual performance to the requirements stated above.*

This may include both documents submitted to DOE and those made available to DOE for review.

**ASSUMPTIONS** For reasonably foreseeable impacts to performance which are not covered by the contract. State the assumption related to a Performance Element and the specific remedy should the assumption prove false.

Do not include every possible impediment to achieving the result.

## SECTION V - EARNINGS SCHEDULE

*List percent of PM fee available for completion of each Element, and the schedule by which the fee may be earned. (Schedule identifies point(s) at which fee may be earned - does not define completion.)*

1. Fee for metric #1

Fee is best paid when all, or significant chunks of the work is done

— Fee is best weighted toward the final increment if several increments are used

2. Fee for Metric #2.

The following cost restriction apply to this PM

— fee earned for this performance measure shall be reduced at the measurement point(s) by:

1% for every 1% Cost Variance (CV) >-\_\_\_% -\_\_\_%

3% for every 1% cumulative CV >-\_\_\_% but \_ -\_\_\_%,

5% for every 1% cumulative CV >-\_\_\_

— total fee reduced under this cost restriction clause shall not exceed 75% of PM fee

the cost restriction will be calculated on total of all WBS elements identified on this rating plan

## SECTION VI - SIGNATURES

Responsible Contractor Mgr:  Initial	<b>Contractor President</b>	Signature of Contractor President	Date Signed
Responsible DOE-AM  Initial	<b>DOE Site Manager</b>	Signature of DOE Site Manager	Date Signed

