OAK RIDGE NATIONAL LABORATORY
MANAGED BY UT-BATTELLE FOR THE DEPARTMENT OF ENERGY

Performance-Based Management System Project Management Plan

ORNL/TM-2000/377

Revision 0

December 2000

Prepared by: _____
Jeff Long, Quality Systems Manager
Quality Services Division

Prepared by
Oak Ridge National Laboratory
Oak Ridge, Tennessee 37831
Managed by
UT-Battelle
for the
U.S. Department of Energy
under contract DE-AC05-00OR22725

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The **purpose** of this project is to identify those processes, documents and resources necessary to implement a Performance-Based Management System (PBMS) for the Oak Ridge National Laboratory and to define those activities necessary to complete the fiscal year 2001 cycle of the process. PBMS will be fully implemented throughout the Laboratory in one year and within existing ORNL staff and budgets. A Project Team composed of Quality Services Division personnel working under the direction of a PBMS Manager will execute this project plan consisting of tasks culminating in a FY 2001 self-evaluation report for the Laboratory that will be submitted to DOE by November 2, 2001. Quality Managers will work with the individual divisions and directorates throughout the year-long process to ensure that efforts remain focused.

Performance-based management is a systematic approach to performance improvement through an ongoing process of establishing strategic performance objectives; measuring performance; collecting, analyzing, reviewing, and reporting performance data; and using that data to drive performance improvement. Performance-based management has **many benefits**, including:

1. It provides a structured approach to focusing on strategic performance objectives. In other words, performance-based management focuses on the achievement of results deemed important by the organization, not on the number of activities.

2. It provides a mechanism for accurately reporting performance to upper management and stakeholders. Performance-based management takes the guess work out of, "How are we doing?" Because all work is planned and done in accordance with the strategic performance objectives, the end result is an accurate picture of individual, program, and organizational performance.

3. It brings all "interested" parties into the planning and evaluation of performance. Performance-based management brings customers, stakeholders, employees (i.e., those who do and/or are most familiar with the work), and management together to plan strategies and goals and to evaluate results. It is the antithesis of the "command and control" style of management of the past. The key word is involvement. Performance-based management involves those who should be involved in the process.

4. It provides a mechanism for linking performance to budget expenditures. At the beginning of the cycle, performance-based management provides a framework for showing what goals will be accomplished and what resources will be necessary to accomplish those goals. At the end of the cycle, it shows what was actually accomplished and what resources actually were used to achieve those results. Thus, performance-based management takes the uncertainty out of budget allocations and provides an effective accounting for dollars spent.

5. It represents a "fair way" of doing business. Performance-based management represents fairness. Decisions on budget allocations, employee promotions, work assignments, reward and award

distribution, and the like are based on objective performance planning/results, not on appearance, personality, or other forms of favoritism.

6. It provides an excellent framework for accountability. Performance-based management ensures accountability for results. In the performance-based management framework, all actions, decisions, expenditures, and results can be easily explained, justified, and reported.

7. It shares responsibility for performance improvement. In the performance-based management process, performance improvement becomes a joint responsibility between the organization and its stakeholders/customers or between the individual and his/her management. This "jointness" assures input from both sides and increases involvement in the process, ownership of results, and accountability for performance.

During the transition from Lockheed Martin Energy Research Corporation to UT-Battelle, LLC, an issue was identified related to lack of an overarching framework that would integrate all of the various aspects of performance management in a way that was consistent, understandable, and self-reinforcing. The existing systems did not exhibit a connection between the institutional and strategic planning processes and the Critical Outcomes process. There was no understandable link between organization and individual performance and the Laboratory's goals and objectives. Further, a weakness was identified in the existing self-assessment process because the process was primarily compliance-based, focusing on environmental, safety, health and quality (ESH&Q) issues. PBMS, when implemented, will address this identified issue.

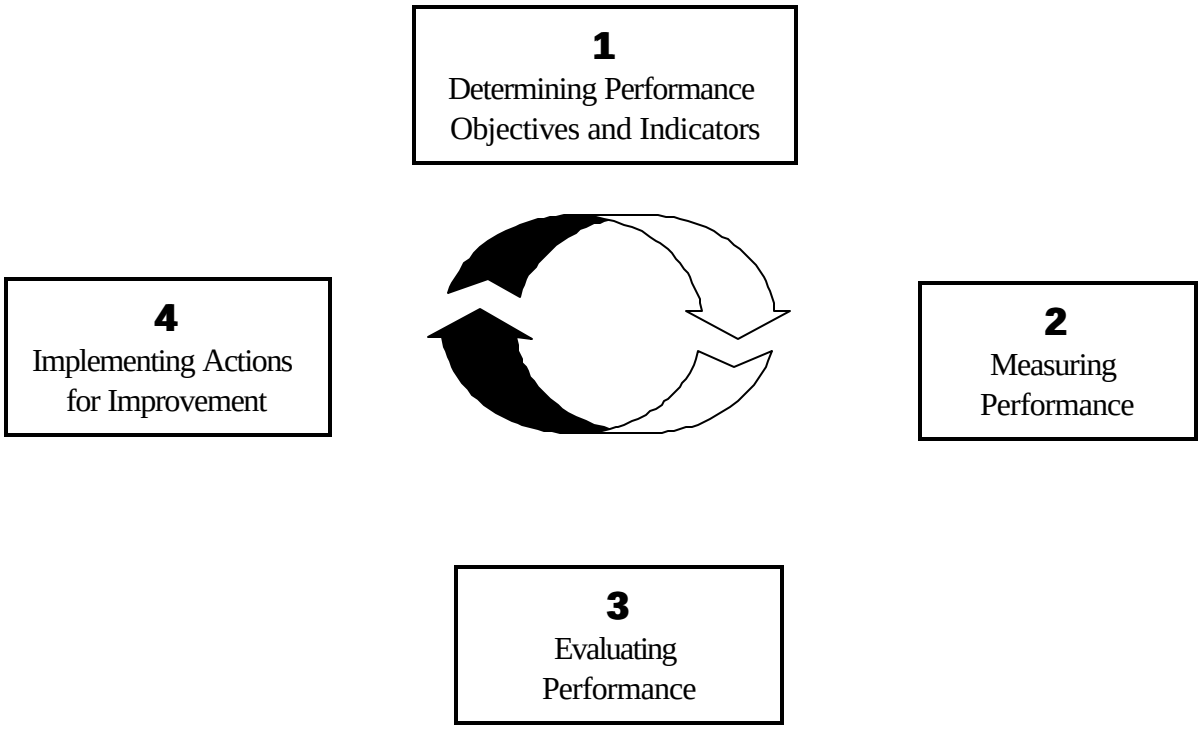
The PBMS philosophy and methodologies have been deployed at Pacific Northwest National Laboratory (PNNL) and Brookhaven National Laboratory (BNL) under a process called the Integrated Assessment Program (IAP). At these laboratories, IAP is a defined management system under the overall umbrella of their Standards-Based Management System (SBMS). Lessons learned from implementation of these systems at these two laboratories will be utilized in the deployment of PBMS at ORNL.

Any major changes to this plan will be approved by the Project Team, the Quality Services Division Director, and the Environment, Safety, Health and Quality Director prior to implementation.

1. SCOPE AND METHODOLOGY

PBMS encourages scientific, operational, and business excellence through evaluation of the line management activities and their accountability for scientific excellence, safety, cost effectiveness, business efficiency, and customer satisfaction. PBMS enables staff to identify their critical business objectives, to develop quantifiable performance indicators, to define goals, to measure their performance and the implementation of efficient and effective business practices, and to determine appropriate changes in future initiatives as set forth by Laboratory management. PBMS is used to measure, to optimize, and to drive improvement in processes and products. PBMS is also recognized as an important aspect of the Integrated Safety Management process as a feedback and improvement tool.

PBMS is implemented utilizing four key processes:



1.1. Determining Performance Objectives and Indicators (POIs)

The first process of PBMS is the development of performance objectives and indicators, those items management wishes to measure because they are important for the success of the enterprise. Critical outcomes are identified by Laboratory management to focus the efforts of all staff members towards achievement of the strategic plan set forth in the Laboratory Agenda. During the annual business planning cycle the DOE and Laboratory directorates and divisions determine supporting performance objectives that represent near-term results contributing to the achievement of those critical outcomes

and other objectives deemed necessary to measure overall performance of the Laboratory missions. Indicators are developed for the performance objectives as a means of determining the degree of success in achieving those objectives. After agreement has been reached, the critical outcomes, performance objectives and indicators are documented in the an annual Laboratory Performance Evaluation Plan which disseminates that information to ORNL's staff. Additional performance objectives are documented in organizational self-assessment plans. Flowdown of the performance objectives and indicators to staff members through personal Performance Assessment and Development System (PADS) Results Plans enables them to understand their role in achieving the Laboratory Critical Outcomes.

1.2 Measuring Performance Against POIs

The second process of PBMS is measuring the degree of success that organizations are achieving in performing activities directed toward achieving the Laboratory's performance objectives. Five identified methods of measurement are: Line Management Self-Assessment, Management System Self Assessment, Scientific and Technical Review, Independent Oversight Assessment, and Internal Audit. Together these assessments generate information on scientific, business and operational performance for Laboratory management, staff, customers, stakeholders, and regulators. The key to accomplishing the measurement is an integrated assessment program with primary emphasis on self-assessment at the division and directorate levels. Self-assessment plans are developed at the beginning of each fiscal year by each organization using guidance provided by ORNL-QA-P03, "ORNL Self-Assessment Program," to ensure that important aspects of performance are monitored. The Self-Assessment program will include aspects of the "balanced scorecard" approach to performance measurement which ensures assessment in a wide variety of business activities such as customer focus, financial, business processes, and organizational effectiveness, as well as operational discipline. These organizational plans are summarized and included as part of the Laboratory-level Self-Assessment Plan. Planned assessment activities are reviewed with appropriate internal and external customers and stakeholders. The ESH&Q Director ensures that the overall Laboratory Assessment Plan is made available to the DOE ORNL Site Manager. In addition to the five methods identified above, assessments are performed by DOE and external regulators and customers. Information generated by these assessments is used by ORNL's organizations to measure their progress towards achieving their performance objectives.

1.3 Evaluating Performance

The third process of PBMS is evaluation of the information obtained from the assessments performed as a part of the overall integrated assessment program (e.g., self-assessments, focused independent oversight assessments, internal audits, technical review of science and technology activities, etc.). Results of this evaluation provide input to the development of an overall summary of the Laboratory's performance. During the evaluation process, data from assessment activities at all levels of Laboratory activity are reviewed including those programs set in place to discover existing problems. These programs include, but are not limited to, occurrence reporting, P-AAA Noncompliance Reporting, Nonconformance Reporting, Radiological Event Reporting, Accident/Incident Reporting, Employee

Concerns, OSHA Inspections, and Environmental Noncompliance Reporting. They offer Laboratory personnel and management opportunities to find and to fix operational problems at lower levels, to look for common areas of concern across the Laboratory, and to provide feedback to both internal and external customers and stakeholders. All of this information is compiled in a management level presentation (qualitative and quantitative) on a periodic basis with an annual evaluation provided to DOE. Each presentation describes how objectives are met as evidenced by the performance indicator's progress toward selected targets. Special emphasis is placed on the identified Critical Outcomes. Level 1 managers are responsible to ensure that performance against Critical Outcome objectives is measured and reported.

Annually, the evaluation process generates a Laboratory-level summary document (the Laboratory Self-Evaluation Report) that is utilized by management and DOE-ORO to determine overall performance. This document also describes the Laboratory's key improvement opportunities as summarized from the self-assessments, technical review of science and technology activities, independent oversight, internal audit and external assessment results.

1.4 Implementing Improvements

The final process in the PBMS system is to implement key improvement opportunities that the evaluation processes identified and to share key lessons learned with others, both within the Laboratory and across the DOE complex. Quality improvement processes are utilized to determine the root cause of problems and corrective actions are implemented to mitigate or to prevent recurrence. Data analysis and trending, through the self-assessment program, will be conducted to identify lower level precursor data that may indicate more serious emerging issues. Laboratory-level improvement areas are disseminated to all levels of Laboratory staff through lessons learned and other feedback mechanisms for mid-course corrections and to be considered for inclusion into the overall Laboratory Agenda during the next planning cycle. PBMS is also recognized as an important aspect of the Integrated Safety Management process as a feedback and improvement tool.

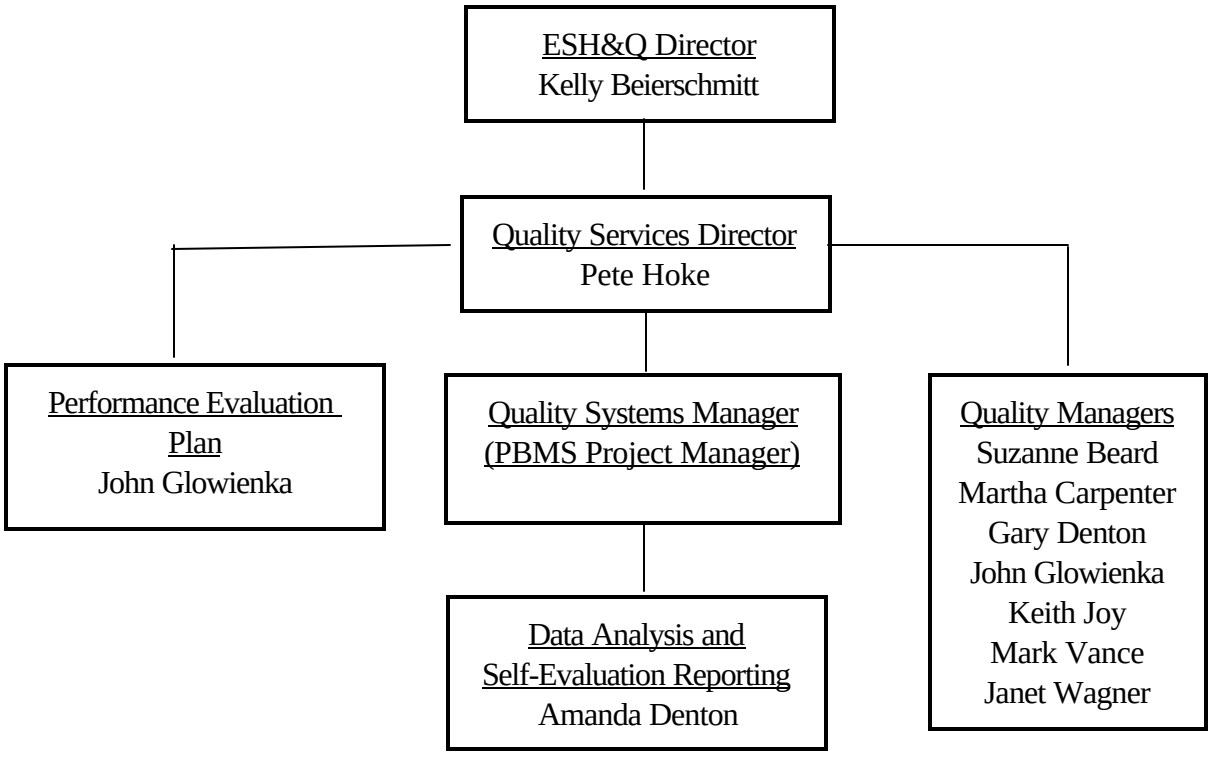
2. PROJECT LEADERSHIP

The Environmental, Safety, Health and Quality (ESH&Q) Directorate is the managing entity. The Quality Services Division will be the sponsoring organization responsible for the design, implementation and continued support of PBMS.

Existing resources are available to implement this management system.

2.1 Key Roles and Responsibilities

The reporting hierarchy for the PBMS Project Team is as follows:



The implementation of PBMS will require direct interface and commitment from management and staff throughout the Laboratory. Quality Managers have been appointed to facilitate this process for line managers. Line managers must commit the necessary staff/resources to support the timely development of required documents and the conduct of the self-assessment activities.

3. CURRENT PRACTICES

Performance Management at ORNL consists of several existing processes including the Critical Outcomes and Performance Objectives process, the self-assessment process, an internal ESH&Q assessment program, and a Lessons Learned Program. These processes are not integrated and in many cases are not necessarily measuring those objectives most critical to the organization.

4. PBMS IMPLEMENTATION

Implementation of the PBMS will be accomplished during FY 2001. A detailed project schedule has been developed for the tasks outlined below. Objectives of the tasks are to implement mechanisms to:

- Ensure appropriate flowdown of those items identified as strategic objectives in the ORNL Institutional Plan.
- Provide an integrating framework for various aspects of performance management in a way that is consistent, understandable, and self reinforcing.
- Expand the current self-assessment process. Utilize self assessment as the primary means of providing ORNL management and DOE-ORO with a status of the health of the Laboratory.
- Build upon the current management assessment process. Utilizing the "balanced scorecard" approach, expand the scope of management assessments beyond operational compliance to include all aspects of business operations.
- Provide effective feedback for improvement to ORNL organizations.

4.1 Task 1: Planning Phase

4.1.1 Organize a PBMS Steering Committee

Responsible: Jeff Long

The PBMS steering committee is comprised of the Project Manager, stakeholders from participating organizations that includes two members from R&D organizations, and a Leadership Team Champion. The committee is chartered to conduct benchmarking activities and to develop a first cut program description for PBMS. The steering committee membership is as follows:

- Amanda Denton, Quality Services Division
- John Glowienka, Laboratory Director's Office
- Roger Jones, Chemical Technology Division
- David Kocher, Life Sciences Division
- Gail Lewis, Audit and Management Advisory Services
- Jeff Long, Quality Services Division, Committee Chair
- John Murphy, Independent Oversight
- Jan Preston, Independent Oversight, Leadership Team Champion

4.1.2 Develop a Self-Assessment/Performance Evaluation Business Planning Calendar

Responsible: John Glowienka

This calendar will provide affected personnel with the schedule of events related to PBMS, including proposed dates for input of documents and for important reviews with the DOE customers. The calendar will be a "living document" that will be updated

throughout the year as necessary.

4.1.3 Draft a Management System Description Document

Responsible: Jeff Long

The PBMS Steering Committee will develop the first draft of the management system description document. This program description will outline the overall model for PBMS and will provide the Requirements and Guidance, Inputs, Outputs, and Key Responsibilities of the management system.

4.1.4 Organize a PBMS Project Team

Responsible: Jeff Long

The PBMS project team is comprised of the Project Manager and other Quality Services Division staff with technical assistance from other Battelle Laboratories. This team will be tasked with implementing the project schedule activities (see Section 2.1). The PBMS Project Team will work with the SBMS Project Team during the implementation phase to revise the management system description document consistent with emerging SBMS guidance.

4.2 Task 2: Preparation/Awareness Phase

4.2.1 Awareness Briefings for Laboratory Management

Responsible: Jeff Long

Both the Leadership Team and the Division Directors and their staffs will be offered awareness training on the philosophy and process of PBMS. This awareness training will be provided in time to utilize the process in the development of self-assessment plans.

4.2.2 Develop Detailed Training

Responsible: Jeff Long

A formal training program will be developed to build skills in the PBMS process. Quality Managers and Quality Assurance personnel (Specialists and Coordinators) should be recognized as the "experts" related to performance-based management.

4.3 Task 3: FY 2001 Execution Phase

4.3.1 Submit the FY 2001 Performance Evaluation Plan (PEP) to the DOE Site Office

Responsible: John Glowienka

The PEP identifies those performance items to be included for fee determination. The PEP, which is developed in concert with our DOE stakeholders, also identifies performance goals and criteria for assigning performance ratings for fee determination.

4.3.2 Issue the Management System Description Document

Responsible: Jeff Long

After the appropriate review and comment by Laboratory staff, the management system document (see 4.1.3) will be issued to formally communicate and to document the PBMS model for ORNL. Specific sub-tasks are identified in the project schedule.

4.3.3 Revise the Existing Self-Assessment Procedure

Responsible: Jeff Long

The existing self-assessment procedure (ORNL-QA-P03) must be revised to support PBMS by expanding the scope of the Laboratory's self-assessment process beyond ESH&Q compliance utilizing the "balanced scorecard" philosophy. The revised procedure will be a bridge from the existing playscript format to the "subject area" guidance that will become available with the implementation of SBMS. This revision will be accomplished through the existing Directives Review process. Specific sub-tasks are identified in the project schedule.

4.3.4 Compile the FY 2001 Independent Oversight Assessment Schedule

Responsible: Jan Preston

This schedule will include those organizations/processes as determined by Independent Oversight staff.

4.3.5 Compile the FY 2001 Internal Audit Schedule

Responsible: Scott Branham

This schedule will include those organizations/processes as determined by Audit and Management Advisory Services staff.

4.3.6 Compile a Laboratory Self-Assessment Plan

Responsible: Jeff Long

Each division will develop a self-assessment plan with assistance from their Quality Managers and appropriate directorate Quality Assurance staff. When selecting candidate assessment areas or activities, consider the following:

- Linkage to achievement of Laboratory Critical Outcomes,
- Owner responsibilities for performance,
- Feedback received from other sources (e.g., other assessments, stakeholders, customers, oversight functions, or regulatory agencies),
- Customers' current and potential needs,
- Competitive environment for the organization,
- Drivers which must be satisfied (e.g., regulatory or contractual),
- Anticipated changes in business needs, regulatory requirements, customer needs, and costs,

- Controls to mitigate risks and how well these controls are working, and
- Verification that improvements are having the desired effect on activities.

These division level plans will be combined by the Quality Managers at the Directorate level and then forwarded to the Quality Services Division where they will be combined by the PBMS Project Manager into a Laboratory-level Self-Assessment Plan. This plan will be available for DOE review. Specific sub-tasks are identified in the project schedule.

4.3.7 Perform Assessments per Plans

Responsible: ORNL-wide Staff

Line organizations and internal assessment organizations (Independent Oversight, Audit and Management Advisory Services, etc.) will be responsible for the conduct and evaluation of assessment activities throughout the fiscal year. DOE Site Office personnel will be invited to participate in the review process, as appropriate.

4.3.8 Conduct Regularly Scheduled Reviews of Performance Data with DOE

Responsible: Jeff Smith

A quarterly review will be conducted with our DOE Site Office. Participants in the review will be determined as appropriate. Specific sub-tasks are identified in the project schedule.

4.3.7.1 Conduct First Quarter Oral Review with DOE Site Office Personnel.
4.3.7.2 Conduct Mid-year Oral Review with DOE Site Office Personnel.
4.3.7.3 Conduct Third Quarter Oral Review with DOE Site Office Personnel.
4.3.7.4 Conduct FY 2001 Oral Review with DOE Site Office Personnel.

4.3.9 Prepare a Mid-Year Review Report

Responsible: Amanda Denton

At the end of April, a formal status review will be conducted to determine progress toward meeting the objectives and indicators as set forth in the Self-Assessment Plans and the Performance Evaluation Plan. Mid-course corrections will be identified and implemented through the assessment process.

4.3.10 Conduct a Level 2 Vulnerability Assessment

Responsible: Quality Managers

Based on items of concern identified during the Mid-Year Self Evaluation, Quality Managers will conduct a vulnerability assessment at the division level to determine required mid-course corrections to successfully meet identified performance objectives.

4.3.11 Charter an Independent Review of the Process

Responsible: Jan Preston

The UT-Battelle Independent Oversight organization will conduct a focused assessment

of ORNL line management feedback and improvement programs (self-assessment planning and implementation and corrective action management). This assessment will include the implementation and effectiveness of PBMS, evaluating the degree of organizational participation, the adequacy and effectiveness of planning and conducting self-assessments, and the adequacy of self-evaluation reports. This review should include a representative from the DOE Site Office on the assessment team.

4.3.12 Develop the FY 2002 Performance Evaluation Plan

Responsible: John Glowienka

Generation of the FY 2002 PEP will begin with an integrated data call. Information related to performance goals at all levels will be requested and gathered. From this information, the Performance Evaluation Plan will be generated and the negotiation process with the DOE Site Office will be initiated. Specific sub-tasks are identified in the project schedule.

4.3.13 Prepare an Annual Self-Evaluation Report

Responsible: Amanda Denton

After the end of the fiscal year, line organizations will develop a Self-Evaluation Report based on results of assessment activities conducted during the year. These line organization reports will be collated at the Directorate level and forwarded to Quality Services. Quality Services will develop a Laboratory-level Annual Self-Evaluation Report to combine the results of the line organization input, internal audit results, independent oversight results, customer survey data, operational improvements, opportunities for improvement, and a summary of external assessments. This report will be distributed across the Laboratory and will be submitted to DOE as input for fee determination. Feedback from the assessment activities will serve as input for the next fiscal year's Laboratory Agenda and resulting Performance Evaluation Plan. Specific sub-tasks are identified in the project schedule.

5. DELIVERABLES

5.1 UT-Battelle Performance Evaluation and Fee Agreement Document

This document describes the basis for the evaluation of UT-Battelle's performance regarding the management and operations of the Oak Ridge National Laboratory. The performance evaluation provides the evidence that UT-Battelle is managerially and operationally in control and is meeting the requirements of DOE as stipulated within the contract. The document also describes the distribution of the total available performance-based fee and the methodology for determining the amount of fee earned by UT-Battelle.

5.2 Self-Assessment Plan(s)

Self-Assessment Plans will be created at appropriate levels of the organization to include those items management wishes to measure because they are important for the success of the enterprise. Plans at the Division-level are to be rolled together to develop the Directorate-level Plan. Directorate-level Self-Assessment Plans are to be submitted to the Quality Services Division to be rolled together as a Laboratory Self-Assessment Plan.

5.3 Mid-Year and Annual Self-Evaluation Reports

At mid-year, an appraisal of progress towards assessment plan expectations and performance indicators will be conducted and documented. At the end of the fiscal year, the divisions/directorates will utilize the evaluation process and generate self-evaluation reports which are aggregated into a Laboratory-level self-evaluation report that describes the results of the assessment process and identifies key improvement opportunities as summarized from the Divisional/Directorate assessments and other Laboratory-level assessment data. This report is also provided to our DOE customer as a tool for judging the Laboratory's overall performance.