

**Oak Ridge Operations**

**Alternative  
Management  
Model  
Initiative**

**June 2002**

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## **Executive Summary**

This report provides a recommendation for the future organizational structure that will best facilitate the accomplishment of the Department's missions in Oak Ridge. It was commissioned by Robert Card, Under Secretary of the Department of Energy, and was supported by the Director, Office of Science (SC-1), and the Assistant Secretary for Environmental Management (EM-1).

The Alternative Management Model Initiative (AMMI) was announced at an all-hands meeting with Under Secretary Card on March 14, 2002, resulting in the formation of four AMMI teams representing a cross section of personnel from Oak Ridge Operations (ORO). Two of the teams were given specific models-- National Nuclear Security Administration (NNSA) and Environmental Management (EM)--and the other two teams were unconstrained. The team reports were completed on May 13, 2002, followed by presentations to the ORO Senior Management Staff, which were completed on May 20, 2002. A subsequent meeting provided a forum for the Senior Management Staff to discuss strengths and weaknesses of the various models with the ORO Manager. Based on the reports, presentations, and Senior Staff input, the Manager made the decision regarding the preferred model.

The preferred alternative combines some of the best aspects of each of the models presented in this report. The organizational structure is similar to NNSA, as the line organizations will report directly to their Headquarters sponsors and receive functional support from a newly established service center in Oak Ridge. Additionally, the preferred model provides for an Executive Council, populated by management from the line and service organizations, to address crosscutting issues within Oak Ridge. The preferred model is particularly strong in its ability to meet the long-term goals of the President's Management Agenda, which were a consideration in this process.

During the course of this effort it became evident that several issues would need to be addressed with implementation of the new model. These issues include, but are not limited to:

- Establishing clearly defined roles, responsibilities, accountabilities, and authorities both at Headquarters and in the Field.
- Re-structuring of the Office of Science (Science) to support the preferred model.
- A decision as to where to place those authorities flowing from the designation of "Head of Contracting Activities" (HCA) needs to be made early in the implementation phase. Potential options include embedding these authorities in the line at Headquarters, i.e., SC-1, or in the newly established Service

Center in support of Site Office activities and in executing their own responsibilities.

- A re-negotiation of the Federal Facility Agreement (FFA) will need to occur to reflect the changes in line management responsibility. Currently, this agreement is signed by the Manager of ORO.
- A re-engineering project plan is needed to eliminate or minimize barriers of internal and external resistance.
- Management accountability for meeting the target dates specified in the re-engineering plan must be established.

If we all commit to resolving these, and other yet-to-be-identified implementation issues, this preferred model holds the promise of delivering the results for Science envisioned by the President's Management Agenda.

## **Introduction**

This report evaluates potential models for the future organizational structure of Oak Ridge Operations (ORO), and recommends the model that would best facilitate the accomplishment of Department of Energy missions at Oak Ridge. It was commissioned by Robert Card, Under Secretary of the Department of Energy, and was supported by the Director, Office of Science (SC-1), and the Assistant Secretary for Environmental Management (EM-1).

The approach chosen to accomplish this task was to form four Alternative Management Model Initiative (AMMI) teams made up of a cross section of personnel from ORO. Each of these teams was led by an ORO Assistant Manager (AM) and had 13-15 team participants. The team led by the AM for Environmental Management (Gerald Boyd) evaluated model options for EM in Oak Ridge. The team led by the AM for Laboratories (George Malosh) evaluated application of the National Nuclear Security Administration (NNSA) model to ORO. The remaining two teams, led by the AM for Asset Utilization (Robert Brown) and the AM for Financial Management (Judy Penry) were unconstrained in the models they chose to evaluate. The initiative was kicked off at an all-hands meeting on April 9, 2002, followed by a four-week period when teams worked to develop models. Team reports (Appendices A-D) were completed on May 13, 2002, followed by oral presentations to the ORO Senior Management Staff that were completed on May 20, 2002.

This evaluation was undertaken in the context of the President's Management Agenda, along with recent initiatives within DOE that align with the President's goals. The four long-term goals of the President's Management Agenda are the primary motivation for structural change within the government and for creating an emphasis on efficiency and results. These goals are as follows:

- Hierarchical "command and control" bureaucracies will become flatter and more responsive.
- Emphasis on process will be replaced by a focus on results.
- Organizations burdened with overlapping functions, inefficiencies, and turf battles will function more harmoniously.
- Agencies will strengthen and make the most of the knowledge, skills, and abilities of their people; in order to meet the needs and expectations of their ultimate clients – the American people.

Other Departmental initiatives evaluated by the teams included, but were not limited to, the NNSA organizational changes, the reorganization of Energy Efficiency and Renewable Energy (EERE), the EM Top-to-Bottom Review, and

the proposed re-engineering within Science. It is important to note that there is currently no corporate approach at Headquarters regarding the coordination of these various initiatives. Lack of such coordination could potentially leave a fragmented organization.

The unique aspects of ORO were also taken into account during evaluation of the models. ORO is a mini-DOE in that it is not of singular purpose, with funding and program direction spanning major Headquarters elements with multiple linkages. Contract administration and oversight for multiple contractors serving multiple programs on multiple sites in Oak Ridge must be coordinated to ensure consistent application of Headquarters policies and procedures.

Finally, regardless of the model chosen, there are issues that will need to be addressed and commitments that will need to be made for implementation of the model to be successful. The primary issues to be addressed go to the core of the uniqueness of ORO and are as follows:

- Requirement of a mechanism to deal with crosscutting issues within ORO.
- Management of the Oak Ridge Reservation. There is a portion of the reservation that lies outside the boundaries of the three sites managed by DOE's Management and Operations (M&O) and Management and Integration (M&I) contractors. Accountability for this aspect of the reservation must be assigned and responsibility taken.
- Continuity of programs managed by ORO for DOE Headquarters that provides integration, planning, and leadership on a national level for specific areas in which ORO holds the expertise. Examples of these programs are Uranium Maintenance and Disposition and Precious Metals Sale and Recovery.

Commitments that would need to be made in order to encourage success of the chosen model include:

- Structuring of Headquarters to support the model chosen for implementation.
- Development, with achievable targets, of a detailed re-engineering project plan. Adequate resources must be applied to the project. Commitment to the execution of the project plan must be made in all elements of the organization, and management must be held accountable for meeting the targets.
- There must be clearly defined roles, responsibilities, accountabilities, and authorities both at Headquarters and in the Field.

- Development of a web-based Standards Based Management System (SBMS) needs to be implemented and deployed to serve site offices and managers in an effective and efficient manner.

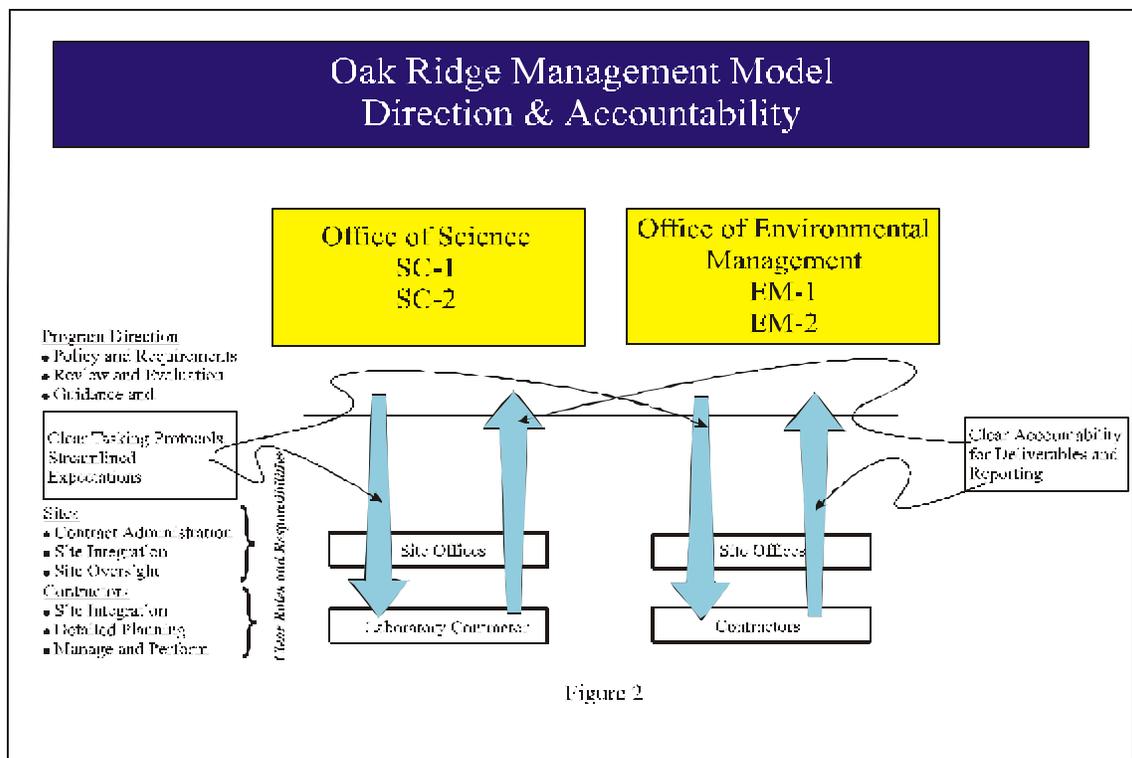
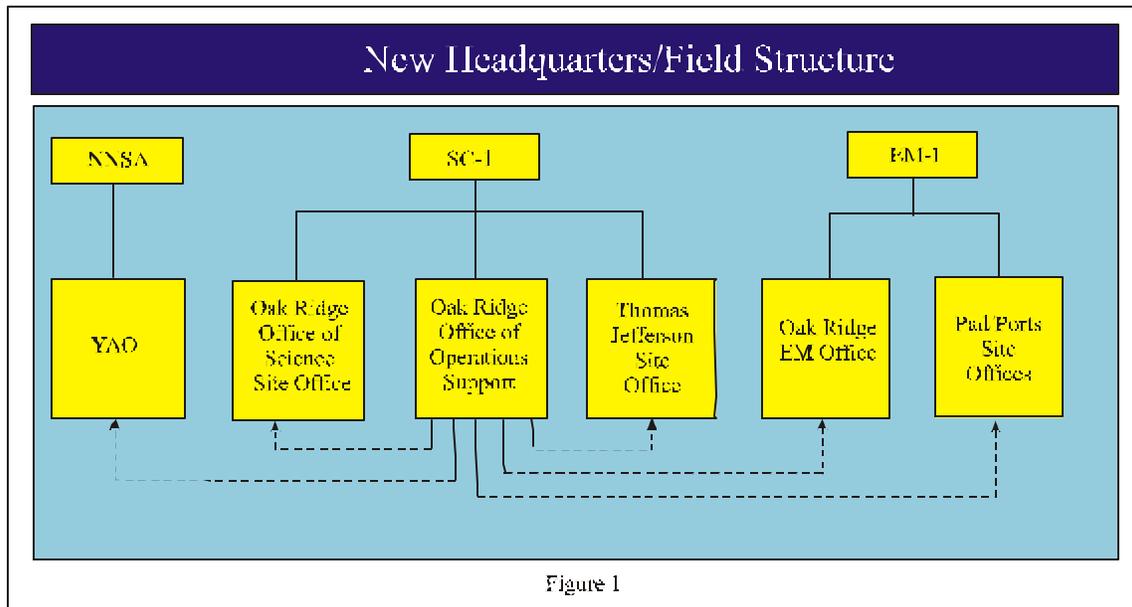
### **Preferred Oak Ridge Management Model (ORMM)**

The preferred model pulls attributes from a combination of the models discussed in preceding sections of this report. Our recommendation is that an NNSA-like model, modified to include additional departmental services, be deployed at Oak Ridge (Figure 1). Under this preferred model the Assistant Manager for Environmental Management, along with the Science elements at Oak Ridge, will report directly to Headquarters (EM-1 and SC-1, respectively). We believe that such a model dramatically improves the clarity of line management direction provided directly from the Headquarters sponsors to the site offices and provides a direct and clear line of accountability for results (Figure 2). This ORMM responds directly to the President's Management Agenda by de-layering upwards of three levels of management (removes the deputy manager and deputies for Operations and Business; also removes the Oak Ridge Assistant Managers from TJNAF, Portsmouth and Paducah EM Sites), reducing the total number of managers, improving the time it takes to make decisions, and re-deploying employees to the site offices.

This model requires the creation of an NNSA-like service center with a new title and expanded responsibilities called the Office of Operations Support (OOS), to provide necessary services to the various site offices such as financial management, contract oversight, personnel processing, security clearance processing, legal counsel, and information technology (Figure 3). The expanded responsibilities of the OOS include, but are not limited to, management of the Oak Ridge Reservation and providing services to the entire Department in areas where OOS maintains particular expertise such as the Materials Recycle Service Center and Uranium Management Service Center.

The model also envisions the use of an Executive Council (Figure 4), comprised of Managers of the Oak Ridge Reservation site offices and the Manager of the OOS, which will serve as a clearing house to address cross-cutting issues, such as land utilization, emergency preparedness, disposition of excess property and facilities, provide for regulatory and governmental interfaces, and provide a forum to discuss items of mutual interest. The Manager of the OSS will chair the Executive Council, be responsible for communicating and coordinating cross-cutting issues with Headquarters functional elements, and will represent the interests of the Oak Ridge Reservation to regulators, State and Local governments, interested stakeholders, and the general public. Participation in the Executive Council by the NNSA Site Manager is key to the successful resolution of cross-cutting reservation and program issues.

The new model is also very flexible. For example, should EM-1 choose to create a new site office to oversee the activities at Paducah and Portsmouth, this new model will easily adjust to this change.



# Oak Ridge Office of Operations Support

(Potential Structure)

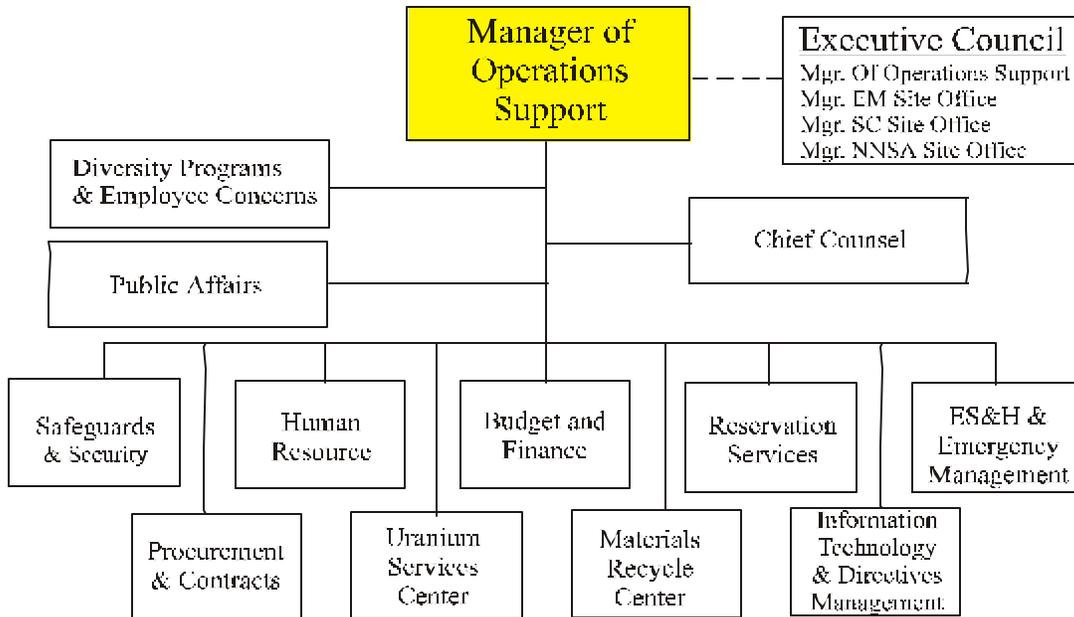


Figure 3

# Executive Council

**Chair: Manager, Office of Operations Support**  
**Manager, NNSA Site Office**  
**Manager, SC Site Office**  
**Manager, EM Site Office**

**Charter:** Serve as a clearing house to promptly address cross-cutting issues affecting the Reservation, provide for regulatory and governmental interfaces, and serve as a forum for discussions of items/issues of mutual interest to Site Managers. The chairperson is designated as the responsible individual to represent the interests of the Oak Ridge Reservation to regulators, State and local government, interested stakeholders, and the general public.

Figure 4

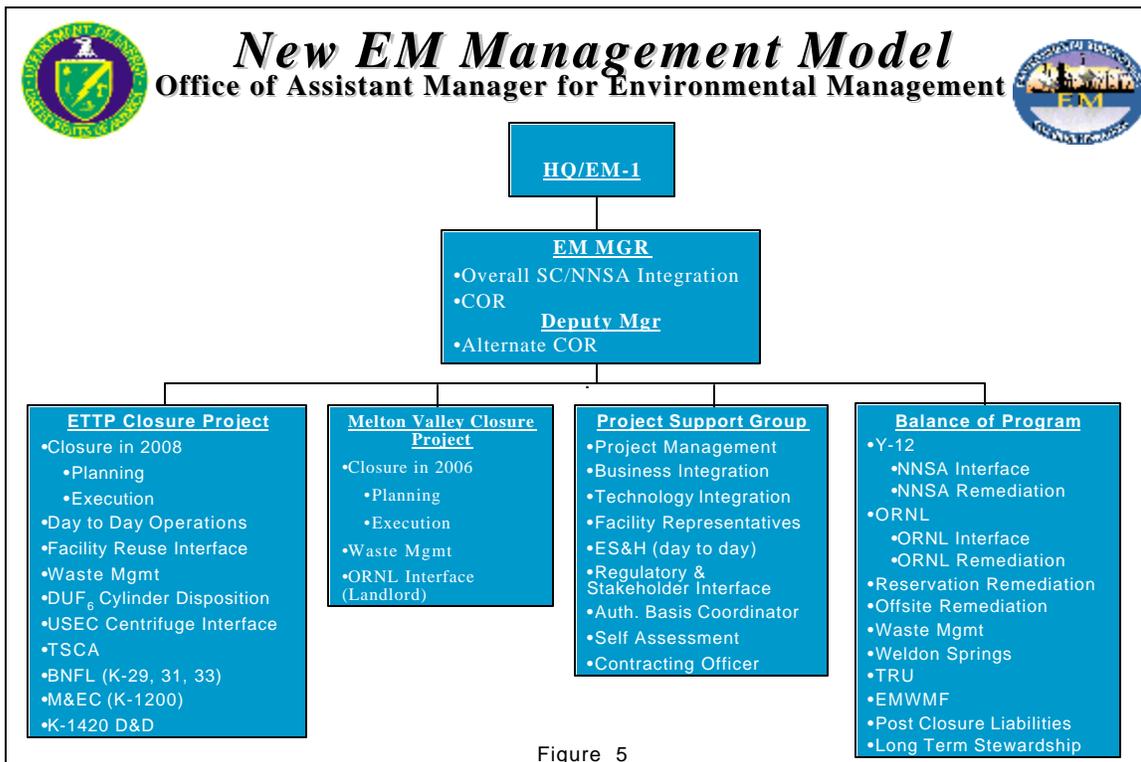
## **Environmental Management (EM) Alternative Management Model Evaluated (Figure 5)**

The EM Team evaluated the organizational structure of the Oak Ridge EM organization. The team determined that a project-based structure would best service the organization as focus shifts to accelerated cleanup and closure. The basic structure of this model consists of four groups. This structure centers around two groups working specifically on the closure of East Tennessee Technology Park (ETTP) and Melton Valley (the focus of the Oak Ridge Accelerated Closure Plan).

A third group, the Balance of Program Group, addresses all other EM activities. These activities include, but are not limited to, Y-12 (NNSA) Interface and Remediation, ORNL (Science) Interface and Remediation, Reservation and Off-Site Remediation, Waste Management, TRU Facility Operations, Environmental Management Waste Management Facility (EMWMF) Operations, Post-Closure Liabilities, and Long-Term Stewardship. A Project Support Group provides services to the two Closure Groups and the Balance of Program Group. This group would embed personnel that perform day-to-day support to the line organization. Services provided include, but are not limited to, Project Management, Business Integration, Technology Integration, Facility Representatives, Regulatory and Stakeholder Interface, Authorization Basis Coordinator, Self-Assessment Personnel, day-to-day ES&H Personnel, and the Contracting Officer.

Additional services will be obtained from the Oak Ridge Service Center. These services include, but are not limited to, Legal, Financial, Human Resources, Training, ES&H Oversight and Specialty Functions, Public Affairs, Diversity Programs, Assets Utilization, Safeguards and Security, Contract/Property, and Information Resource Management.

This model addresses the long-term goals of the President's Management Agenda. In particular, the first goal, which states that the *"Hierarchical 'command and control' bureaucracies will become flatter and more responsive,"* is addressed by flattening the organizational structure and improving the span of control. Additionally, the organization is structured so the emphasis is shifted to accelerated cleanup with a focus toward results as stated in the second goal, *"Emphasis on process will be replaced by a focus on results."*



## Other Alternative Management Models Evaluated

- Unconstrained Team #1 Model (Figure 6)

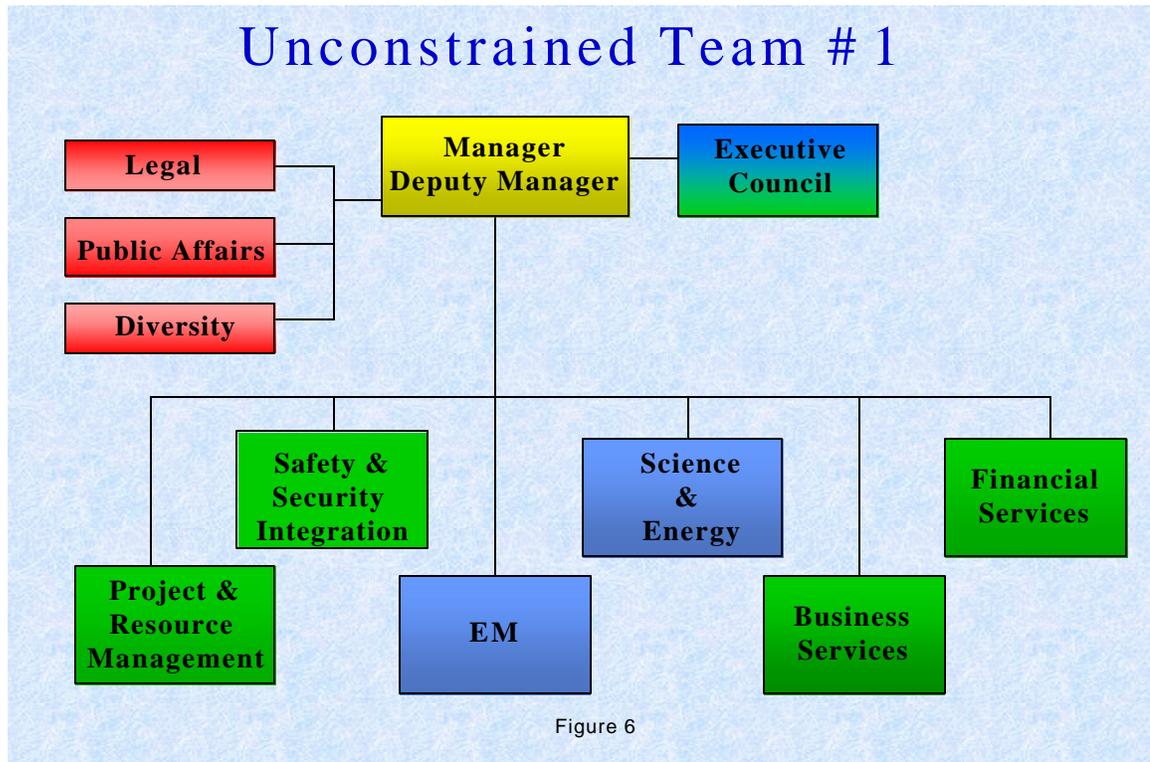
This team concluded their model would maintain an ORO office that reports through a Lead Program Secretarial Office (LPSO). It develops an Executive Council populated by heads of organizations described below to address cross-cutting issues and integrate support to Headquarters, although Legal, Diversity, and Public Affairs report to the Manager and are not part of this Executive Council. This model relies on effective and efficient matrix organizations to support the line organizations. The model has six primary organizations reporting directly to the Manager. These organizations include the two line organizations of Energy and Science and Environmental Management. The Energy and Science Organization would include the Oak Ridge National Laboratory (ORNL), Oak Ridge Institute for Science and Education (ORISE), and Thomas Jefferson National Accelerator Facility (TJNAF). The Environmental Management Organization has facilities at all three Oak Ridge Reservation sites with primary responsibility for East Tennessee Technology Park, as well as Paducah and Portsmouth.

Two of the remaining four organizations encompass Business Services and Financial Services. These two organizations would provide Business and Financial Support to the line organizations, as well as servicing the ORO infrastructure. Within these organizations would be the Head of Contracting

Activity (HCA) and Allottee authorities--authorities which currently reside with the ORO Manager. Business Services would have contract administration responsibilities and infrastructure for federal operations. Financial Services would have budgeting and accounting responsibilities, including the Financial Services Center.

The remaining two organizations are Safety and Security Integration and Project and Resource Management. These organizations would provide a majority of the technical matrix support required by the line organizations. Safety and Security would provide, but not be limited to, oversight functions such as establishment of a safety configuration board, facility representatives, environmental safety, nuclear safety, industrial safety, external regulation, emergency management, natural phenomenon, and safeguards and security to the line organizations. Project and Resource Management would provide, but not be limited to, program functions such as nuclear materials management, uranium management, transportation, resource management, project management, asset utilization/reindustrialization, loan/lease program, and long-term stewardship.

This model does address some of the President's Management Agenda long-term goals. With regard to the first goal, which states that the *"Hierarchical 'command and control' bureaucracies will become flatter and more responsive,"* this model will reduce one layer of management (deputies for Operations and Business) under its organizational structure, and, in addition, the organization is flexible enough to collapse into four organizational units rather than six.



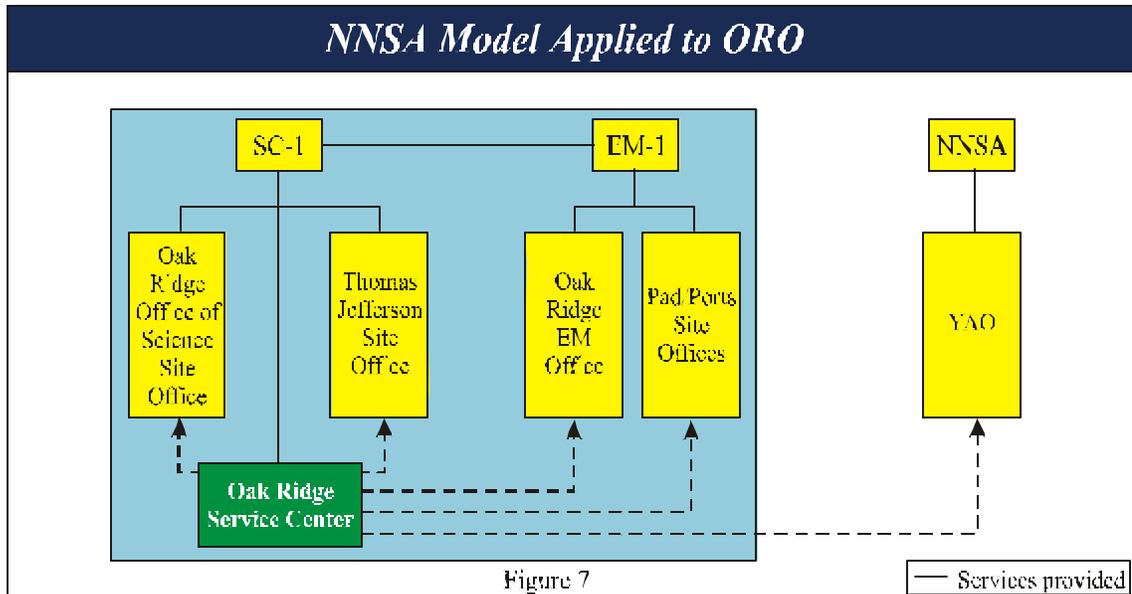
- NNSA-Like Model (Figure 7)

The NNSA-like team evaluated the application of the NNSA Model to ORO. This model implements fundamental structural change by eliminating Operations Offices from the line. This results in a redefinition of the line and changes both the mission of the Field elements and the relationship between Headquarters and the Field elements and contractors. In this model, the ORO Site Offices are placed directly in the line from Headquarters and the Operations Office would become a Service Center.

Site Offices will be delegated sufficient authority and responsibility to enable them to work effectively with the contractors in the management of day-to-day activities. In this model, the site offices will be the Oak Ridge EM Site Office, the Portsmouth and Paducah EM Site Offices, the ORNL Science Site Office, and the TJNAF Science Site Office. The Site Office will have responsibility for day-to-day contract management for its assigned contracts. Its responsibilities include agreeing to the safety and security parameters within which the contractor is authorized to operate, as well as performing oversight, reviewing contractor self-assessments, and evaluating contractor performance. Staff needed day-in and day-out for the Site Office to fulfill its responsibilities will be deployed to the Site Office. Other expertise would reside in the Service Center to ensure efficient use of resources.

The Service Center would provide support to the EM and Science Site Offices, as it currently does for the NNSA Y-12 Site Office. This support would include such functions as human resources, legal, public affairs, financial services, procurement, etc. The Oak Ridge Service Center will report to the Office of Science.

The team noted that there are several advantages to be gained and few disadvantages inherent in implementing the model. There are no aspects of the activities in Oak Ridge that present an insurmountable barrier to implementation. The implementation of this model must, however, include reengineering in Headquarters as well as in the Field. The model's implementation will address the long-term goals of the President's Management Agenda, particularly the first of these goals that states that *"Hierarchical 'command and control' bureaucracies will become flatter and more responsive."* This goal is met in this model through the reduction in the number of managers, the increased spans of control, and the elimination of organizational layers from the line. Finally, the model focuses on results by clearly and unambiguously defining the "line" and holding the line accountable for results.



- Unconstrained Team #2 Model (Figure 8)

The second unconstrained team concluded that the most effective organizational model to manage a diversity of DOE programs at multiple sites is a structure which integrates the accountability and authorities to deal with operational and crosscutting issues in the field. The key elements in this model are as follows:

- The Oak Ridge reservation will be centrally managed including activities, such as, land utilization, emergency management, disposition of excess property or facilities, and interface with the local regulators and government organizations.
- Subject-matter experts in procurement, financial management, project management and engineering services, ES&H, human resources, and information technology will be assigned (matrixed) to the line organizations. The functional organizations will be responsible for ensuring training and certification of the personnel.
- The concept of shared services (Service Centers) will be used to provide services to ORO and potentially other DOE sites.
- HCA, Allottee, and Personnel Management authorities will continue to reside with the Operations Office Manager. Contracting Officer Representative (COR) authorities will be assigned to the Site Managers. Authority for providing all technical and programmatic direction to the site contractors will reside with the Site Managers.

The Operations Office will execute its assigned programmatic and operational responsibilities through a simplified organizational structure consisting of three directorates: (1) Program and Site Operations, (2) Technical Services, and (3) Business Services.

The Program and Site Operations Directorate have programmatic, operational, and ES&H responsibilities for the EM Closure Sites (Weldon Spring Site Remedial Action Project (WSSRAP), ETTP, and off-site facilities), Leased Enriching Facilities (Portsmouth and Paducah), and Energy Labs (ORNL, TJNAF, and ORISE.) Program guidance and direction will flow directly from the PSO's to the individual Site Managers.

In addition to corporate ES&H, safeguards and security, project management and engineering services, the Technical Services Directorate will be responsible for the Oak Ridge Reservation management activities. This directorate houses the Materials Recycle Center and the Uranium Management Center which support ORO and other DOE sites.

The Business Services Directorate includes the financial and administrative organizations. As the Oak Ridge Financial Service Center has demonstrated, the capability and capacity exists for other ORO administrative organizations to provide services to other DOE sites. Included in this directorate is the Information Technology organization, which will be the focal point for ORO's implementation of e-government.

This model supports the goals in the President's Management Agenda in the following manner: reduces the number of organizational layers by one (deputies for Operations and Business); reduces the time it takes to make decisions; reduces the number of senior managers by 50 percent; promotes the efficient use of human capital through the matrix-management concept; and motivates the workforce by providing opportunities for reassignments as programs expand or contract.

# Unconstrained Team # 2

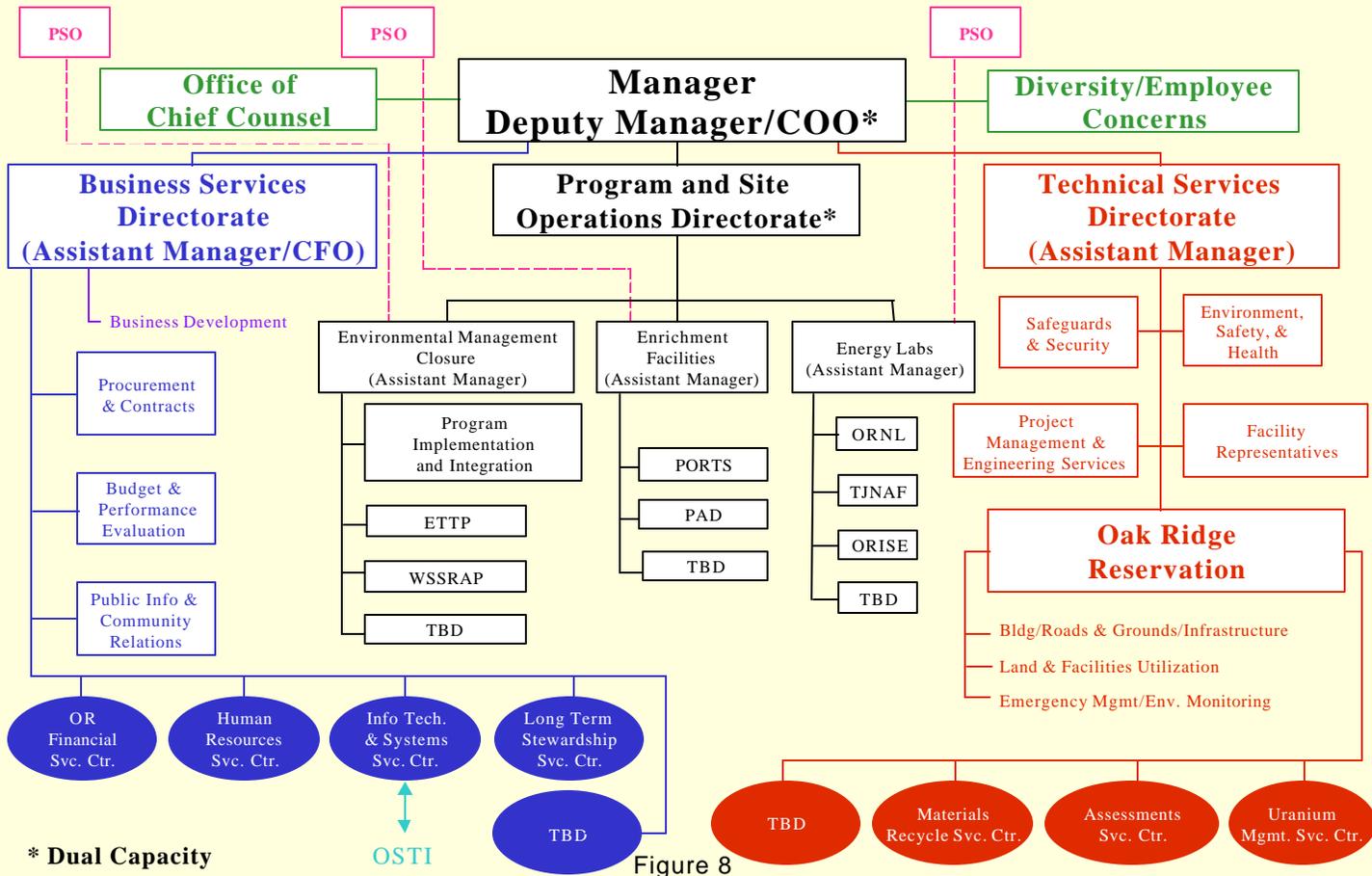


Figure 8

## **Conclusion**

The NNSA model modified to include additional departmental services, hereinafter referred to as the Oak Ridge Management Model (ORMM), has the best chance of delivering long-term benefits to the Department. Additionally, the ORMM removes 2-3 layers of management between the sponsors (Science and EM) and the service providers (the Laboratories and EM Contractors) which will dramatically reduce the time to make decisions.

The unconstrained models presented interesting, creative approaches but emphasized strong hierarchical “command and control” structures, which utilize strong matrix support to the line. Both are similar to our current model, but they recognize the problems that we are experiencing with that model, and they provide recommendations to improve the quality of support to the line through better teamwork and, in one case, the use of an Executive Council to deal with crosscutting issues

After weighing the advantages and disadvantages of the models presented, the NNSA-like model with its clarity of line management direction and accountability provided directly from the Headquarters sponsor to the Site Offices and contractors, along with its obvious focus on mission results and the removal of upwards of three levels of management, swayed the decision to recommend this new ORMM. This recommendation includes the creation of a service center at Oak Ridge, hereinafter referred to as the Office of Operations Support (OOS) and a new Executive Council at Oak Ridge. The Manager of the OSS will chair the Executive Council, be responsible for communicating and coordinating cross-cutting issues with Headquarters functional elements, and will represent the interests of the Oak Ridge Reservation to regulators, State and Local governments, interested stakeholders and the general public.

## **Implementation Issues**

During the review of the four management models by the ORO Senior Managers, a number of common implementation issues were identified that must be addressed regardless of which model was chosen.

- First and foremost, we need to recognize that the Office of Science must lead this re-engineering effort if it is to succeed. Without clear definition of roles and responsibilities; i.e., the role of line versus functional elements in Science, and defining how authorities and responsibilities will flow to the Field, this effort to improve will fall short of its objectives.
- A decision as to where to place those authorities flowing from the designation of HCA needs to be made early in the implementation phase. Potential options include embedding these authorities in the line at Headquarters, i.e.,

SC-1, or in the newly established Service Center in support of Site Office activities and in executing their own responsibilities.

- A re-negotiation of the Federal Facility Agreement (FFA) will need to occur to reflect the changes in line management responsibility. Currently, this agreement is signed by the Manager of ORO.
- We must act quickly and recognize that the current structure, both at Headquarters and the Field, will most likely act as a barrier and strongly resist this change. As a result, progress will be either slowed or stopped. If we are to be successful, Headquarters must approve Field requests to re-engineer/de-layer in an expeditious manner. To do otherwise will impose unwarranted delays and serve those who wish to resist change and the President's Management Agenda. The Office of Human Resources Management (ME-50) can assist in this effort by championing novel concepts such as the Management Councils in NNSA and EERE, where managers and executives can make positive contributions to change while they seek other career opportunities within the agency.
- If we are to harvest the cost savings that we believe would be available from this proposed model, Science must provide strong support to the implementation of new e-Government initiatives at the OOS. Specifically, we believe a web-based Standards Based Management System (SBMS) must be implemented and deployed in order to serve Science employees and managers around the country in an effective and efficient manner.
- Finally, Science must seek to fully fund those OOS requirements relating to the maintenance of the Oak Ridge Reservation and those activities related to emergency response that affect all reservation tenants (EM, NNSA, and Science), in addition to the functional support organizations that will reside there.

It is clear that if we all commit to resolving these implementation issues, this model holds the promise of delivering the results, for Science and the Department, envisioned by the President's Management Agenda.

## **APPENDICES**

### Appendix A

EM Team Report and Presentation

### Appendix B

Unconstrained Team #1 Report and Presentation

### Appendix C

NNSA-Like Team Report and Presentation

### Appendix D

Unconstrained Team #2 Report and Presentation

### Appendix E

Definitions/Terminology

### Appendix F

Acronyms

# **Appendix A**

# **Appendix B**

# Appendix C

# Appendix D

# **Appendix E**

## Appendix E

### Definitions/Terminology

**Allottee:** Represents the Head or other authorized employee of the Department who has been delegated authority to incur obligation pursuant to the terms of an allotment.

**Contracting Officer (CO):** Person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings.

**Contracting Officers Representative (COR):** Person designated to represent the CO in the technical phases of the work; the COR is not authorized to change any of the terms and conditions of the contract

**Federal Facilities Agreement (FFA):** A legally binding interagency agreement required by CERCLA to establish timetables, procedures, and documentation for cleanup of the federal facilities on the National Priority List.

**Head of Contracting Activity (HCA):** The official who has overall responsibility for managing the contracting activity

**Management & Integration (M&I) Contract:** An agreement under which the Government contracts for the subcontracting of the operation, maintenance, or support on its behalf, of a Government-owned or -controlled research, development, special production, or testing establishment wholly or principally devoted to one or more major programs of the contracting Federal agency and integration of the various subcontractor activities.

**Management & Operating (M&O) Contract:** An agreement under which the Government contracts for the operation, maintenance, or support on its behalf, of a Government-owned or -controlled research, development, special production, or testing establishment wholly or principally devoted to one or more major programs of the contracting Federal agency.

# **Appendix F**

## Appendix F

### Acronyms

AM	Assistant Manager
AMAU	Assistant Manager for Asset Utilization
AMEM	Assistant Manager for Environmental Management
AML	Assistant Manager for Laboratories
AMMI	Alternative Management Model Initiative
DOE	Department of Energy
EERE	Office of Energy Efficiency and Renewable Energy
EM	Environmental Management
EM-1	Assistant Secretary for Environmental Management
EMWMF	Environmental Management Waste Management Facility
ES&H	Environment, Safety , and Health
ETTP	East Tennessee Technology Park
HCA	Head of Contracting Activity
LPSO	Lead Program Secretarial Office
M&I	Management and Integration
M&O	Management and Operating
NNSA	National Nuclear Security Administration
ORISE	Oak Ridge Institute for Science and Education
ORMM	Oak Ridge Management Model
ORNL	Oak Ridge National Laboratory
ORO	Oak Ridge Operations
OOS	Office of Operations Support
SBMS	Standards Based Management System
SC-1	Director, Office of Science
Science	Office of Science
TJNAF	Thomas Jefferson National Accelerator Facility
WSSRAP	Weldon Springs Site Remedial Action Project
YSO	Y-12 Site Office