



**Department of Energy**  
Germantown, MD 20874-1290

November 18, 2002

MEMORANDUM TO:

RAYMOND L. ORBACH, DIRECTOR  
OFFICE OF SCIENCE

FROM:

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DOE REVIEW COMMITTEE

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DOE REVIEW COMMITTEE

NOV 19 2002

SUBJECT:

Department of Energy Report on the October 2002  
*OneSC* Project Review

Attached for your consideration and use is the final report on the Department of Energy *OneSC* Project review. The *OneSC* review was conducted on October 30-November 1, 2002 at the Fermi National Accelerator Laboratory.

If you have any questions or would like to discuss the report further, please contact Daniel Lehman or Marvin Gunn.

Attachment

cc:

J. Decker, SC  
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*Department of Energy  
Review Committee Report*

on the

**OneSC  
PROJECT**

October 2002



## EXECUTIVE SUMMARY

A Department of Energy Review Committee conducted a review of the Office of Science Restructuring Project, known as the *OneSC* project, on October 30-November 1, 2002 at Fermi National Accelerator Laboratory (Fermilab) in Batavia, Illinois. The review was conceived as part of the project planning process and was guided by the charge issued by Raymond L. Orbach, Director of the Office of Science (SC). The purpose of the review was to evaluate the *OneSC* project's overall progress (scope, schedule, management, and resources) with a special emphasis on Phase 1 of the project, and to reduce the risk of failure by identifying existing and potential problems in a timely manner so that adequate resolution is possible.

Overall, the Committee believes the project is on the right track. The Committee commends the project team and especially the project leadership for their dedication, hard work, and creativity. The Committee's concerns are centered on improving the analysis used to support project recommendations, communications across the SC community, the understanding of human capital and day-to-day business implications associated with the conceptual organizational models, and the need for continuous coordination with other DOE stakeholders at all levels to assure timely approval and implementation of the new structure. In order to address these concerns, the Committee recommends seeking more time or less scope for Phase 1 to deal with significant complexities, establishing a Steering Committee to oversee the project and advise the Director, considering a phased implementation of the new organization and conducting an operational readiness review to ensure the newly restructured SC meets internal and external stakeholder requirements and expectations.

The *OneSC* project is intended to advance the President's Management Agenda by improving the effectiveness of SC. The primary objectives of the project are to reduce management layers; clarify roles and responsibilities/accountabilities and authorities; and to simplify requirements and streamline management processes. Due to the size and scope of the restructuring effort, all activities are being managed as a project. An initial *OneSC* Project Plan was approved on July 22, 2002.

The project is divided into three phases. At the end of Phase 1 the new SC structure, including organizational alignment and reporting relationships, will be fully defined and approved. The plan calls for the Phase 1 scope of work to be completed by December 31, 2002.

The Committee was given an overview of project activities and progress by the project manager, briefings by NNSA managers on the implementation of similar NNSA restructuring, and re-engineering efforts and detailed presentations by *OneSC* Project Work Breakdown Structure (WBS) Team Leaders for all activities undertaken in Phase 1. The Committee was guided through the substantial data collected and analyses performed by the key WBS elements related to restructuring Headquarters, Site Office, and the newly proposed Support Centers.

The Committee believes the project scope is generally well thought out and comprehensive, however, it identified two areas that need additional attention: 1) the complexity of analyzing the requirements for a new SC organization, and 2) fully defining the new SC structure and reporting relationships. The Committee is concerned the related tasks of redefining many leadership positions and making appointments to these critical positions have been vastly underestimated. In addition, coordination of the proposed structure with other DOE elements is likely to be very time consuming. Also, the Phase 1 scope is lacking an effective transition plan to implement the new organization.

With respect to the *OneSC* project schedule, the Committee believes the completion milestones for Phase 1 are not realistic. The project team should re-evaluate the elements of Phase 1 that can reasonably be achieved by December 31, 2002 and seek approval of a revised scope (or extension of the Phase 1 schedule) from the Director as soon as possible.

The Committee believes the resources assigned to the project are generally reasonable, but finds the ambitious scope and unrealistic schedule has put unreasonable demands on project staff. This concern extends to subsequent project phases. With few exceptions, project team members have full-time jobs and have not been relieved of their regular responsibilities. The Committee is concerned whether there will be sufficient staff with the requisite skills throughout the entire project. The project team should re-assess the project resources and recommend to the Director steps to make those resources available to the project as needed.

The Committee finds the project communication team is integrated and recognizes the importance of effective communication at all levels of the SC organization. Communications within the *OneSC* project team appear sufficient, and the communication channels between the *OneSC* project and the SC community are formal, proactive, and uniform. Clear, focused, and sustained communications must become an integral part of the path forward. This effort is particularly important as the project approaches the end of Phase 1 and expectations about the outcome increase.

The first class management team assembled from Headquarters and the Field has been perceptive, highly dedicated, and hardworking. Significant personal sacrifice is apparent. The overly ambitious project scope and unrealistic Phase 1 schedule have put an unreasonable burden on management's ability to properly execute the project. The project's leadership is aware of this problem and is taking steps to address the various management challenges. The Committee recommends establishing a Steering Committee, comprised of senior Headquarters and Field managers to oversee the project, serve as a sounding board, and advise the Director of progress and problems.

The project leadership is to be commended for driving substantial progress. However, the Committee is concerned some important tasks are not as thoroughly implemented as needed for successful execution of overall project objectives. The Director should have the benefit of more thorough analyses, including the examination of organizational options. Adequate and sufficiently formal interactions with other DOE organizations in developing key recommendations are not evident.

The process of going from the project's recommendations to the Director's activation of a new SC organization and subsequent delegation of appropriate authorities is a complicated process that does not appear to now be included in the project's Phase 1 deliverables. The project team should develop a transition plan for the Director's consideration to move from Phase 1 recommendations to the activation of the new *OneSC* organization. The Director should consider organizing an operational readiness (or similar) review prior to implementing the Phase 1 recommendations.

A closeout report, highlighting key findings, comments, and recommendations was presented to the project team at the completion of the review. A summary of the closeout report was presented to the Director by the Committee Co-Chairs on November 4, 2002.

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# 1. INTRODUCTION

The Office of Science (SC) is re-aligning its Headquarters and Field Structure to streamline and improve the management and implementation of its programs by reducing layers of management, streamlining decision making processes, clarifying roles and responsibilities, and making more efficient use of resources. Because restructuring an office with the size and scope of SC is a complex task involving the direct participation of large number of SC staff (over 80 managers and staff in Phase 1) carrying out such a wide array of improvement initiatives, it was decided to use the project management framework typically used for SC's large capital construction projects.

Consistent with the standard practice of performing independent review of SC's large capital construction projects, the SC Director requested that Daniel Lehman, Director of the Construction Management Support Division and Marvin Gunn, Jr., Manager of the Chicago Operations Office form and co-chair a review committee appropriate to this project.

In a September 24, 2002 memorandum (Appendix A), Raymond L. Orbach, Director, Office of Science, requested an evaluation of the project's overall progress (scope, schedule, management, and resources) with a special emphasis on Phase 1 of the project, and to reduce the risk of failure by identifying existing and potential problems in a timely manner so that adequate resolution is possible.

The Committee was organized into seven subcommittees with members drawn from DOE national laboratories, SC Headquarters programs, DOE Site and Operation Offices, and specialty consultants. The committee membership and subcommittee structure are found in Appendix B. The review took place October 30-November 1, 2002 at Fermi National Accelerator Laboratory.

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## 2. OneSC KEY PROJECT ELEMENTS

### 2.1 Planning and Integration (WBS 1.1)

The Integrated Project Team, especially the project leaders, are to be commended for their dedication, hard work, and creativity in answering the Office of Science (SC) charge to design and implement dramatic improvements in the way SC leads and delivers science. This project is specifically identified in the Inspector General’s DOE Management Challenges Report (DOE/IG-0538), which anticipates the results as providing “... one of the greatest opportunities for enhancing the economy and efficiency of Departmental operations.”

#### 2.1.1 Findings

The Project Plan and the added detailed plans represent an extensive team effort to address project scope through data gathering and scheduling using the available resources. The effects of planning can be observed along four dimensions:

**Mission Need**—It is clear that the initial project plan is aligned with the desired end state.

**Lifecycle Definition**—The detailed plans identify many present states and the activities necessary to assess, analyze, restructure, and re-engineer, where necessary, to arrive at the envisioned new organization while the present organization remains operational.

**Detailed Plans**—Each Sub-Team has developed effective strategies and detailed plans to deliver their products to the overall project. The integration within the Team is good at all levels, but the internal SC management integration is weak.

**Front-End Loading**—Significant efforts have been and continue to be made by the project leaders in developing the approach to conduct this activity as a project, communicating the plan to project stakeholders, and defining a set of deliverables to focus the project team’s efforts.

The Work Breakdown Structure used to plan, organize, and communicate project tasks and products is provided in Appendix D. A critical path schedule developed by the project team is provided in Appendix E.

### **2.1.2 Comments**

The Committee expressed some concern that while the breadth of project activities is well planned and organized, the depth to which some Sub-Teams have executed their plans may be too detailed and have caused unnecessary anxiety for this phase of the project. The Committee believes exact descriptions of Phase 2 outcomes before the completion of Phase 1 with a united-management delivery to all stakeholders has led to some stove-piping in the project. The singular and strong focus by Sub-Teams on developing and delivering their defined product has the potential to short-circuit some of the management coordination required for successful completion of the project.

The Committee has a general concern that more attention is needed throughout the project to transition planning. The Committee believes this forward view through the actual transition may offer insights to current planning and analysis activities and help to define priorities in this schedule driven effort. The transition planning should also address many of the SC management level integration needs in greater detail to assure SC management leadership as the stages of the project unfold.

The Committee has some concern that the project plan design inadequately represents the value or values of SC's human capital. It is important that the communication plan address the effect of the SC restructuring on the human element of the organization. More effort should be focused on potential employee angst over a non-traditional approach to organizational design that could derail the project in Phase 2.

### **2.1.3 Recommendations**

1. Re-order the priorities of the project to focus more narrowly on the essential deliverables needed for Phase 1.
2. Build transition planning into all Team efforts.
3. Fully engage senior field and headquarter management prior to the Phase 1 announcement and release of the Phase 1 report.

## **2.2 Project Communication (WBS 1.2)**

### **2.2.1 Findings and Comments**

The Committee endorses the efforts of the *OneSC* Project Team to develop and to implement sound communications. The individuals charged to meet communication objectives are qualified and strongly motivated. The individuals are operating as an integrated group that recognize the need for effective communication at all levels (within the *OneSC* Project Team, between the *OneSC* Project Team with the Office of Science community, with organizations and individuals in directions “up and out” from SC) to underpin overall project success.

Communication throughout the *OneSC* Project Team appears to be sufficient at this time. The *OneSC* website ([www.screstruct.doe.gov/](http://www.screstruct.doe.gov/)) is an effective, state-of-the-art information resource. However, not every member of the SC community will use it. In addition, the information and the links posted on this URL must be continually refined and refreshed to ensure continued interest among *OneSC* customers and stakeholders.

The Communications Plan presented to the Committee on October 28, 2002 is more accurately described as a statement of communication principles and a status report on communication activities and near-term plans. It should be rewritten, vetted, and posted on the *OneSC* webpage as soon as possible.

Communication channels between the *OneSC* Project and the SC community are formal, proactive, and uniform. Clear, focused, and sustained communications must become an integral part of the path forward. It is now time for SC management to proactively reinforce its message with updated information that tells the SC community where the process stands, gives dates when real action might be taken, and deal with some of the questions people have.

### **2.2.2 Recommendations**

1. Ensure the SC corporate restructuring message defines the compelling reasons for change.
2. Engage all of SC in the *OneSC* project, especially Associate Directors and program offices.
3. Establish solid communications for the “up and out” (beyond the SC community) directions.

4. Develop answers to the tough questions that normally accompany a change of the nature and magnitude. If necessary, seed the Q&As with the tough questions people are asking but not submitting to the web site.
5. Develop and implement a credible Communications Plan.

## **2.3 SC Organization (WBS 1.3)**

### **2.3.1 Headquarters**

#### **2.3.1.1 Findings**

The WBS 1.3.1 Team Chairman presented a summary of the Team's work to date and a projection of the tasks to be completed. Work planning for this WBS component is documented in a series of fourteen e-mails. A consolidated plan showing tasks and milestones was not presented. The Committee found that an impressive amount of data had been collected in a relatively short period through a variety of mechanisms including research, questionnaires, and interviews. Much of this data is presented in a book consisting of five chapters, four of which relate to Phase 1. The fifth chapter contains information on issues relating to how work is accomplished and suggestions for improving efficiency and reducing costs; accordingly, this information is more related to Phase 2 activities.

A proposed "To Be" structure was presented for the Headquarters Office of Science that reflected a rearrangement of existing SC elements. A rationale for the structure was presented in the briefing to the Committee that included the following pieces:

- Reflects guidelines and criteria in Project Plan and other guidance
- Legitimizes certain current reporting relationships
- Consolidates some related elements

The Team did not document for review the analysis that led to the proposed structure. Furthermore, the Committee was told that other organizational options were intentionally not developed or analyzed by the Team or SC leadership. The proposed structure has been shared with SC leadership, including the Associate Directors, and feedback has been received. It is not clear whether all questions and issues have been resolved.

The Team proposed a concept of Program Execution Agreements (PEA) to be used to define Roles and Responsibilities/Accountabilities and Authorities (R2A2) between SC and the Site Offices for the execution of programmatic work.

The question of placement of Head of Contracting Authority (HCA) in Headquarters is not yet settled, although discussions have been held with ME officials.

### **2.3.1.2 Comments**

The Committee has several concerns about the proposed Headquarters organization structure:

1. The basis for the proposed structure is not clear since the analytical work supporting the proposal was not documented. Furthermore, no other options were developed or analyzed.
2. The proposed structure raises questions about the roles of the four principals presented in the structure. For example the structure does not convey the Principal Deputy role of SC-2. Rather it appears that the role of SC-2 is limited to a line role between the Director and Associate Directors. The structure also raises questions regarding the relationship of the Associate Directors with the Director.
3. The proposed role of SC-3 is broad and diverse. This organization will be expected to address a challenging array of Headquarters (policy) and Field (operational) issues.
4. The structure raises questions about the SC line of succession. For example, would SC-4 follow SC-3 in the line of succession?
5. The proposed structure does not include a uniform and adequate vetting process among all SC principals.

The Committee did not examine the PEA concept in depth, but sees merit in it and believes it should be considered further in coordination with other interface agreements as part of WBS 1.5.

Settlement of the question regarding placement of the HCA authority in the Headquarters is critical to completing the organization and management structure of *OneSC*. Authorities and responsibilities flowing from this designation are fundamental to the overall One SC structure.

### **2.3.1.3 Recommendations**

1. Conduct and document further organizational analysis including development and assessment of options. Proposed SC-2 and SC-3 elements require special attention.
2. Assign further consideration of PEA concept to WBS 1.5 (Interface Agreements).
3. Drive aggressively toward settlement of the HCA placement issue.

### **2.3.2 Site Office Organization**

#### **2.3.2.1 Findings and Comments**

The project team has done a commendable job in identifying in great detail the “As Is” and “To Be” elements of the site office R2A2s. In the “As Is” condition, there is wide variation in the R2A2s of site offices and site managers that support the SC mission.

In the SC restructuring vision, the site office plays a key role as focal point for DOE-SC management of its laboratories. The Restructuring Project team has made significant progress in defining the essential elements of the “To Be” R2A2s of the site managers and site offices consistent with the vision, although some important issues remain. Areas not yet fully assessed include: staffing levels, transition from operations offices, and role in stakeholder relations.

#### **2.3.2.2 Recommendations**

1. Provide an operational definition of the SC-1 goal that the site manager be able to determine the “sense of the laboratory”.
2. Clarify the requirements for contracting officer qualifications of the site manager, including implementation plans.
3. Resolve the grade structure of the site manager.

### **2.3.3 Support Center Organization**

#### **2.3.3.1 Findings**

The overall scope of the Support Center Sub-Team effort is comprehensive and identifies logical steps for analyzing the various services currently provided by Operations Offices to allow for informed recommendations for restructuring.

Thus far, the Team has assembled a vast quantity of information in a relatively short period of time by obtaining input from a large number of contributors throughout SC, from Operations Offices and Headquarters.

R2A2 matrices have been completed and provide a very detailed baseline of the “As-Is” condition at Chicago and Oak Ridge, and less detailed functions and activities for SC-60 and SC-80. An R2A2 matrix for the “To-Be” Condition is still under development

Interface agreements, including those for services provided to or received from non-SC customers, are needed.

A very aggressive schedule to finalize the “To-Be” Condition Analysis and report by November 15, 2002 has been established.

Support Center organization structures are to be developed as part of Phase 1.

An implementation plan for transitioning to the ultimate “To-Be” Condition will be finalized as results of Phase 2 re-engineering become known. Placement of HCA authority is an issue.

#### **2.3.3.2 Comments**

The overall scope does not include consideration of services currently provided by the Department, e.g., ME for administrative services. It is not clear whether the Support Centers are eventually expected to provide these types of services on an “enterprise” basis within the Office of Science. Some additional analysis of these services might be considered.

The level of detail provided in the R2A2 matrices goes into great depth, but it is not clear how the data will be used to help define an organizational structure for the “To-Be” Condition. It may be too much data to be useful for this purpose.

It is not clear whether there will be some sort of cross-walk of R2A2s from the “As-Is” to the “To-Be” Condition to ensure no gaps occur in carrying over all R2A2s that need to be maintained by a successor.

The level of support needed by the sites does not yet appear to be very well understood.

The Support Center Sub-Team is relying on the Interface Team to identify interface agreements with non-SC customers or service providers. This responsibility will not be carried out until Phase 2, and no specific plans were identified for confirming in some manner whether significant changes were being considered by these non-SC customers or service providers.

The level of support needed by the sites from Support Centers is not well understood.

To determine an appropriate Support Organization structure, there are a great many complexities that need to be addressed, such as 1) finalizing the R2A2 matrix for the “To-Be” Condition, 2) implementing appropriate contracting responsibilities flowing from the decision on placement of HCA authority and Contracting Officer authority at Sites, and 3) gaining a common, mutual understanding between Support Centers and sites on how the respective entities will operate. These complex issues should be resolved and will effect being able to meet the November 15 “To Be” Condition Analysis completion date. Neither this target date nor the objective to develop Support Center organization structures within the overall Phase 1 schedule seems achievable.

### **2.3.3.3 Recommendations**

1. The Sub-Team Leader should ensure cross-over of all R2A2s from “As-Is” to “To-Be”.
2. The Project Team should formulate an approach for engaging non-SC customers and clients.
3. The Sub-Team Leader should:
  - a. Re-assess the realism of the Phase 1 schedule, considering slip-dates, a modified approach, or some combination of both.
  - b. Prioritize gathering only data needed to determine organizational structure.
  - c. Assure that level and type of support needed by Site Offices is fully understood.

## 2.4 Systems and Processes (WBS 1.4)

### 2.4.1 Findings and Comments

One goal of the *OneSC* project is to restructure SC to enhance its effectiveness and efficiency. Critical to achieving this goal is business process reengineering of SC systems and processes. Three areas of systems and processes are being considered. Most of the proposed re-engineering effort will occur during Phase 2 of the project. In general, the planning for the re-engineering effort is on course and on time. Following is the status of each of the three areas:

#### *SC Business Systems and Processes*

A high level plan has been prepared for re-engineering the SC business systems. The key elements of the plan are as follows:

- Perform a survey of all of the “As Is” SC business systems. The systems have been surveyed and results are in the process of being analyzed.
- By the end of Phase 1, the criteria to be used to prioritize systems for business process re-engineering will be defined.
- A web-based system is proposed to provide all of the information on SC systems and process. This system (OSIBS) would provide both the information on the “As Is” and the “To Be” SC organization as the “To Be” organization comes into being and evolves. Ownership, funding, location, etc. of OSIBS will need to be determined.
- In Phase 1, the “To Be” organization is being determined including its R2A2s. The associated systems and processes will be determined in Phase 2, along with those systems and processes to initially go through business process reengineering. The process to get to actual re-engineering in the current plan needs additional detailing.

#### *M&O Contracts*

The Model contract activity is well underway and should not effect Phase 1 of the *OneSC* project. This will be considered in Phase 2 of the project.

## ***Optimization of Staffing and Contract Staff***

After the Phase 1 organization rollout has occurred, the optimization of staffing and contract staff for the new systems and processes will come as part of the Phase 2 project activities.

### **2.5 Interface Agreements (WBS 1.5)**

#### **2.5.1 Findings**

The Interface Agreement Sub-Team is comprised of two Headquarters individuals, with the Sub-Team Leader just recently taking over the leader assignment.

The scope of the Task has been defined to include only interface agreements with offices external to SC and within DOE.

The Sub-Team presented a list of seven existing agreements that had been collected.

The Sub-Team held interface meetings with major program offices and had identified points of contact for NNSA, EM, NE, EE, RW, and FE.

Based on a review of the collected agreements, the Sub-Team determined that an agreement with EM concerning staffing issues for the PNNL Site Office needed to be finalized in Phase 1.

Other agreements were considered less urgent and could, in the Sub-Team's opinion, be reviewed and updated in Phase 2.

#### **2.5.2 Comments**

The scope of the Task seems too narrow and should be expanded to include interface agreements within the Office of Science, e.g., HQ/Field and Sites/Support Centers. Further, the Sub-Team scope should consider expanding to include assessment of significant interface agreements with parties outside of DOE, such as Emergency Response or Radiation Assistance Programs agreements. This expanded scope would require that additional input is sought and possibly additional resources being added to the Sub-Team, particularly from Operations and Site Offices.

The collection process seemed to uncover only a limited number of internal agreements, and additional sources, e.g. Operations Office Managers, or approaches for identifying a more complete inventory of interface agreements might identify additional interface agreements.

The Headquarters, Site Offices, and Support Centers Sub-Teams indicated needs for identifying or entering in to interface agreements, such as Program Execution Agreements between SC Headquarters and Site Offices and service agreements with non-SC customers. While the task of determining the type of agreement or negotiating them need not be assumed directly by this Sub-Team, they should at least oversee and be aware of the activities to assure reasonableness and appropriate levels of consistency and integration.

### **2.5.3 Recommendations**

1. The Project Leader should consider changing the Project Plan to broaden the scope to include interface agreements within SC.
2. The Project Leader should assign responsibility to an individual for assuring reasonableness, consistency, and integration in development of interface agreements.
3. The Sub-Team Leader should assure that a complete inventory of interface agreements is collected and consider expanding the team's membership.

## **2.6 Project Control and Reporting (WBS 1.6)**

### **2.6.1 Findings and Comments**

The SC Restructuring Project is using traditional approaches for project control and reporting. This is appropriate and seems to be working well.

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### **3. PROJECT MANAGEMENT**

The Director of the Office of Science requested a review of the One SC Project to evaluate overall progress, with special emphasis on Phase 1, and to reduce the risk of failure by identifying existing and potential problems so that timely resolution is possible. The review charge asked six questions (shown as subheadings below).

#### **3.1 Is the project scope defined appropriately?**

##### **3.1.1 Findings and Comments**

Yes, for the most part; but the schedule to carry out Phase 1 appears to be unrealistic.

The project scope is described in the September 30, 2002 Project Plan (Rev 1) with the overall objectives of realigning SC's Headquarters and Field structure to achieve fewer levels of management and result in an organization that is more streamlined and responsive. The project is divided into three phases: 1) planning and communication; 2) implementation and communication; and 3) completion and communication.

Phase 1 includes the identification of R2A2s for major management levels; an inventory of supporting systems prioritized for Phase 2 re-engineering; mapping of "As Is" and "To Be" conditions; a signed Memorandum of Understanding with Richland Operations Office; an assessment of SC leadership and appointments made to critical positions in the new management structure. At the end of Phase 1, the new SC structure is to be fully defined and approved. Expected completion of Phase 1 is December 31, 2002.

The scope is generally well thought out and comprehensive, however there are several areas that need to be included. Phase 1 does not recognize the complexity of analyzing the requirements for a new SC organization and fully defining its structure and reporting relationships both within SC and with other DOE organizations. The complexity of effecting the new organization is not reflected in the scope. The task of assessing leadership and making appointments to critical positions has been vastly underestimated. Also, the scope should include the development of a transition plan to effect the new organization recommended and approved in Phase 1. The scope is overly ambitious for the schedule, particularly for Phase 1. The tradeoff between scope and schedule is also reflected in Section 3.2.

### **3.1.2 Recommendations**

1. Add a detailed transition plan to Phase 1; emphasize all steps from recommendation to the Director, to activate the new management structure. Include steps to identify and secure the necessary departmental approvals.
2. Re-evaluate what can be reasonably achieved by the December 31, 2002 timeframe.
3. Seek approval of modification of scope and/or schedule from the Director.

## **3.2 Has a realistic schedule been developed that reflects the major activities and events in the project?**

### **3.2.1 Findings and Comments**

Not for Phase 1, especially when additional tasks are included to give a high chance for project success.

Phase 1 is scheduled to be completed by December 31, 2002; Phase 2 by September 30, 2004; and Phase 3 by December 31, 2004. It is clear that the schedule for Phase 1 is greatly underestimated as noted above, particularly in light of the Director's concern about the risk of failure. The overall schedule for the balance of the project may be reasonable but that is not clear. There is an obvious trade-off between scope and schedule for Phase 1 that needs to be assessed and brought to the Director for a decision.

### **3.2.2 Recommendations**

1. Re-evaluate the Phase 1 schedule after identifying the additional tasks including a detailed transition process.
2. Advise the Director as soon as possible of the schedule/scope tradeoff options for this decision.

### **3.3 Are sufficient resources available to complete the project within schedule?**

#### **3.3.1 Findings and Comments**

Generally yes, but the ambitious scope and unrealistic schedule has put unreasonable demands on staff. There is additional concern for Phases 2 and 3.

The project has formed a team of nearly 80 SC Headquarters and Field staff to carry out this assignment. Composed of well-qualified and dedicated personnel, the team was assembled quickly and work started soon thereafter. It has been intelligently structured. The project leadership should be commended.

However, whether there are sufficient resources available to complete the project on time, as currently configured and scheduled, is the crucial, long-term issue.

The Committee is concerned whether there will be sufficient staff with the requisite skills available throughout the entire project. Maintaining the current momentum and level of commitment by the team is essential for success. Increased contractor support may provide valuable assistance in collecting data and preparing the necessary analyses.

#### **3.3.2 Recommendations**

1. Assess staff resources required to implement the project.
2. Recommend to the Director steps to assure that personnel will be available. This is particularly true for the team management.
3. Estimate other resources (e.g., funding, contractor) required to carry out the project and advise the Director.
4. Consider the increased use of contractor assistance to help ensure successful completion of the project.

### **3.4 Has the project developed adequate mechanisms to communicate results and information to project stakeholders?**

#### **3.4.1 Findings and Comments**

Not yet, although substantial progress has been made in some areas.

The Committee believes that the communications project staff is well qualified and strongly motivated; they have formed an integrated group that recognizes the importance of effective communications at all levels of the SC organization.

Communications within the *OneSC* team appear sufficient. The web site is an effective state of the art information resource that will have to be continually refined and refreshed to provide current information and attract continued interest by SC staff and stakeholders.

The Committee is concerned that communication between the project and the SC community is informal and not uniform; more personal contact is encouraged. If communication with the SC community is not addressed, existing support for the project will wane. Customers and stakeholders have not been adequately defined to foster an effective communications strategy. The Communications Plan (October 28, 2002) appears to be focused on the near term. It should be revised, vetted, and posted on the web site as soon as possible. The Committee notes that several deliverables are scheduled for late-November.

#### **3.4.2 Recommendations**

1. Establish as a high priority, solid, innovative communications strategies and mechanisms for getting the getting the word out to the SC community.
2. Revise as a high priority, the Communications Plan to assure that a clear, sustainable message is communicated to SC staff, with particular attention to communications from the Director.
3. Initiate regular, formal interactions with SC staff in Headquarters and in the field. Special efforts should be made to engage managers, such as Associate Directors, to be strong project advocates and routinely keep their staffs informed.

4. Prepare a series of short, easy to understand, written communications about project objectives and progress on the objectives; ensure that they are widely available.
5. Focus especially on providing “answers” to tough questions.

### **3.5 Is the project being managed as needed for its proper execution?**

#### **3.5.1 Findings and Comments**

Yes, given the constraints. However the very ambitious scope/schedule has and will continue to strain the project management’s ability to coordinate tasks and provide the necessary amount of quality control. Additional oversight mechanisms would substantially help assure a successful project.

A first class management team has been assembled from Headquarters and the field. Under their leadership a detailed plan was developed in a short period of time and a well functioning nation-wide team has been functioning. Management has been perceptive, highly dedicated, and hard working at some personal sacrifice. The dispersed composition of the project team has made communication and joint deliberation difficult.

The overly ambitious project scope and unrealistic Phase 1 schedule, however, have put an unreasonable burden on management’s ability to properly execute this project. The Committee believes that project management is aware of the problem and has taken initial steps to address the various issues. There is some concern that project subtasks have not been sufficiently integrated and that there is insufficient consideration of the project as a whole. The project manager does not have the support resources that he requires. More overview and questioning of individual task products is required to assure that the Director is presented with a quality Phase 1 document with recommendations that can be successfully implemented.

#### **3.5.2 Recommendations**

1. Establish a steering committee, reporting to the Director to provide policy direction and oversight; examine the NNSA’s Leadership Coalition as a possible model.
2. Assure that project tasks are integrated into a comprehensive Phase 1 recommendation to assure delivery of a high quality and complete a Phase 1 report with a high confidence that it can be successfully implemented.

### **3.6 Has sufficient progress been made on this project based on the Project Plan?**

#### **3.6.1 Findings and Comments**

Significant progress has been made, however, because of the overly ambitious scope/schedule, important tasks may not have been as thoroughly completed as required.

The project team was quickly organized and has made substantial progress in carrying out the Project Plan. A detailed work breakdown structure has guided the development of a great deal of information required to analyze the various issues and establish a new SC organization.

The Committee does, however, have several major concerns that, if not addressed now, could jeopardize the ultimate success of the project.

While a large amount of data has been collected on the “As Is” R2A2s of the current SC organizations, there is concern that schedule pressures may be inhibiting a complete analysis of the R2A2s and organizational structure of the recommended “To Be” organization.

The Director should have the benefit of more thorough analyses, including the examination of organizational options.

Another area of concern is whether there has been a sufficient examination of the various delegations now in place and the impact that such authorities would have on a proposed new structure. Adequate and sufficiently formal interactions with other DOE organizations in developing the recommendations is not evident, and should be taking place.

The process of going from a team recommendation to the Director to the activation of a new SC organization and the delegation of appropriate authorities is a complicated and time consuming process that does not appear to now be included in the team’s Phase 1 deliverables.

#### **3.6.2 Recommendations**

1. Assure that all recommendations to the Director are supported by thorough analyses.

2. Engage in consistent and formal interactions with other DOE offices at both the leadership and staff levels to determine and address their requirements and expectations (particularly ME).
3. Develop a transition plan for the Director's consideration to move from the Phase 1 recommendation to the activation of the new organization.
4. Identify options for the Director for review of the project teams' recommendations (such as an operational readiness review).
5. Consider recommending a phased implementation plan to help assure a successful transition.

# **APPENDICES**

# **APPENDIX A**

## **CHARGE MEMORANDUM**



## Department of Energy

Washington, DC 20585

September 24, 2002

MEMORANDUM FOR: DANIEL R. LEHMAN  
DIRECTOR, CONSTRUCTION MANAGEMENT  
SUPPORT DIVISION

MARVIN E. GUNN, JR.  
MANAGER, CHICAGO OPERATIONS OFFICE

FROM: RAYMOND F. CUBACK  
DIRECTOR, OFFICE OF SCIENCE

SUBJECT: Office of Science Review of the OneSC Project

I am requesting that you co-chair a series of independent reviews of the OneSC Project initiative. The purpose of these reviews is to evaluate the project's overall progress (scope, schedule, management, and resources) with a special emphasis on Phase I of the project, and to reduce the risk of failure by identifying existing and potential problems in a timely manner so that adequate resolution is possible. The first review is scheduled for October 30 through November 1, 2002, at Fermilab.

To advance the President's Management Reform Agenda, I have sponsored the OneSC project initiative to improve the effectiveness of the Office of Science (SC) by reducing management layering, clarifying roles, responsibilities, accountabilities and authorities, simplifying requirements, and streamlining management processes. A baseline OneSC Project Plan was approved on July 22, 2002.

In carrying out its charge, the review committee should respond to the following questions:

1. Is the project scope defined appropriately?
2. Has a realistic schedule been developed that reflects the major activities and events in the project?
3. Are sufficient resources available to complete the project within schedule?
4. Has the project developed adequate mechanisms to communicate results and information to project stakeholders?



5. Is the project being managed as needed for its proper execution?
6. Has sufficient progress been made on this project based on the Project Plan?

Ed Cumesty and Bob Wunderlich will work closely with you as necessary to plan and carry out this review. I would appreciate a briefing following the review and receipt of the Committee's formal report within 45 days of the conclusion of the review.

cc: James F. Decker, SC  
Milton D. Johnson, SC  
Edward G. Cumesty, SC

# **APPENDIX B**

## **REVIEW PARTICIPANTS**

**Department of Energy Review  
of the  
Office of Science Restructuring Project: OneSC  
October 30-November 1, 2002**

**Marvin E. Gunn, Jr., Co-Chairman (DOE/CH)  
Daniel R. Lehman, Co-Chairman (DOE/SC)**

**SC 1**

**Planning and Integration**

**WBS 1.1**

- 
- \* Wanda Mitchell, DOE/NBL  
[Steve Meador, DOE/SC]  
[Les Price, DOE/ORO]

**SC 2**

**Project Communications**

**WBS 1.2**

- 
- \* Walt Polansky, DOE/SC  
[James Hirahara, DOE/OAK]

**SC 3**

**SC Organization**

**WBS 1.3**

- 
- \* Dean Helms  
[James Hirahara, DOE/OAK]  
[Walt Polansky, DOE/SC]  
[Roy Whitney, TJNAF]

**SC 4**

**Systems and Processes**

**WBS 1.4**

- 
- \* Roy Whitney, TJNAF  
[Dean Helms]

**SC 5**

**Interface Agreements**

**WBS 1.5**

- 
- \* James Hirahara, DOE/OAK  
[Walt Polansky, DOE/SC]

**SC 6**

**Control and Reporting**

**WBS 1.6**

- 
- \* Les Price, DOE/ORO  
[Steve Meador, DOE/SC]  
[Wanda Mitchell, DOE/NBL]

**SC 7**

**Project Management**

- 
- \* Ira Adler  
[Walt Polansky, DOE/SC]  
[Les Price, DOE/ORO]

**LEGEND**

SC Subcommittee

\* Chairperson

[ ] Part-time Subcommittee Member

**Count: 10 (excluding observers)**

# **APPENDIX C**

## **REVIEW AGENDA**

**Department of Energy Review  
of the  
Office of Science Restructuring Project: OneSC**

**AGENDA**

**Wednesday, October 30, 2002—Wilson Hall, Comitium**

8:00 a DOE Executive Session..... D. Lehman  
9:00 a Opening Remarks ..... E. Cumesty  
9:15 a Background Information – NNSA Restructuring Project ..... R. DeGrasse  
NNSA Site Office Team..... M. Zamorski  
NNSA Service Center Team..... J. Hirahara  
10:45 a Continuation of NNSA Restructuring Project..... M. Zamorski/  
J. Hirahara  
  
11:00 a Break  
11:15 a OneSC Restructuring Project ..... E. Cumesty  
12:00p Lunch  
1:00 p Planning and Integration (WBS 1.1)..... R. Wunderlich  
2:30 p Project Communications (WBS 1.2)..... G. Pitchford  
3:15 p Break  
3:30 p SC Organization (WBS 1.3)..... E. Cumesty  
4:00 p SC HQ (WBS 1.3.1)..... I. Thomas  
5:00 p DOE Executive Session  
6:30 p Adjourn

**Thursday, October 31, 2002**

8:30a Site Office (WBS 1.3.2)..... R. Wunderlich  
9:30 a SC Support Center Team (WBS 1.3.3)..... M. Holland  
10:30 a Break  
10:45 a SC Systems and Processes (WBS 1.4) ..... R. Nolan  
12:00 p Lunch  
1 :00 p Interface (WBS 1.5) ..... J. Turi  
2:00 p Project Control and Reporting (WBS 1.6)..... R. Wunderlich  
3:00 p DOE Executive Session

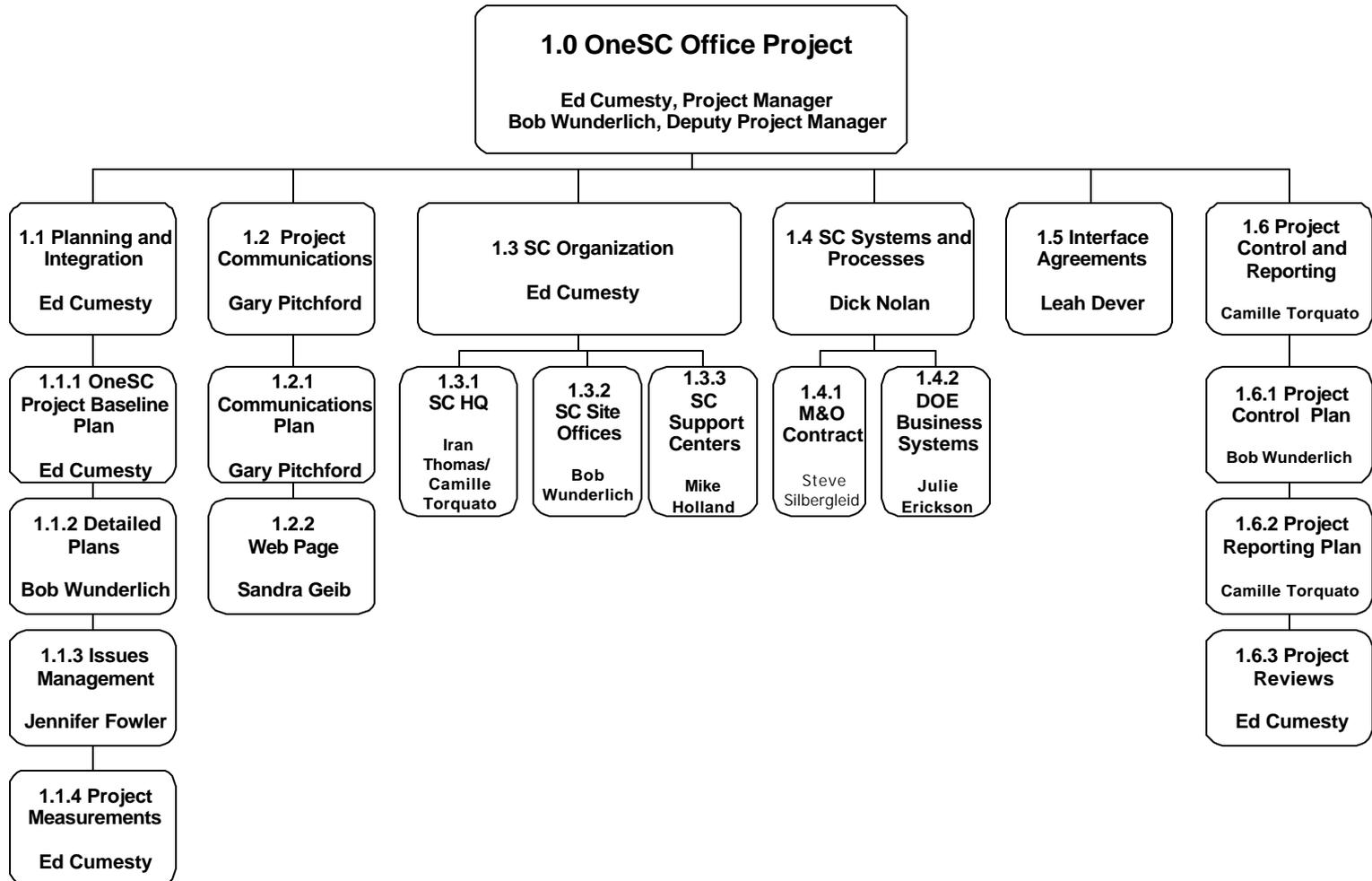
**Friday, November 1, 2002**

8:30 a Subcommittee Working Session  
10:00 a DOE Executive Committee Session - Dry Run  
12:00 p Lunch  
2:00 p Close Out with OneSC Management  
3:00 p Adjourn

# **APPENDIX D**

## **OneSC WORK BREAKDOWN STRUCTURE**

# OneSC Work Breakdown Structure



# **APPENDIX E**

## **CRITICAL PATH SCHEDULE**

**OneSC Project Critical Path Schedule  
(10/14/02)**

<b>#</b>	<b>WBS</b>	<b>Milestone</b>	<b>Schedule Date</b>	<b>Lead Person(s)</b>
1	1.1.1	Issue OneSC Project Plan	7/22/02	Cumesty
2	1.5	Identify required Interface Agreements for Phase I	9/20/02	Wunderlich/ Thomas/Holland
3	1.3.1.1.1 1.3.2.1.1 1.3.3.1.1	HQ/Site Office/Support Center Teams exchange "As Is"	9/23/02	Wunderlich/ Thomas/Holland
4	1.1.3	Recommendation and Options on HCA assignment(s)	9/27/02	Fowler
5	1.3.1.1.2 1.3.2.1.2 1.3.3.1.2	Draft "To Be" Condition Reports developed by respective HQ, Support Center, Site Office Teams	10/11/02	Wunderlich/ Thomas/Holland
6	1.3.1.1.2 1.3.2.1.2 1.3.3.1.2	Compare differences and reconcile "To Be" conditions among HQ, Site Offices, Support Centers	10/16-17/02	Team Meeting
7	1.3.1.1 1.3.2.1 1.3.3.1	Finalize "As Is" and "To Be" Condition Reports for HQ, Site Offices, and Service Centers	11/15/02	Cumesty/ Wunderlich/ Thomas/Holland
8	1.3.1.2 1.3.2.2 1.3.3.2	Develop organizational charts for each SC organization	11/15/02	Cumesty/ Wunderlich/ Thomas/Holland
9	1.3.1.3 1.3.2.3 1.3.3.3	Develop reporting requirements for SC organizations (HQ, Site Offices, Support Centers)	11/15/02	Cumesty/ Wunderlich/ Thomas/Holland
10	1.4.2	Identify priorities for business systems re-engineering	11/15/02	Nolan/Erickson
11	1.5	Complete required Interface Agreements for Phase I	11/15/02	Turi
12	1.3, 1.4, 1.5	Complete final draft of the SC Restructuring Report for internal review	11/15/02	Cumesty/Nolan/Turi
13	1.0	Issue SC Restructuring Report to SC-1 for approval	11/27/02	Cumesty

<b>14</b>	<b>1.0</b>	<b>Implement approved SC Restructuring</b>	<b>1/2/03</b>	<b>Orbach</b>
<b>15</b>	<b>1.4</b>	<b>Begin SC Phase II re -engineering</b>	<b>1/2/03</b>	<b>Cumesty</b>
<b>16</b>	<b>1.4</b>	<b>Complete SC Phase II re -engineering</b>	<b>9/30/04</b>	<b>Cumesty</b>
<b>17</b>	<b>1.4</b>	<b>Begin Phase III</b>	<b>10/1/04</b>	<b>Cumesty</b>
<b>18</b>	<b>1.4</b>	<b>Complete Phase III</b>	<b>12/31/04</b>	<b>Cumesty</b>