



# NATIONAL ACADEMY OF PUBLIC ADMINISTRATION

1100 New York Ave NW, Ste 1090 East  
Washington, D.C. 20005

TEL (202) 347-3190 FAX (202) 393-0993  
INTERNET: [www.napawash.org](http://www.napawash.org)

**DEPARTMENT OF ENERGY**

**OFFICE OF ENERGY EFFICIENCY  
AND RENEWABLE ENERGY**

**ASSESSMENT OF ACQUISITION  
AND FINANCIAL ASSISTANCE OPERATIONS**

**Panel**

Howard M. Messner, *Chair*

Jonathan D. Breul

Harold B. Finger

Dwight A. Ink

Steven J. Kelman

**November 2003**

## Table of Contents

<b>I. INTRODUCTION</b> .....	1
<b>II. EERE'S ACQUISITION/FINANCIAL ASSISTANCE ENVIRONMENT</b> .....	3
<b>III. PROJECT MANAGEMENT CONSOLIDATION</b> .....	10
<b>IV. ASSESSMENT OF ACQUISITION AND FINANCIAL ASSISTANCE OPERATIONS</b> .....	18
Acquisition and Financial Assistance Planning .....	19
EERE Headquarters Operations and Data Systems.....	20
Golden Field Office and National Energy Technology Laboratory Operations.....	24
Strategic Goals, Objectives and Performance Metrics.....	28
Use of Past Performance Information in Acquisition and Financial Assistance Awards.....	36
Assistance Guidance and Training .....	39
Streamlining Possibilities .....	42

## ATTACHMENTS

Attachment A: Acronyms.....	45
Attachment B: List of Panel Recommendations.....	46
Attachment C: Comparison of Sample EERE Acquisition/Financial Assistance Instruments with EERE Strategic Plan Goals ... ..	48

## TABLES

Table 1. Total Department of Energy Obligations for FY 2002.....	5
Table 2. EERE Obligations for FY 2002.....	6
Table 3. EERE Obligations by Procurement Office.....	7
Table 4. EERE Acquisition and Financial Assistance Obligations.....	9
Table 5. Project Management Center Contracting Officer and Contracting Officer Representative Responsibilities.....	14

## **I. INTRODUCTION**

On July 1, 2002, the Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE) underwent a major reorganization. Shortly thereafter, both EERE and the House Subcommittee on Interior and Related Agencies asked the National Academy of Public Administration (the Academy) to assess and monitor the effectiveness of EERE's reorganization efforts and determine whether EERE's acquisition and financial assistance operations were adequate to support its new business model.

The Panel established by the Academy to oversee this study has issued two interim documents on the status of EERE's reorganization. The first, issued in June 2003, provided the Academy Panel's preliminary observations on the reorganization. The Panel noted that the basic construct of the new organization was sound but offered several suggestions and recommendations where it believed that aspects of the new organizational model warranted further examination and possible mid-course corrections. The second interim document, issued in September 2003, provided additional recommendations on EERE's reorganization efforts; included information on EERE's estimates of potential savings resulting from the reorganization and other opportunities for savings that are outlined in EERE's Management Action Plan to implement the reorganization; and discussed issues related to EERE's funding being split between two appropriation bills and made recommendations to address congressional concerns in this area.

This document provides the Panel's assessment of EERE's acquisition and financial assistance processes and identifies how EERE can increase effectiveness and streamline those processes in support of its programs. To assist the Panel, the Academy subcontracted with Jefferson Consulting Group (JCG). In cooperation with Academy staff, JCG conducted interviews with officials in EERE, the National Renewable Energy Laboratory (NREL), and the National Energy Technology Laboratory (NETL).<sup>1</sup> JCG also reviewed acquisition and financial assistance documents from DOE's Acquisition Regulations and Acquisition Guide, DOE's Energy Assistance Regulation (10 Code of Federal Regulations (CFR) 600) and Guide to Financial Assistance, EERE's Acquisition Customer Guide and references to EERE's websites, the Federal Acquisition Regulations (FAR) and Office of Management and Budget (OMB) Circulars. Included in this document are the Panel's key findings and recommendations for EERE's acquisition and financial assistance operations as they relate to planning; EERE headquarters operations and data systems; the Golden Field Office and NETL; strategic goals, objectives and performance metrics; the application of past performance; guidance and training; and streamlining. A list of acronyms used in this document is included as Attachment A and Attachment B includes a list of all Panel recommendations.

---

<sup>1</sup> See Attachment A to the September document that includes all contacts except those at NETL.

The Panel will issue a fourth document dealing with the status of the reorganization's implementation in April 2004 and a final report in August 2004. Both documents will include additional observations on acquisition and financial assistance.

### **Additional Organizational Changes Within EERE**

Since the beginning of this study, EERE has been taking steps to consolidate the procurement and project management functions for its entire portfolio in the Golden Field Office. The observations, findings and recommendations in this document are based on EERE's existing acquisition and financial assistance operations and its plans for the consolidated operation in Golden. In September, due to concerns that the single, consolidated procurement and project management function in Golden is not feasible at this time, EERE leadership announced its intention to alter its plan by establishing a Project Management Center (PMC) that adds NETL as a primary service provider in EERE's procurement and project management delivery system. This change and its rationale are discussed in Section III of this document. Because of the significant role NETL will play in EERE's future acquisition and financial assistance operations, JCG has attempted to include in this document data about NETL's operations where available.

## II.EERE’s ACQUISITION/FINANCIAL ASSISTANCE ENVIRONMENT

By any measure, acquisition<sup>2</sup> (procurement) and financial assistance (grants and cooperative agreements) are core functions at EERE. Obligations for contracts, grants and cooperative agreements account for most of EERE’s budget and effectively supplement its workforce by tenfold. The strategic use of these resources is essential if EERE’s 11 program areas are to be successful in developing and deploying the technologies for which they are responsible.

An effective analysis of EERE’s management of acquisition and financial assistance transactions must begin with a basic understanding of similarities and differences between them. Because federal agencies had a long history of failing to make clear distinctions between grants and contracts, Congress enacted the Federal Grant and Cooperative Agreement Act of 1977 (31 U.S.C. 6301-08). In distinguishing between procurement contracts from grants and cooperative agreements, the Act requires that the awarding official look to the ultimate purpose of the transaction and:

	<b>When:</b>
	The principal purpose of the instrument is to acquire (by purchase, lease or barter) property or services for the direct benefit or use of the U.S. Government; or the agency decides in a specific instance that the use of a procurement contract is appropriate.
	The principal purpose of the relationship is to transfer a thing of value to the state or local government or other recipient to carry out a public purpose of support or stimulation authorized by a law of the United States and substantial involvement is not expected between the executive agency and the recipient.
	The principal purpose of the relationship is to transfer a thing of value to the state or local government or other recipient to carry out a public purpose of support or stimulation authorized by a law of the United States and substantial involvement is expected between the executive agency and the recipient.

Although they share the same principal purpose, cooperative agreements are distinguished from grants in that substantial involvement of the awarding agency is anticipated. Substantial involvement normally takes the form of programmatic involvement in the funded effort through collaboration, participation or intervention.

Additional guidance concerning these distinctions is included in DOE Financial Assistance Letter No. 2001-03, Determining Appropriate Award Instrument, which

<sup>2</sup> Although the terms are often used interchangeably, “acquisition” is often preferred because it refers to all aspects of the process that begins with defining a need and culminates in satisfaction of the need. It also addresses the contribution and responsibility of personnel who do not have legal authority to bind the government but nevertheless play decisive roles in shaping the course of an acquisition.

explores the differences in greater detail and provides useful examples for dealing with areas that are not always clear. For example:

Evaluations or studies are other activities that, depending on the circumstances, can be appropriately awarded as either a financial assistance instrument or a contract. For example, a study to assess the benefits of solar energy for State and local communities should be funded using a grant if the primary beneficiaries are the State and local communities. However, if the study is being conducted to assist DOE in planning and forecasting its solar energy budget requirements or to prepare a mandated report for Congress, then a contract should be used. While the Government might benefit from the information obtained from the study in the first scenario, the primary beneficiaries are the State and local communities. In the second scenario, the study is for the direct use of DOE, even though it might be disseminated to the general public and may be used by other organizations and governments in their own solar energy efforts.<sup>3</sup>

Although their “principal purpose” is the only legal basis for distinguishing between acquisition and financial assistance, the choice has many other implications. For example:

- The process for award and administration of acquisition instruments is heavily constrained by law and regulation (e.g., the FAR or the Department of Energy Acquisition Regulation). Protests can be lodged with the General Accounting Office or the courts.
- Award and administration of grants or cooperative agreements are governed by agency financial assistance regulations (e.g., DOE Financial Assistance Rules, 10 CFR Part 600). Although these rules implement requirements from OMB Circulars relating to financial assistance, they are not nearly as restrictive as their acquisition counterparts. Normally, there are no avenues for protest outside the agency.
- Although profit-making concerns can often participate in financial assistance programs, they often choose not to do so because all recipients are normally prohibited from earning an element of profit or fee beyond their allowable costs. As a result, the competing universe of recipients is often confined to state and local governments, not-for-profit organizations and educational institutions.

Acquisition instruments include:

- contracts
- task orders
- delivery orders
- purchase orders
- interagency agreements

---

<sup>3</sup> Financial Assistance Letter-20001-03 (10/12/2001), page 5.

- modifications to any of the above

Financial assistance instruments include:

- grants
- cooperative agreements
- modifications

**The DOE Procurement/Financial Assistance Environment**

In general, DOE uses its acquisition and financial assistance programs to promote the development and deployment of technologies. As indicated in Table 1 below, nearly three-quarters of its obligations in fiscal year (FY) 2002 were awarded to contractors who operate DOE’s nine major, multi-program national laboratories located throughout the United States.

**Table 1  
Total DOE Obligations for FY 2002<sup>4</sup>**

		<b>% of Total</b>
Facilities Management Contracts (National Laboratories)	\$15,671,670	73.5
Other Contract Actions (Including Interagency Agreements)	3,797,701	17.8
Grants and Cooperative Agreements	1,860,030	8.7
Totals	\$21,329,401	100

DOE elements with head of contracting activity<sup>5</sup> authority to award both acquisition and assistance instruments include the following:

- |                                   |   |
|-----------------------------------|---|
| Washington Procurement Office     | Chicago Operations Office                 |
| Oakland Operations Office         | Albuquerque Operations Office             |
| Oak Ridge Operations Office       | Richland Operations Office                |
| Idaho Operations Office           | Nevada Operations Office                  |
| Savannah River Operations Office  | Pittsburgh Naval Reactors Office          |
| Schenectady Naval Reactors Office | Western Area Power Administration         |
| Southwestern Power Administration | Strategic Petroleum Reserve               |
| Ohio Field Office                 | National Energy Technology Lab            |
| Office of River Protection        | Office of Civilian Radioactive Waste Mgt. |
| Rocky Flats Office                | Golden Field Office                       |

<sup>4</sup> Data from Department of Energy “Annual Procurement and Financial Assistance Report-FY 2002” prepared by the Office of Procurement and Assistance Management.

<sup>5</sup> Pursuant to Department of Energy Acquisition Regulation Subpart 901.6, the Secretary has delegated contracting authority to the Procurement Executive, who in turn has redelegated it to Heads of Contracting Activity. These delegations are formal written delegations containing dollar limitations and conditions.

## **Acquisition and Financial Assistance at EERE**

EERE is obviously part of DOE's general commitment to promoting the development and deployment of technologies, but it applies a different mix of acquisition/financial assistance than the total DOE mix to accomplish those ends. Grants and cooperative agreements constituted only 8.7% of DOE's overall obligations in FY 2002. However, as indicated in Table 2 on the next page, EERE grant and cooperative agreement obligations constituted 45.9% of its obligations. Although EERE's use of the national laboratories is substantial, it is not nearly as great as DOE's overall use or reliance on its national laboratories. It should be noted that in addition to contracts, grants and cooperative agreements, EERE uses policy, regulation, and various unfunded arrangements and mechanisms to implement its programs and further its mission.

**Table 2**  
**EERE Obligations for FY 2002<sup>6</sup>**

		<b>% of Total</b>
Facilities Management Contracts (national laboratories)	\$494.6	42.7
Other Contract Actions (including Interagency Agreements)	130.8	11.4
Grants and Cooperative Agreements	531.9	45.9
Totals	\$1,157.3	100

Another factor that has shaped EERE's approach to executing its acquisition and financial assistance program has been its lack of control over those processes. EERE uses 12 of the 20 DOE entities with head of contracting authority, but EERE controls only the Golden Field Office whose Office of Acquisition and Financial Assistance (OAFAs) awards and administers acquisition and financial assistance transactions. Often, this has placed EERE program managers in the posture of "shopping around" for procurement offices that would be responsive to their needs. As indicated in Table 3 below, that practice continues well into FY 2003.

---

<sup>6</sup> Data from briefing materials provided by Robert Brewer, Office of Information and Business Management Systems.



**Table 3**  
**EERE Obligations by DOE Procurement Office<sup>7</sup>**  
**Oct 2002-April 2003**

	<b>Obligations</b>
Albuquerque	\$6,926,547
Chicago	51,510,396
Golden	233,432,967
Headquarters	7,592,780
Idaho	30,245,772
Nevada	807,617
NETL	12,473,999
Oak Ridge	12,166,485
Oakland	25,324,007
Richland	23,716,418
Savannah River	300,000
Western Area Power Administration	7,497
Total:	\$404,504,485

As part of its reorganization efforts, EERE has sought to address this issue by consolidating procurement and project management responsibilities at the Golden Field Office. The intent of the effort is clearly to reduce EERE's reliance on DOE procurement offices with higher priority customers. The consolidation also would allow EERE to build the expertise and capacity to award and administer grants and cooperative agreements, which are the mainstays of EERE's programs.<sup>8</sup>

A final look at the EERE acquisition and financial assistance environment involves understanding variations among the 11 program areas in their use of the different instruments. FY 2003 is the first year that data will be captured by those 11 areas (the reorganization occurred in the last quarter of FY 2002). Table 4 depicts obligation activity by program area for acquisition and financial assistance actions awarded between October 2002 and April 2003. Although it is too soon to get a clear picture from these data (the award of competitive grants and cooperative agreements will bring significant increases in the financial assistance area during the 4<sup>th</sup> fiscal quarter), it seems likely that there will be variations in instrument use.

In FY 2002, EERE awarded 28.5% of the Department's financial assistance funds. As a major player in that arena, the Panel believes that EERE should play a significant role in shaping DOE's regulations that pertain to the use of financial assistance funds. The Federal Acquisition Regulations and Department of Energy Acquisition Regulations include requirements that are often rooted in statute. However, the authors of DOE's

<sup>7</sup> Based on Procurement and Acquisition Data System data supplied by Joseph Malinovsky, Office of Information and Business Management Systems.

<sup>8</sup> As noted earlier, EERE has decided that a single, consolidated procurement and project management operation in Golden is not feasible at this time and is advancing a Project Management Center concept that involves non-EERE entities. The PMC is discussed further in Section III of this document.

Financial Assistance Regulations have greater flexibility to consider revised approaches. EERE should take a lead role in using this flexibility to respond to the challenges it encounters in pursuing its research and development programs.

**Recommendation:**

**The Panel recommends that EERE pursue being a “laboratory” for innovation and change related to the award and administration of financial assistance. The goal should be to develop more effective ways of doing business in areas that are constrained by DOE’s Financial Assistance Regulations.**

**Table 4**  
**EERE ACQUISITION AND FINANCIAL ASSISTANCE OBLIGATIONS<sup>9</sup>**  
**October 2002-April 2003**

ACQUISITION				ASSISTANCE			
			Total Acquisition			Total Assistance	Total Obligations
	-		\$42,239,416			\$765,823	\$43,005,239
			\$21,540,074			\$314,700	\$21,854,774
			\$5,822,851			\$2,600,642	\$8,423,493
	-		\$12,626,834			\$12,730,185	\$25,357,019
			\$18,646,904	-	-	-\$73,933	\$18,572,971
			\$10,700,630			\$31,809,413	\$42,510,043
			\$50,299,669			\$20,104,681	\$70,404,350
			\$17,953,540			\$9,904,351	\$27,857,891
			\$26,736,529			\$1,543,412	\$28,279,941
			\$7,208,368		-	\$100,306,519	\$107,514,887
			\$10,315,605			\$408,272	\$10,723,877
			\$224,090,420			\$180,414,065	\$404,504,485

<sup>9</sup> Negative numbers reflect cumulative deobligations.

### III. PROJECT MANAGEMENT CONSOLIDATION

In order to ensure that it is getting value for its research dollars once it awards the numerous acquisition and financial assistance agreements, EERE has relied on project managers, both within and outside of EERE, to oversee and monitor the awards. One of the fundamental goals of the reorganization was for EERE to adopt “one-way” of doing business. To accomplish this, EERE planned to replace its large network of service providers with a consolidated acquisition, financial assistance, and project management operation at the Golden Field Office. Golden’s Acquisition and Financial Assistance office would award and administer all acquisition and financial assistance transactions, and its Project Management Office would perform project management functions associated with EERE’s contracts, grants and cooperative agreements, thus eliminating its reliance on other DOE project management offices for those services.<sup>10</sup> To accomplish this, EERE began to consolidate more resources and project management workload in Golden. By October 1, 2003, EERE had increased the full-time equivalents (FTEs) in Golden from 58 to 68.5 and had transferred to Golden the FY 2003 project management functions from the Idaho and Chicago Operations Offices. In the next phase of the consolidation, Golden would assume the project management work being performed in DOE’s Albuquerque and Oakland offices.

In planning for this initiative, Golden made four basic assumptions that would be necessary for its success:

- There was a minimal amount of work in Albuquerque that needed to be transferred to Golden.
- The work transfer rate would match the resources transfer rate.
- There was a consistency in the products produced by the old project management network.
- EERE’s total transaction workload would be reduced (as a result of the work packaging initiative).<sup>11</sup>

As the effort got underway, however, these assumptions did not represent the reality. The Albuquerque workload being transferred to Golden includes lab subcontracts in addition to lab contracts. Golden was not aware of the subcontract workload because, unlike the lab contracts, lab subcontracts are not included in the DOE database, Procurement and Assistance Data System, which Golden used to estimate the work it would absorb. Golden also believed that the five FTEs being transferred from Chicago were handling the total EERE project management portfolio. According to Golden officials, however, Chicago was responsible for only 60% of EERE’s project

---

<sup>10</sup> The regional offices would continue to provide project management to EERE’s deployment programs.

<sup>11</sup> This initiative, which is included in EERE’s Management Action Plan, is designed to more strategically package projects into fewer, larger solicitations in order to better focus EERE’s research dollars. The added benefit of this strategy is that it will significantly reduce the number of small transactions EERE now performs, which often take as much time and effort as larger solicitations.

management workload. The rest was being done in EERE headquarters.<sup>12</sup> These problems with the workload volume have been compounded because the resources needed to perform the additional work have not been transferred to Golden at a commensurate rate as the work itself.

The inconsistencies in the work products from the Operations Offices were a more severe problem than Golden anticipated. For example, the Chicago Operations Office was not preparing Energy Policy Act statements on some of the awards that required them. Golden had to create those statements. In addition, the number of transactions generated within EERE remains high. Critical action items to begin the process of strategically packaging EERE's work in an effort to reduce transaction numbers are not scheduled for completion until December 31, 2003.

The events over the last several months have sparked concerns within EERE. Top leadership is concerned that finding the resources to consolidate project management capabilities in Golden will take years, not months. Golden officials have indicated that they need about 130 FTE to handle EERE's entire portfolio. But EERE's proposed budget for Golden in FY 2004 is only 84 FTEs. EERE leaders fear that a slow transition will discourage new ways of doing project management across EERE. Program managers also have expressed concerns that the rapid consolidation of project management is overwhelming Golden, which may affect service quality. And Golden has raised the issue of the need to increase its ability to accommodate large surges in workload, which periodically occur.

This rather gloomy situation, compounded by the National Nuclear Security Administration's (NNSA)<sup>13</sup> insistence that EERE assume by November 15, 2003 responsibility for the 78 agreements currently handled by Albuquerque and Oakland,<sup>14</sup> caused EERE's top leadership to look for an alternative that could provide EERE with additional project management resources and capabilities and still allow EERE to move forward with implementing common project management and business practices. The result is the EERE Project Management Center concept, which will integrate Golden, the National Energy Technology Laboratory (NETL), the State Technologies Advancement Collaborative (STAC), and EERE's regional offices into a "virtual" center to perform all of EERE's project management activities. Under this concept, with the exception of the relatively small workload to be awarded by DOE headquarters and the work performed by the DOE laboratories, EERE will have its acquisition and financial assistance transactions awarded by either the Golden Field Office or NETL.<sup>15</sup> Project management functions will be performed by Golden's project management staff, the regional offices and NETL.

---

<sup>12</sup> EERE's Workforce Analysis project should identify all project management work currently being performed in headquarters. For a discussion of that project, refer to the Academy's *The Reorganization Status of the Office of Energy Efficiency and Renewable Energy*, September 2003, pages 17-19.

<sup>13</sup> The Albuquerque and Oakland Operations Offices work for NNSA.

<sup>14</sup> Golden officials informed Academy staff that Albuquerque probably will not transfer the work by November 15 due to problems with funds for those projects.

<sup>15</sup> The plan for the PMC includes using STAC to make EERE financial assistance awards once STAC is capable of handling the workload.

## **National Energy Technology Laboratory**

NETL is a government owned/government operated laboratory reporting to the Assistant Secretary of DOE's Office of Fossil Energy (FE).<sup>16</sup> It is part of EERE's current network of project management service providers. In FY 2003, NETL managed a total of 144 EERE projects with a value of \$381 million, which included projects such as Black Liquor (a small project in the Biomass Program), and the majority of the solicitations and financial assistance agreements for the Building Technologies Program.

The reasons for having NETL in the PMC include:

- It is reported that NETL's staff is underutilized and is fully capable of increasing its EERE workload. NETL will be able to hire additional expertise, if needed, to effectively manage EERE's portfolio of projects.
- EERE will not need additional FTEs for the work performed at NETL.
- NETL already has experience with some of EERE's portfolio, and its relative proximity to EERE headquarters will be helpful as it assumes responsibility for new program areas.
- There have been some concerns within DOE and among congressional staff that EERE and FE have not worked together as perhaps they should. Including NETL in the PMC may help improve that working relationship.

## **State Technologies Advancement Collaborative**

STAC, a five-year pilot program, is a federal-state intergovernmental agreement between DOE (represented by EERE and FE) and the states (represented by the National Association of State Energy Offices (NASEO) and the Association of State Energy Research and Technology Transfer Institutions (ASERTTI)). It was created in response to the Interior Appropriation Committee's desire to have the states more involved with federal energy research initiatives and is funded by a set-aside of Interior funds. STAC's purpose is to plan, fund and oversee energy research, development, demonstration and deployment (RDD&D) consistent with the strategies, goals and objectives of DOE and the states; thereby better leveraging federal and state funds, expediting funding for RDD&D projects, and reducing redundancies. STAC is to build on existing, successful programs and is not intended to replace other existing DOE/state initiatives.

NASEO's members are State Energy Offices with RDD&D activities focused on demonstration and deployment. Except for an executive director, STAC has no staff—it is a "virtual entity." NASEO is the "prime" recipient and administrator of funds under the cooperative agreement. (Congress has initially earmarked about \$8 million for STAC projects.) NASEO will establish, fund and maintain all project agreements and provide the administrative staff to support STAC's operations. The technical review teams for

---

<sup>16</sup> NETL is the only government owned/government operated lab in DOE's network of laboratories.

project awards will be voluntary teams comprised of members nominated by NASEO, ASERTTI and DOE.

ASERTTI's members are state and regional energy organizations that cover the full range of RDD&D activities. Its role is to advise STAC's executive director in the development of the merit review process and to provide technical support for program planning and development, the solicitation process, and project progress reviews.

STAC's projects will be focusing on six areas funded by the Interior Appropriations Act:<sup>17</sup> fossil, industry, transportation, distributed generation, buildings, and biomass. The prime recipient of project awards must be a State Energy Office or a state-chartered institution (such as a university), but there are no restrictions on RDD&D subcontractors. The projects must be multi-state efforts in order to create an exponential affect on the market from the introduction of new technology. There is a 50-50 cost share (federal/recipient) for these awards.

In the past, congressional staff have expressed concern that EERE has not worked closely enough with the states and their research and development efforts. EERE leadership hopes that including STAC in the PMC will help improve those working relationships. Although STAC will only be responsible initially for state energy activities funded through the cooperative agreement, EERE leadership believes that STAC's role in the PMC will increase once STAC shows that it is capable of handling the work.

### **Division of Responsibilities**

On September 11-12, 2003, EERE hosted a meeting with representatives of the four PMC entities to begin the process of planning and implementing the PMC concept. One outcome of that meeting was a proposal for assigning contracting officer and contracting officer representative responsibilities to each of the entities.<sup>18</sup> Those assignments are shown in Table 5.

---

<sup>17</sup> STAC is not prohibited from using funds appropriated in the Energy and Water Development Appropriations Act, but their use depends on whether or not Energy and Water Development-funded programs choose to use STAC.

<sup>18</sup> Within the sphere of project management, there are two key participants: the contracting officer who places the contract or financial agreement and the contracting officer representative who monitors the technical progress of the work.

**PROJECT MANAGEMENT CENTER**  
**Contracting Officer and Contracting Officer Representative Responsibilities**

		<b>Contracting Officer Representative</b>
Biomass <sup>19</sup>	Golden & NETL	Golden & NETL
Buildings	NETL	NETL
Distributed Energy Resources	NETL	NETL
FreedomCAR & Vehicle Technologies	NETL	NETL
Geothermal	Golden	Golden
Hydrogen, Fuel Cells, and Infrastructure Tech <sup>20</sup>	Golden	Golden
Industrial <sup>21</sup>	Golden & NETL	Golden & NETL
Solar	Golden	Golden
Wind & Hydropower	Golden	Golden
		<b>Contracting Officer Representative</b>
FEMP	Golden & NETL	Golden & NETL
Weatherization	NETL	Regions
State Energy Program Grants <sup>22</sup>	NETL	Regions
State Energy Activities <sup>23</sup>	STAC	Regions
<i>Gateway Deployment</i>		
Rebuild America	NETL	Regions
Building Energy Efficiency Information & Outreach	NETL	Regions
Building Codes Training & Assistance	NETL	Regions
Clean Cities	NETL	Regions
Energy Star	NETL	Regions
Inventions & Innovations	Golden	Golden/Regions

According to Golden officials, the guiding principle for dividing the work among the participating entities was to assign responsibility where there was the best chance of successfully getting the work done. For example, prior to the reorganization, the Chicago Operations Office managed the Distributed Energy Resources (DER) work. Because DER has had such a small headquarters staff, it relied on Chicago for a high level of project management services. Golden did not believe that it would be able to achieve that level of service for two years. Rather than try to build that expertise, Golden determined that NETL would have a better chance of meeting DER’s needs. Where responsibility is split between Golden and NETL, it is because NETL already managed relatively small parts of those programs and it was determined it was best to leave the work there.

The rationale for transferring the deployment work to NETL was to free Golden’s resources to work primarily on EERE’s research and development work. In addition to

<sup>19</sup> The NETL portion is Black Liquor, for which since 1999, NETL has issued 3 competitive solicitations and managed 13 projects valued at over \$198 million.

<sup>20</sup> NETL will be responsible for the part of the fuel cells and infrastructure initiative funded by FE. Golden will be responsible for all EERE-funded work.

<sup>21</sup> The NETL portion is Mining Industry of the Future, for which since 1999, NETL has issued 4 competitive solicitations and managed 53 projects valued at over \$38 million.

<sup>22</sup> This includes the State Energy Program and the State Energy Program Special Projects.

<sup>23</sup> Currently, these include only the awards made by STAC under its cooperative agreement.



the six contracting officers in the regions,<sup>24</sup> Golden's acquisition office has been using four FTEs to support the region's deployment work, and Golden's accounting, legal and other support activities devote about another four FTEs to these programs.

As a result of work assignments, the only additional work coming to Golden because of the reorganization, at present, is the work from the Industrial Technologies Program, which was being run out of the Idaho Operations Office. But Albuquerque has a significant amount of hydrogen and fuel cells work and Oakland has substantial solar work, all of which is scheduled to transfer to Golden in the near future. As EERE continues with its plans to consolidate project management activities and transfers into Golden the subcontracting work that the national labs are currently doing and the technical oversight of laboratory research and development, Golden's workload will continue to increase.

Under the PMC concept, the regions will function as the contracting officer representatives for STAC's projects. It is anticipated that the \$8 million for STAC will fund 8 to 12 projects, which will be balanced across the RDD&D spectrum. There is a question as to whether the regions will have the necessary technical expertise to effectively project manage these projects, particularly those with a research emphasis.

### **Oversight of Project Management Center Operations**

EERE program managers will provide evaluations of the support they receive from the NETL project managers. Those evaluations will be the basis for 50 percent of NETL project managers' performance appraisals. A similar process will be used for program managers to evaluate Golden's project management staff. While this process may help EERE ensure that it receives quality project management services, EERE has not yet identified how it plans to oversee NETL's operations to ensure that common business practices are being followed.

### **Observations:**

Due to these recent changes to EERE's approach for centralizing project management responsibilities, all findings and recommendations related to project management will be deferred until the Panel's April progress assessment. However, the Panel has some observations for EERE to consider as it moves forward to implement the PMC.

The PMC will address the primary concern of EERE management, which is the lack of adequate resources in Golden to handle the increased project management workload. EERE leadership does not believe that, in the near term, it can find within its current allocation the 50 additional FTE's needed in Golden to handle all of EERE's project management activities. The combined resources of Golden and NETL will enable EERE to handle this workload and will better enable EERE to deal with workload surges. Golden and NETL also will be able to borrow staff from one another for short durations

---

<sup>24</sup> New contracting officers in the regions will become NETL employees and will be detailed to the regions. However, existing EERE contracting officers will remain EERE employees.

to obtain temporary expertise. In addition, involving STAC in the PMC may help address congressional concerns that EERE is not working closely enough with the states on their research and development efforts.

An underlying theme of EERE's reorganization is the need to implement common business practices throughout its operations, and NETL appears amenable to changing its operations to accommodate EERE's need for a single project management approach. Although the Panel believes that EERE's ability to implement one way of doing business would be optimized if it could develop its own Project Management Office in Golden where EERE would have control over the resources needed to implement its programs, it recognizes that pursuing such an option may not be practical. It is unlikely that EERE will be able to increase resources in Golden any time in the foreseeable future for it to handle the workload now going to NETL. Aside from resource constraints, the program offices whose work is being transferred to NETL will be making significant investments in time and resources to develop NETL's expertise in their programs. Unless performance issues evolve in NETL, the Panel believes that the PMC, which was an invention of necessity, will most likely be part of EERE's long-term future. At the same time, however, the Panel also believes that despite this change in EERE's project management operations, EERE should continue to take the steps necessary to ensure that Golden has the resources needed to carry out its project management responsibilities as effectively as possible.

While EERE has experience working with NETL, which has an established project management capability, STAC is still an unknown in the overall equation. Whether it will ever be in a position to handle more of EERE's project management workload, such as non-formula state grant work, is a question. In the current design, STAC will not be assuming any of EERE's existing contracting officer workload. EERE will need to closely monitor STAC's operations under the interagency agreement to assess its capacity for playing a larger role in the PMC in the future.

To successfully implement the PMC, the Panel believes that EERE needs to have the necessary mechanisms in place to oversee operations at NETL, and eventually STAC, to ensure that operations conform to EERE's business model and to ensure project accountability. Without such mechanisms, EERE will be unable to effectively manage its programs. The Panel is encouraged that the individuals heading EERE's and NETL's efforts to implement the PMC are long-time government employees, and that they, as well as their staffs, appear to be working together well and committed to making the PMC successful. But the Panel believes that EERE needs to institutionalize an oversight mechanism for the PMC's operations. At a minimum, the Panel encourages EERE to detail a staff member to NETL indefinitely to serve as a liaison and facilitate communication between the two organizations.

Another issue EERE must address is Golden's ability to provide comparable service levels as NETL. NETL staff manage an average of 18 projects and NETL has the resources to hire additional resources if needed. Some of Golden's project managers have 55 projects. With such a large difference in workload, it is not possible to perform

the same level of project oversight. With the shift of work to NETL, and if Golden receives the staffing level for its project management operations that is proposed for FY 2004 (24 DOE employees and 19 support service contractors to manage an estimated 800 projects), the Golden project management staff will have less than 25 projects per person. Only then can Golden hope to match NETL's operations. EERE will need to continually assess the relative workloads of the project management staffs in the PMC to ensure that they remain balanced. If not, service levels will not be comparable among the servicing entities.

## **IV. ASSESSMENT OF ACQUISITION AND FINANCIAL ASSISTANCE OPERATIONS**

## ACQUISITION AND FINANCIAL ASSISTANCE PLANNING

### **Discussion:**

As previously indicated, award of acquisition and financial assistance instruments is the predominant delivery mechanism for EERE programs. All of the EERE program areas generate annual spend plans that are carefully reviewed by EERE management prior to their approval. The spend plans identify and describe the projects (new and continuing) their estimated amounts, the proposed acquisition/financial assistance vehicles and the awarding offices.

What is missing is an annual acquisition/financial assistance planning process that will translate these spend plans into a manageable strategy for awarding the numerous and diverse acquisition and financial assistance instruments that will be funded by the 11 EERE program areas. Such a process would:

- enable EERE to ensure that the program and procurement offices have anticipated the volume and complexity of the planned workload and have allocated sufficient time and resources for its accomplishment
- assign responsibility for completion of all the major milestones involved in preparing and processing the procurement requests
- provide a basis for prioritizing and reconciling the competing workload demands from the 11 EERE program areas

EERE's plan to concentrate the execution of acquisition and financial assistance instruments in the Golden Field Office and NETL makes the institution of such a planning process even more critical.

### **Recommendations:**

**The Panel recommends that EERE:**

- **Implement an annual acquisition and financial assistance planning process that produces an annual plan sufficiently in advance of the fiscal year to allow for the timely and orderly award of all EERE funded instruments.**
- **Establish clear lines of authority and responsibility for developing, reviewing and implementing the annual acquisition/financial assistance plan.**
- **Include acquisition and financial assistance plan execution as a critical element in the performance standards of EERE managers.**

# EERE HEADQUARTERS OPERATIONS AND DATA SYSTEMS

## Headquarters Operations

### Discussion:

With the exception of contracts awarded in Golden to provide administrative support to the regions or the Golden Field Office, all of EERE's acquisition and financial assistance requests are generated in headquarters. The purpose of this section is to discuss headquarters procurement operations and how work flows from the sponsoring program office to the appropriate awarding activity. The diagrams below depict the offices involved in processing funded actions of less than \$5 million.

### Typical Workflow for Actions Less than \$5 Million

#### **EERE Program Office**

With the assistance of the budget analyst, prepares Program Guidance Letter, Work Authorization Statement (WAS) or Procurement Request (PR).

?

#### **Procurement Team, Operations and Logistics**

Reviews Program Guidance Letter, WAS or PR for procurement/financial assistance sufficiency.

?

#### **EERE Deputy Assistant Secretary**

Reviews, concurs and signs the Program Guidance Letter and associated WAS or PR and any related documentation.

?

#### **Budget Execution**

Confirms that action meets all fiscal sufficiency standards. Ensures funding availability. Enters action into Budget Execution tracking log and EERE spend plan. Transmits action to the appropriate office.

?

#### **Transmission of Work Requests**

WAS to a DOE field element with cognizance of the specific laboratory. PR or program guidance letter to DOE headquarters procurement, Golden Field Office or DOE Operations Office.

In the absence of an approved spend plan, actions over \$5 million require the approval of EERE's Assistant Secretary. Upon approval of each program office's spend plan, the Deputy Assistant Secretary's approval authority is raised to \$30 million. The Federal Acquisition Regulations and the Department of Energy Acquisition Regulations govern the content and processing requirements of procurement requests for acquisitions. Financial assistance requirements must conform to the DOE Financial Assistance Regulations. Work Authorization Statements for work to be performed at DOE laboratories are covered by DOE Order 412.1, Work Authorization System.

Although not officially included in the workflow described above, Golden personnel (particularly project management staff) are frequently involved in assisting the EERE program office to assemble the procurement request and supporting documentation.

The various reviews and processes that are conducted at headquarters are designed to bring discipline and uniformity to an acquisition and financial assistance environment that is still undergoing significant change. As that environment stabilizes and common approaches to doing business are established, the Panel believes that EERE should examine the feasibility of simplifying the headquarters reviews and moving some of the documentation requirements to field staff (who are already informally involved in their development).

#### Role of the Operations and Logistics Team, Office of Program Execution Support

The Operations and Logistics Team within the Business Administration's Office of Program Execution Support reviews all funding requests for consistency with sound acquisition and financial assistance principles. The Team also is the liaison with the DOE headquarters procurement office regarding procurement actions that will be processed by that office. The bulk of the EERE actions processed by DOE headquarters are for support services contractors (\$32 million in FY 2002) to assist Technology Development and Business Administration operations. Program staff interviewed were virtually unanimous in their past dissatisfaction with the responsiveness and support provided by the DOE headquarters procurement office. In the last six months, the Operations and Logistics Team Leader has expended a considerable amount of effort to improve the quality of EERE's procurement request packages sent to DOE headquarters and to establish a better working relationship with the new team leader from the DOE office.

The EERE Management Action Plan has identified "Support Services" as an Area of Improvement that includes plans to review EERE's use of support services contractors and develop more strategic approaches that save funds and add value. The Operations and Logistics Team Leader is playing a role in this effort and has already identified alternative procurement approaches that will save funds (e.g., switching from DOE laboratory operation of multiple hotlines to a commercial concern).

The Team Leader is a seasoned acquisition and financial assistance professional who can do much to bring stability, discipline and responsiveness to the EERE procurement

environment. At this point, his staff (transferred from the program areas during the reorganization) lack the experience and training in acquisition and financial assistance to supply the same caliber of strategic advice and assistance to EERE internal clients. Strengthening the staff would enable the Team Leader to delegate more of the day-to-day responsibilities and increase his capacity to deliver strategic advice and support to EERE's overall acquisition/financial assistance objectives.

**Recommendation:**

**The Panel recommends that EERE strengthen the Operations and Logistics Team by adding one or more experienced acquisition and financial assistance specialists and providing training to existing staff to enhance their capabilities to assist program clients.**

**Data Systems**

**Discussion:**

The Procurement and Assistance Data System is DOE's central repository for information on all unclassified procurement and financial assistance awards. It also feeds acquisition data to the Federal Procurement Data System. The Management Analysis and Reporting System is DOE's accounting system. It records acquisition and financial assistance obligations, makes payments, and generates DOE's financial statements.

These two DOE systems are not integrated, which results in duplicate data entry and increased data entry errors. In addition, the two systems do not generate all the information necessary for managing EERE projects, e.g., project-level data at the national laboratories. Finally, with the exception of awards by the Golden Field Office, the accuracy of information contained in the Procurement and Assistance Data System is dependent upon other DOE components.

These issues relate to a major concern within EERE that it lacks a corporate program management system, which is fully described in the first Area of Improvement in EERE's Management Action Plan. Ultimately, the issues will be addressed through DOE's implementation of the I-Manage<sup>25</sup> system that will consolidate and streamline Departmental efforts to integrate financial, budgetary, procurement, personnel, and program and performance information. Because I-Manage is not scheduled for completion until 2006, DOE has authorized EERE to develop an interim system that will address some of these issues.

**Observations:**

The Department is driving development of the I-Manage system. However, the Panel observes that EERE has done a good job of assessing its information needs and

---

<sup>25</sup> "I-Manage" is the term used by DOE to describe a department-level automation initiative for all RDD&D program/project management.



developing an interim system to address those needs. The EERE Management Action Plan details numerous steps that EERE has taken and will take to improve its information management capabilities.

## **GOLDEN FIELD OFFICE AND THE NATIONAL ENERGY TECHNOLOGY LABORATORY OPERATIONS**

### **Discussion:**

As discussed earlier,<sup>26</sup> EERE is planning a Project Management Center that will be responsible for all of its acquisition, financial assistance and project management activities. Although details for the PMC's operations have not been formally established, it is clear that the Golden Field Office and NETL will play a significant role in meeting EERE's acquisition and financial assistance needs. The following summarizes key aspects of both procurement offices' operations.

### **Golden Field Office**

#### **Organization and Staffing**

Golden's Acquisition and Financial Assistance office (OAFAs) is responsible for award and administration of acquisition and financial assistance at Golden. The Office Director reports directly to the Golden Field Office Manager. There are three team leaders who oversee the work of the Office, including the work performed by six contracting officers who are outstationed to the regional offices. Currently, assigned staff (by series) are 13 GS-1102s (Contract Specialist) and 13 GS-1101s (General Business and Industry).

#### **Workload and Working Relationships**

OAFAs workload in Golden mainly consists of:

- grants, cooperative agreements and contracts with industry and academia supporting the 11 EERE program areas
- administration of the management and operating contract with NREL
- contracts to provide administrative support to EERE's field structure

Of those actions, financial assistance instruments constitute the predominant workload (88-99%). The contracting officers in the regions award and administer grants (normally based on solicitations issued by Golden) for deployment-related activities. These include:

- non-competitive formula grants to the states for the Weatherization program
- State Energy Program (SEP) non-competitive formula grants
- SEP competitive special project grants

With the exception of direct contacts with FEMP in EERE headquarters, OAFAs staff deal exclusively with Golden project management staff who have been assigned to EERE programs.

---

<sup>26</sup> See Section III.

OAFA enters post-award data in the Procurement and Assistance Data System and uses an Excel spreadsheet to record receipt and assignment of procurement requests. There is no system for reporting the status of pre-award requests.

### Processing Time Standards

OAFA does not distribute or monitor a set of processing time standards for the various types of acquisition and financial assistance transactions they award. Currently, the only processing standards related to timeliness of award are contained in DOE's Balanced Scorecard targets. For FY 2003, they are:

- 110-150 days>for new competitive service awards over \$100,000 (except major site and facility management contracts), the average time from receipt of offer (or solicitation closing date if applicable) to date of award for each new award.
- 60-90 days>for orders for services under the Federal Supply Schedules that require a statement of work and a request for quotation, the average time from receipt of quotation (or solicitation closing date if applicable) to date of award of each new instrument.
- 210-270 days>for new financial assistance awards, the average time from receipt of application (or solicitation closing date if applicable) to date of award for each new award.

In addition to not being very aggressive, these scorecard targets do not track processing from initiation of the procurement request through award.

### General Observations

The scope of the study did not permit a detailed evaluation of OAFA operations. Nevertheless, JCG and Academy staff:

- interviewed OAFA management and staff during two on-site visits to Golden and over the phone
- interviewed outstationed OAFA contracting officers in Philadelphia, Denver and Boston
- discussed OAFA service with EERE program managers
- reviewed sample files, solicitations, acquisition and financial assistance instruments, and guidance materials on the Golden Field Office website
- reviewed training data and staff performance standards

JCG's review clearly indicates that OAFA is well managed and staffed with individuals whose experience and training are highly suited for the types of instruments they award and administer. However, their continued ability to deliver high quality service to their program customers rests upon:

- the ability to recruit and retain the number of staff that are commensurate with the growing workload that is being absorbed from other DOE operations
- provision of the management tools and information technology resources that are necessary and present in most full-fledged professional procurement operations

### **Recommendations:**

#### **The Panel recommends that EERE:**

- **Establish staffing standards that (1) directly relate to the types of acquisition and financial assistance transactions Golden awards and administers, and (2) can be used to project staffing requirements as well as assess staff productivity.**
- **Acquire an automated system that (1) tracks acquisition/financial assistance transactions from receipt of the procurement request to execution and (2) provides Golden managers and customers with query and reporting capabilities concerning workload volume and status.**
- **Develop aggressive processing times for all types of acquisition and financial assistance transactions that start with initiation of the procurement request through award of the instrument.**
- **Communicate processing standards to the program customers, and monitor actual processing times to identify problem areas and targets for streamlining.**

### **National Energy Technology Laboratory**

#### **Organization and Staffing**

NETL's Acquisition and Assistance Division is part of its Office of Institutional and Business Operations. Currently, the Division is organized into 6 teams with a total of 51 FTE located at NETL offices in Morgantown, WVA and Pittsburgh, PA. All the contract specialists are GS-1102s. The team that services EERE requirements is located in Morgantown with a staff of 10 FTE's. In addition to the EERE work, the team also handles some work for the Office of Energy Assurance and the Department of Homeland Security. Also, each of the NETL teams can obtain support from the remaining teams if workload and assigned staff become out of balance.

#### **Workload and Working Relationships**

Nearly all (95%) of NETL transactions involve cooperative agreements. Management considers a workload of 25-30 instruments/contract specialists to be the norm. In the past, NETL has provided support to the Building Technologies, Industrial Technologies, Biomass, FEMP and Weatherization program areas. A substantial expansion of the NETL role is under consideration as part of EERE's development of a virtual Project Management Center.

As is the case with Golden, the assigned contract specialists deal exclusively with project management staff who have been assigned to EERE programs. Post-award data are entered and tracked in the Procurement and Assistance Data System. PROMIS is NETL’s project management tracking system, which has a feature for tracking certain pre-award milestones associated with solicitations.

Processing Time Standards

NETL has established processing time standards for 56 types of transactions. Financial assistance transaction standards are:

Noncompetitive–All>	120 days
Competitive under \$25 million>	184 days
Competitive over \$25 million>	246 days
Continuation awards-All>	36 days
Budget revisions/renewals>	90 days

In addition, the FY 2004 Operations Plan for the Acquisition and Assistance Division contains the following metrics:

		<b>Target</b>
Attainment of Procurement Plan milestones established in strategy meetings	Solicitation issuance Ranking of proposals Board report issued Selection statement signed Congressional notification to HQ Awards made	Fewer than 10% of the Procurement Plan milestones will be greater than 30 days late.
Procurement efficiency		90% of scheduled actions are completed per Procurement Action Tracking System standard lead time.

General Observations

A JCG representative interviewed key NETL staff during a one-day visit. JCG also reviewed sample solicitation and financial assistance documents and other data and information supplied subsequent to the meeting. Based on this rather limited review, it appears that NETL is well-organized and managed, with competencies and capacity to perform a much larger role in meeting EERE’s acquisition and financial assistance objectives. The Panel has no specific recommendations regarding NETL acquisition and financial assistance operations.

## STRATEGIC GOALS, OBJECTIVES AND PERFORMANCE METRICS

### EERE Acquisition and Financial Assistance Instruments

#### Discussion:

JCG reviewed a small sample of EERE grants, cooperative agreements, contracts and cooperative research and development agreements to determine their relationship to DOE Annual Performance Plan and EERE Strategic Plan goals. In no case did the instrument itself contain a specific reference to the Annual Performance Plan goals/proposed targets or EERE Strategic Plan goals. However, as explained in Attachment C, in every case the work to be performed under the instrument could be related to a DOE Annual Performance Plan and/or EERE Strategic Plan goal.

In addition, interviews and documentation clearly established that all 11 EERE program areas have processes in place to ensure that DOE Annual Performance Plan and EERE Strategic Plan goals are thoroughly addressed during the planning, budget formulation, budget execution, and analysis and evaluation phases.

#### Use of Performance Metrics

JCG reviewed the same sample of instruments to examine the extent to which they contained specific standards or metrics for evaluating the contractor's or recipient's performance or the extent of technology development. The acquisition documents in the sample were all FEMP Indefinite Delivery/Indefinite Quantity contracts that federal agencies could use to order Energy Savings Performance Contracting conservation services. Upon issuance of a task order, the contractor will take specific steps—Energy Conservation Measures (ECMs)—to reduce energy consumption at the designated Federal facility. JCG found that:

- Although some of the performance and reporting requirements are to be established by the ordering agencies, the contracts contain very specific performance standards and metrics related to the installation, operation, and maintenance of ECMs that include:
  - facility performance requirements for ECMs
  - installation requirements for ECMs
  - operation of ECMs
  - maintenance of ECMs
  - repair of ECMs
  - contractor maintenance and repair response time

In addition to specific performance metrics, the contracts are share-in-savings arrangements that provide that the contractor “shall be responsible for providing all labor, material, and capital to install energy and water conservation projects and provide operations and maintenance as specified in each delivery order. The cost of

an ECM project must be covered by the reduced energy and related operations and maintenance cost savings incurred at the Federally-owned facility.”

With the exception of project support provided by the DOE national laboratories, acquisition instruments play a very minor role in supporting 10 of the 11 program areas. FEMP relies heavily on contracts and, as discussed above, employs specific performance metrics in those instruments.

- The grants and cooperative agreements had a very similar format. The bulk of the instruments are devoted to General Terms and Conditions, Intellectual Property Divisions and Additional Provisions. Appendix D of each instrument contains the budget, statement of work, and Federal Assistance Reporting Checklist. The statements of work were typically extracted from the successful recipient’s application and varied in level of detail from detailed descriptions of research tasks and subtasks to one- or two-page task descriptions or statements of objectives. Although some of the statements of work assigned scheduled dates to some of the key activities, there were no other examples of specific standards or metrics that would apply to either the recipient’s performance in conducting the activity or the desired research results.

The findings related to sampled grants and cooperative agreements are consistent with information provided by Golden and NETL staff. Staff interviewed indicated that, although deliverables and milestones might be included in financial assistance awards, performance metrics are not. A Golden manager offered the opinion that performance metrics are fundamentally inconsistent with financial assistance instruments that typically contain broad statements of objectives. A NETL manager indicated that performance metrics related to the viability of specific technologies are tracked throughout project performance and play a critical role in funding continuation decisions. Recipients are aware of this. He does not believe a useful purpose would be served by including the metrics in the instrument itself because changes in technology are often so rapid that the original target metrics could be easily surpassed.

The Panel recognizes that the use of “hard” performance requirements (metrics) for a research and development project is complicated because one cannot be sure in advance that the effort will be successful. Metrics are most useful in a performance-based contracting environment when they are linked to a strategic set of financial incentives and disincentives contained in the contract. However, financial assistance instruments generally do not condition payment on delivery of certain specific results. In addition, the nature of the financial assistance relationship (stimulation and support), the absence of an element of profit as a motivator, and the fact that recipients have substantial incentive to succeed and share substantially in the cost of performance, make inclusion of metrics of only limited use from an incentive/disincentive standpoint.

Notwithstanding these concerns, the Panel believes inclusion of performance targets in financial assistance instruments would add value. Currently, EERE financial assistance solicitations make it clear to potential recipients that favorable funding consideration

rests upon the ability to reach or approach technical targets that are promising for attaining strategic program goals. For example, a current EERE solicitation<sup>27</sup> contains the following evaluation criteria:

**Energy Benefits (Weight: 30)**

The factors used to evaluate this criterion are as follows. 1) Energy benefits considering the potential for the proposed technology to contribute to the reduction of the overall energy consumption and the reduction in the use of fossil based feedstock energy in the U.S. as compared to the current commercial technology to produce the same or similar product(s). Chemical projects are expected to yield energy savings of at least 10 trillion British Thermal Units (BTUs) per year by 2020, and ideally should yield energy savings in excess of 50 trillion BTUs per year by 2020 when fully commercialized across the chemical industry. Forest Products projects are expected to yield energy savings of at least 5 trillion BTUs per year by 2020, and yield energy savings in excess of 10 trillion BTUs when fully implemented across the forest products industry. The energy savings will be evaluated by considering the adequacy, technical merit, assumptions, and completeness of the applicant's energy savings estimates provided through evidence presented by the applicant or by the Energy Savings Estimator tool referenced in Section III.C. 2) The sum of energy savings results for multiple products and markets will be considered, as well as any additional markets identified in the proposer's discussion of energy savings.

EERE's practice of including specific research and development targets or objectives in solicitation evaluation criteria provides potential recipients and EERE evaluators with a clear basis for assessing the likely merits of individual projects. The Panel believes that there should be a similar emphasis on ensuring that the assistance awards themselves include clear and measurable definitions of success. As a minimum, each grant or cooperative agreement should include a clear outcome statement that describes the principal project result(s) that will be generated by successful recipient performance and how that result is linked to a broader program-level objective. Often, the outcome statement could be accompanied by measurable performance standards/metrics that the successful recipient included in its application. In either case, EERE programs will benefit from a sharpened focus on the results of each project. It will also enable evaluation of the recipient's past performance across a range of projects, (since it is not expected that all R&D will succeed).

---

<sup>27</sup> DE-PS36-03GO93015, Chemicals and Forest Products Industries of the Future Solicitation for Applications for Cost Shared Research and Development



**Recommendations:**

**The Panel recommends that EERE:**

- **Include clear program and project outcome statements and (whenever possible) associated performance metrics in each EERE financial assistance award.**
- **Modify the provision that is entitled “Continuations, Renewals and Extensions” to clearly identify the role metrics will play in EERE follow-on funding decisions for financial assistance actions.**

**The National Renewable Energy Laboratory**

**Discussion:**

In FY 2002, EERE obligated \$494 million with DOE national laboratories. The largest recipients of funding were NREL (\$179 million), Oak Ridge National Laboratory (\$120 million), NETL (\$65 million) and Sandia (\$44 million). With the exception of NETL (a government-owned/government-operated facility), each of these laboratories is managed and operated by a contractor. This section provides a profile of the NREL contract with Midwest Research International (MRI) and discusses how EERE measures lab performance there and at other DOE facilities.

<b>Operation of the National Renewable Energy Laboratory Profile of Contract No: DE-AC36-99G010337</b>	
Contractor:	<b>Midwest Research International</b>
Major Subcontractors:	Battelle and Bechtel
Period of Performance:	11/9/98-present
Scope of Services:	<p>The contractor is responsible for all aspects of the management and operation of the National Renewable Energy Laboratory including planning and work execution. Principal performance requirements identified in the Statement of Work are:</p> <ul style="list-style-type: none"><li>❑ Science and Technology- MRI will deliver high quality scientific and technological outcomes that advance DOE priorities and Program objectives.</li><li>❑ Leadership- MRI will lead NREL as a Federally Funded Research and Development Center to create opportunities that significantly advance the EERE mission while enhancing NREL’s role as a recognized national and international asset.</li><li>❑ Technical and Scientific Viability- MRI will ensure the long-term viability of the Laboratory by building and enhancing NREL’s technical capabilities.</li><li>❑ Mission Support- MRI will manage and enhance NREL business and management systems, work processes, and capabilities to provide an effective and efficient work environment that enables the execution of NREL’s mission.</li></ul>

<b>Operation of the National Renewable Energy Laboratory Profile of Contract No: DE-AC36-99G010337</b>	
	<ul style="list-style-type: none"> <li>❑ Environment, Safety, and Health- MRI will protect the safety and health of the NREL workforce, the community, and the environment.</li> <li>❑ Outreach and Stakeholder Relations- MRI will build strong and productive relationships and alliances with stakeholders, advance awareness and support of the DOE renewable energy and energy efficiency mission, and advance math, science and technology education.</li> </ul>
Annual Operating Plan	<p>Each year the contractor submits an annual operating plan that identifies performance objectives, key tasks and performance indicators for each of the six program outcomes. For example the FY 2003 Annual Plan contains the following information regarding to the first objective identified for Outcome Area 6., Outreach and Stakeholder Relations:</p> <p><b><i>“PO 6.1 Promote awareness of DOE/EERE and NREL missions and technologies, and build relationships that support the strategic directions of the Laboratory.</i></b></p> <p><b><i>Measuring Performance:</i></b></p> <p><i>&gt;What strategic opportunities have been sought to enhance the Laboratory’s national and local reputation? What new approaches to the enhancement of NREL’s reputation have been developed, tested, and or implemented?</i></p> <p><i>&gt;How innovative and effective are (sic) the institutional communication products been in terms of message delivery, customer requirements, and external recognition?</i></p> <p><i>PI 6.1.1 Stakeholder relationships and networks are established , maintained, and enhanced in support of the DOE/NREL mission.</i></p> <p><i>PI 6.1.2 Opportunities for enhancing institutional viability and reputation are created and implemented.</i></p> <p><i>PI 6.1.3 Quality communications products are developed and recognized as supporting the advancement of the NOE/NREL mission.</i></p> <p><b><i>Key Tasks:</i></b></p> <ol style="list-style-type: none"> <li><i>1. Implement media relations strategies to gain national visibility for the DOE, NREL, and energy efficiency and renewable energy technologies.</i></li> <li><i>2. Provide leadership and support for the FY03 American Solar Challenge Race in July.</i></li> <li><i>3. Implement stakeholder networking strategies that build critical relationships and enhance Laboratory visibility.</i></li> <li><i>4. Develop quality communications products that are recognized as supporting the advancement of NREL and DOE’s programs and technologies.”</i></li> </ol>
Annual Funding:	Initially estimated at \$160 million per year. FY 2002 obligations were \$178,835,000.

<b>Operation of the National Renewable Energy Laboratory Profile of Contract No: DE-AC36-99G010337</b>	
Contract Type:	Cost Plus Award Fee (CPAF): The initial 6 months of performance was performed on a cost plus fixed fee basis. On April 1, 1999 the CPAF provisions went into effect. The aggregate fee base for the first 3 annual evaluation periods was \$499,118,000. The aggregate available fee pool for the same time period was \$14,327,500 (2.87%).
Performance Evaluation	The contract's Performance Evaluation and Measurement Plan calls for annual evaluation periods each of which is divided into two six-month award fee periods. Contract performance measures consist of critical outcomes (identical to the performance requirements listed above), performance objectives and performance indicators. The objectives and indicators are negotiated between the contractor and EERE and can change with award fee periods. Evaluation of the contractor's performance is highly subjective. Each critical outcome area is rated (Outstanding, Excellent, Good, Marginal or Unsatisfactory), and significant and notable achievements and deficiencies are documented in the Award Fee Performance Evaluation Report
Award Fee Determination:	Each rating has an associated range of point scores, e.g., 90-100 for Outstanding and 80-89 for Excellent. Each point score has an associated award fee percentage. The award fee percentages drop dramatically as the scores drop. For example, a score of 89 yields an award fee of 90% of the available fee pool. However, a score of 80 yields only 40%. No award fee is paid for scores of 69 or less.

**Observations:**

The combination of a brief statement of work and annual performance plan provides a flexible mechanism for addressing six major performance outcome areas while varying the activities and objectives that might be assigned from year to year. The contract's major performance-based mechanism is a performance evaluation plan that ties all of the contract's available award fee (there is no base fee) to the contractor's performance in each of the six major outcome areas. Paragraph 5.5 of the Performance Evaluation Plan states: "Consistent with the 'award fee' nature of this Contract, evaluation of the Contractor's performance is substantially subjective and will be determined unilaterally by DOE." An examination of the NREL FY 2003 One Year Plan indicates that none of the performance indicators are expressed in terms of predetermined objective metrics. This does not mean that all the contractor's accomplishments can only be evaluated subjectively. Often the contractor's accomplishments are counted or measured after the fact. In fact, the contractor's most recent Self Assessment Report for the 10/01/02-3/31/03 evaluation period contains a number of objective metrics in support of its accomplishments. However, the significance of those accomplishments is subjectively considered by the government along with other subjective evaluations in arriving at the recommended adjectival rating and resultant fee determination.

The government typically favors the Cost Plus Award Fee contract because it allows the government to consider the totality of the contractor's performance and the circumstances and constraints that impacted that performance. Contractors often favor more predetermined objective elements with the fee implications clearly understood prior to performance. A number of agencies (e.g., the National Aeronautics and Space Administration and Air Force) have moved to inclusion of measurable performance metrics with a certain amount of the award fee pool directly related to them or to measurable performance thresholds that must be met before some or all of the award fee pool can be earned.

### **Recommendations:**

#### **The Panel recommends that EERE:**

- **Ensure that the NREL contract's annual performance plan describes the relationship between the broad programmatic objectives contained in the National Energy Policy, DOE and EERE Strategic Plans, and the critical outcomes that will be evaluated.**
- **Develop more objective metrics for the NREL contract's Performance and Evaluation Plan and link them to a defined portion of the award fee pool on a predetermined basis.**

### **Other National Laboratories**

Unlike the situation with NREL (with 94% of its work supporting EERE), EERE is a minor client at the other DOE laboratories it uses. A draft EERE White Paper that EERE prepared a year ago entitled "EERE Approach to Evaluating the Annual Performance of SC and NNSA Laboratories"<sup>28</sup> contrasts the systematic approach used at NREL with the lack of any systematic approach to influence fee evaluations of other laboratories. While acknowledging that there may be a question of the cost-effectiveness of attempting to provide performance input to many of the laboratories, the paper proposes a rather elaborate methodology for reconciling proposed EERE performance indicators rating factors contained in the Office of Science and NNSA award fee rating plans.

The EERE Management Action Plan reports completion of a successful pilot for the FY 2002 evaluation of Oak Ridge that used a new common EERE approach to provide award fee input to the Office of Science and NNSA national laboratories. The Panel recognizes the importance of measuring the performance of the DOE laboratories used by EERE and supports its continued efforts to find practical ways of reporting the necessary performance data.

In addition to developing cost-effective processes for providing award fee evaluation input to laboratories, EERE needs a realistic basis for monitoring laboratory performance with a view to:

---

<sup>28</sup> SC is DOE's Office of Science and NNSA is DOE's National Nuclear Security Administration.

- immediately informing the laboratory of deficient performance
- identifying those situations that require the development of alternative sources
- providing input to laboratories that request performance data

**Recommendation:**

**The Panel recommends that EERE require each program office to implement a sound set of performance standards/metrics and monitoring procedures for each DOE laboratory that it uses.**

## **USE OF PAST PERFORMANCE INFORMATION IN ACQUISITION AND FINANCIAL ASSISTANCE AWARDS**

An item of interest to the Panel has been the extent to which information concerning contractor/recipient past performance plays a role in the award and administration of EERE programs. At present, regulatory requirements related to the collection and use of past performance information applies only to acquisition instruments. The following discussion describes those requirements and then considers whether similar requirements are/should be used with regard to financial assistance transactions.

### **Use of Past Performance Information on EERE Acquisitions**

#### **Discussion:**

Although use of past performance information had been used in making contractor “responsibility” determinations prior to the award of contracts, the Office of Federal Procurement Policy Letter 92-5, “Past Performance Information,” made significant changes to requiring that performance information be used in contract awards, which were subsequently implemented in the FAR. As defined under FAR Subpart 42.15, past performance is:

relevant information, for future source selection purposes, regarding a contractor's actions under previously awarded contracts. It includes, for example, the contractor's record of conforming to contract requirements and to standards of good workmanship; the contractor's record of forecasting and controlling costs; the contractor's adherence to contract schedules, including the administrative aspects of performance; the contractor's history of reasonable and cooperative behavior and commitment to customer satisfaction; and generally, the contractor's business-like concern for the interest of the customer.

The FAR requires that, for each contract in excess of \$100,000, agencies prepare an evaluation of past performance at the time the work is completed as well as interim evaluations “as specified by the agencies to provide current information for source selection purposes, for contracts with a period of performance, including options exceeding one year.” In addition FAR 15.304 requires that past performance be a source selection factor on all acquisitions in excess of \$100,000 unless the contracting officer documents the reason past performance is not an appropriate evaluation factor for the acquisition. The major intent of these provisions is to ensure that necessary past performance information is available and considered prior to award, and to induce contractors to improve performance through the knowledge that their future business prospects will be determined by agencies that will be applying past performance as an evaluation criterion.

DOE, along with many other civilian agencies, uses the National Institutes of Health Contractor Performance System as its automated contractor performance information

database. Although there is no regulatory requirement in the DOE Acquisition Regulations, the DOE Acquisition Guide contains implementation recommendations and best practices.

Currently, Golden is not in full compliance with the FAR requirements. Although past performance information is requested from prospective offerors, the information received is neither verified nor entered into the automated system. With such a small percentage of Golden's workload being acquisition (fewer than 20 existing contracts under administration), this is not a major deficiency.

**Recommendation:**

**The Panel recommends that EERE ensure that past performance is properly considered in acquisition decisions by requiring the Golden Field Office to fully implement requirements related to the collection, verification and recording of contractor past performance information.**

**Use of Past Performance Information on EERE  
Financial Assistance Transactions**

**Discussion:**

There are no requirements for collecting and using financial assistance recipients' past performance information in either the DOE Financial Assistance Regulations, or the DOE Financial Assistance Guide. Neither Golden nor NETL apply anything like the acquisition requirements to the financial assistance environment. The question is: "Should they?" Some pros and cons follow.

<b>Pros</b>
<ul style="list-style-type: none"> <li>? The type of past performance information that is relevant for contracts, e.g., conformance to award requirements, control of costs and adherence to schedules, is equally applicable to grants and cooperative agreements.</li> <li>? Nearly half of EERE’s programs are implemented through financial assistance transactions. EERE should send a clear message that “recipient performance matters.”</li> <li>? Even though considerations of past performance may be implicit in EERE’s decision-making regarding new awards or funding continuation, making it an explicit evaluation factor (even if it only amounts to a tie-breaker between otherwise equivalent applications) will strengthen its motivational value.</li> <li>? The lack of regulatory requirements will make it easier for EERE to structure a recipient past performance initiative that is tailored to selected situations, cost-effective, and adds value to EERE programs.</li> </ul>
<b>Cons</b>
<ul style="list-style-type: none"> <li>? EERE recipients are already motivated to perform. They have a vested interest in the project outcome and frequently share (substantially) in the costs of performance.</li> <li>? EERE recipients understand that funding continuation is contingent upon acceptable performance during the current period of the grant or cooperative agreement.</li> <li>? Often, it is not the recipient’s inadequate performance that results in adverse funding decisions. Rather, it is the fact that the technology under investigation simply will not yield the desired results.</li> <li>? Adding it as part of the evaluation criteria will impose delays and a significant workload burden on the evaluators who often are charged with rating large numbers of applications.</li> </ul>

The Panel believes that, with over half of its funding allocated to financial assistance instruments, EERE needs to have a clear policy for collection of recipient past performance information and how that information will be considered in subsequent funding decisions. Assistance procedures that replicate the processes mandated by the FAR are not necessary. As a result, the administrative burden of collecting and considering the information for evaluation purposes can be effectively mitigated, and recipients can receive the clear message that their performance matters.

**Recommendation:**

**The Panel recommends that EERE develop and implement policies and procedures for the collection and use of information regarding recipient past performance under financial assistance instruments.**



## ASSISTANCE GUIDANCE AND TRAINING

### Policies, Procedures and Guidance

**Discussion:**

The box below summarizes the major acquisition and financial assistance policies, procedures, and guidance in use at the federal, DOE, EERE and NETL levels.

		<b>Financial Assistance</b>
<b>Federal</b>	Federal Acquisition Regulation	<p>OMB Circular A-21&gt;Cost Principles for Educational Institutions</p> <p>OMB Circular A-87&gt;Cost Principles for State, Local and Indian Tribal Governments</p> <p>OMB Circular A-102&gt;Grants and Cooperative Agreements with State and Local Governments</p> <p>OMB Circular A-110&gt;Uniform Administrative Requirements for Grant and Other Agreements with Institutions of Higher Education, Hospitals and Other Nonprofit Organizations</p> <p>OMB Circular A-122&gt;Cost Principles for Nonprofit Organizations</p> <p>OMB Circular A-133&gt;Audits of States, Local Governments and Nonprofit Organizations</p>
<b>DOE</b>	<p>Department of Energy Acquisition Regulation (48CFR Ch.9)</p> <p>Department of Energy Acquisition Guide</p>	<p>Department of Energy Assistance Regulation (10 CFR 600)</p> <p>Department of Energy Guide to Financial Assistance</p>
<b>EERE</b>	<p>Acquisition Customer Guide (Appendix C to the EERE Program Management Guide) is available on-line and represents an excellent, comprehensive summary of the requirements pertaining to acquisition and financial assistance transactions.</p> <p>Golden Field Office Procurement Processes website: <a href="http://procurement.go.doe.gov/">http://procurement.go.doe.gov/</a> contains descriptions of numerous processes, forms and templates for use in awarding and administering acquisition and financial assistance instruments.</p>	
<b>NETL</b>	<p>NETL acquisition/financial assistance and project management personnel have access to an intranet site (“Procurement Desktop”) that has extensive guidance and templates for use in awarding and administering acquisition and financial assistance instruments.</p>	

Based on this, the Panel believes that the acquisition and financial assistance staffs responsible for awarding and administering the bulk of EERE’s transaction have ready access to useful guidance and information concerning acquisition and financial assistance

## Training

### DOE Requirements

DOE Order 361.1, Acquisition Career Development (ACD) Program, issued in 1999, established training and certification requirements for the acquisition workforce. As defined in the Order, the acquisition workforce includes contracting, purchasing, financial assistance, property and program management. The Order requires that “a specific certification standard path must be established for each position, including education, training, and experience standards, which the incumbent must meet for that career level.” Career levels are (I) Entry, (II) Intermediate, and (III) Advanced or Senior.

In addition, DOE Order 541.1A, issued in 2000, establishes requirements for the appointment of contracting officers (who execute contract, grant and cooperative agreement instruments). Those requirements are summarized in the following box:<sup>29</sup>

			<b>Highly Desirable Training</b>
Negotiation/Sealed Bid, Procurement Contracts, Interagency Agreements and Sales Contracts	At least 5 years of progressively complex and responsible experience in negotiation/sealed bidding and performing business administration of procurement. Extensive experience in the GS-1102 or GS-1105 job series, or directly comparable military experience as a contracting officer is highly desirable.	Certified Level II under Contract ACD Program.	Architect/engineering contracting Construction contracting Advanced cost type contracts Automated Data Processing procurement Contracting for Commercial Services
Grants and Cooperative Agreements	At least 3 years of progressively complex and responsible experience in negotiating and performing business administration of grants and/or cooperative agreements. Extensive experience in grants and/or cooperative agreements.	Certified Level II under Contracting ACD Program and certified under Financial Assistance Career Development Program.	Negotiation techniques  Property Management

<sup>29</sup> From Attachment I to DOE Order 541.1A.

The DOE ACD program requires that individuals complete Defense Acquisition University courses<sup>30</sup> in:

Basics of Contracting  
Principles of Contract Pricing  
Government Contract Law  
Intermediate Contract Pricing  
Architect-Contracting (Assignment Specific)  
Construction Contracting (Assignment Specific)

The Financial Assistance Curriculum consists of:

Federal Financial Assistance  
Cost Principles: OMB Circulars A-21, A-122 and A-87.  
Federal Funds Management

#### Golden Field Office Training

The Golden Acquisition and Financial Assistance office maintains career development/training information on each of its employees. JCG's review of these data indicated that:

- 100% of the staff with contracting officer warrants met or exceeded their certification requirements.
- 65% of the staff met or exceeded their required certification levels.
- FY 2004 travel and training plans have been submitted for eight of the nine employees who have not completed their certification requirements.
- Currently, 39% of the Oafa staff are certified at Level III and 26% at Level II.

#### NETL Training

JCG did not review detailed training information concerning NETL acquisition and financial assistance staff, but was informed that 75% were certified at Level III.

#### General Observations

Based on this information, the Panel believes that both Golden and NETL management appear to be committed to obtaining the necessary training for their personnel.

---

<sup>30</sup> Only a few slots are available to DOE at the Defense Acquisition University, but a commercial vendor has been certified to deliver the training.

## STREAMLINING POSSIBILITIES

### Discussion:

EERE has completed and initiated a number of streamlining activities. A description of those activities and Panel comments and additional suggestions follow.

### Completed Activities

- The Federal Financial Assistance Management Improvement Act of 1999 (PL106-107) required each federal agency to develop and implement a plan for streamlining and simplifying the application, administrative, and reporting requirements for federal financial assistance. As discussed in the latest EERE Management Action Plan, the Golden Field Office and the regional offices completed a streamlining initiative applied to state grant applications (about \$300 million of EERE's annual obligations). As a result, states will provide annual representations and certifications in lieu of completing and submitting them with each application.
- The Golden Field Office also developed a set of procedures and resources for EERE and the regional offices as a guide for soliciting, selecting, awarding, administering and closing out contracts and financial resources. The team process that was followed eliminated unnecessary and repetitive steps in the acquisition/financial assistance cycles and resulted in valuable information and templates being placed on the Golden Internet site.

### In-Process Activities

- "Work Packaging" is a major EERE initiative described in EERE's Management Action Plan. Basically, the initiative entails:
  - decreasing the number of small dollar value transactions (in FY 2002, 95% of EERE's transactions were less than \$1 million) and repackaging the work into larger, strategically significant awards
  - focusing solicitation eligibility and other requirements to reduce the number of applications that are received and the attendant costs on EERE and/or applicants of application preparation, evaluation and debriefing. One example cited in the Management Action Plan is a solicitation that generated 275 applications competing for a total of \$1.2 million with only 25 successful applicants (a 90% rejection rate).
  - reducing the number of administrative transactions (51% of FY 2002 transactions were zero-dollar administrative changes) by eliminating unnecessary requirements or consolidating them in annual modifications

The Management Action Plan provides for completion of all of the above components by 12/30/03. In addition, it provides for fully funding awards of less than \$100,000 during FY 2004 to reduce the number of incremental funding transactions in FY 2005.

## **Observations:**

Rejection rates of 90% or more are not unusual for full and open acquisitions. However, financial assistance competitions often generate significantly more responses, and thereby produce a far greater evaluation burden. Unlike full and open acquisitions that are constrained by FAR requirements, financial assistance competitions have less regulatory constraints. Agencies have greater flexibility to design competition plans that sharpen eligibility requirements or provide for stages that permit the early identification and elimination of applicants that have no reasonable chance of success. OAFAs have previously attempted to use preapplication screening techniques, but these efforts failed because program managers were reluctant to reject any organization from participating in the full competition. Overcoming this cultural resistance is imperative if this initiative is to achieve success.

Although awarding fewer small dollar value transactions will undoubtedly produce savings in staff resources and processing time, this may not be possible or desirable for all EERE program areas. In its June "Preliminary Observations" paper, the Panel noted: "EERE's research and development activities are diverse and program offices need the flexibility to be able to enter into relationships with organizations having the necessary expertise. This could result in small transactions in some cases. Many of EERE's deployment activities leverage relatively small amounts of money in projects that produce significant energy savings."

Reducing the complexity and associated effort in awarding the smaller financial assistance instruments is another possibility. On the acquisition side, procurements under \$100,000 are conducted using simplified purchasing methods. Streamlining should also be feasible for grants and cooperative agreements of a similar size.

Elimination of unnecessary higher-level reviews and approvals also will contribute to streamlining the process by delegating approval authority to subordinate managers and holding them accountable for their decisions. Reasonable quality control and risk management measures often substitute after the fact reviews of a sample of transactions for 100% review and approval before the actions are taken. Review thresholds should take into account the significance of the types of transactions and their volumes. These include the artificially high review and approval levels that have been produced by the combination of a regulatory requirement and the flattening of the EERE organization. Using after the fact reviews of a sample of transactions in lieu of 100% review and approval before the action is taken will streamline the process and provide quality control.

## **Recommendations:**

**The Panel recommends that EERE:**

- **Simplify the competition and evaluation requirements for financial assistance transactions below a certain dollar threshold (e.g. \$100,000).<sup>31</sup>**
- **Examine all situations that impose a higher-level review and approval requirement during the acquisition and financial assistance cycles and eliminate any unnecessary requirements.<sup>32</sup>**

---

<sup>31</sup> This includes pursuit of a permanent waiver that will allow a simplified merit review process established under an EERE pilot for fixed obligation awards covered by 10CFR600.29.

<sup>32</sup> This may entail requesting class deviations from DOE's Director of Procurement and Assistance Management.

## ACRONYMS

<b>ACD</b>	Acquisition Career Development Program
<b>ASSERTTI</b>	Association of State Energy Research and Technology Transfer Institutions
<b>BTU</b>	British Thermal Unit
<b>CFR</b>	Code of Federal Regulations
<b>CPAF</b>	Cost Plus Award Fee
<b>DER</b>	Distributed Energy Resources
<b>DOE</b>	Department of Energy
<b>ECM</b>	Energy Conservation Measures
<b>EERE</b>	Energy Efficiency and Renewable Energy
<b>FAR</b>	Federal Acquisition Regulations
<b>FE</b>	Office of Fossil Energy
<b>FEMP</b>	Federal Energy Management Program
<b>FTE</b>	Full-time Equivalent
<b>FY</b>	Fiscal Year
<b>JCG</b>	Jefferson Consulting Group
<b>MRI</b>	Midwest Research International
<b>NASEO</b>	National Association of State Energy Offices
<b>NETL</b>	National Energy Technology Laboratory
<b>NNSA</b>	National Nuclear Security Administration
<b>NREL</b>	National Renewable Energy Laboratory
<b>OAFA</b>	Office of Acquisition and Financial Assistance
<b>OMB</b>	Office of Management and Budget
<b>PMC</b>	Project Management Center
<b>PR</b>	Procurement Request
<b>PSPG</b>	Program Strategic Performance Goal
<b>RDD&amp;D</b>	Research, Development, Demonstration and Deployment
<b>SEP</b>	State Energy Program
<b>STAC</b>	State Technologies Advancement Collaborative
<b>WAS</b>	Work Authorization Statement

List of Panel Recommendations

	<b>The Panel Recommends that EERE:</b>
EERE’s Acquisition/Financial Assistance Environment	<ul style="list-style-type: none"> <li>? Pursue being a “laboratory” for innovation and change related to the award and administration of financial assistance. The goal should be to develop more effective ways of doing business in areas that are constrained by DOE’s Financial Assistance Regulations.</li> </ul>
Planning	<ul style="list-style-type: none"> <li>? Implement an annual acquisition and financial assistance planning process that produces an annual plan sufficiently in advance of the fiscal year to allow for the timely and orderly award of all EERE funded instruments.</li> <li>? Establish clear lines of authority and responsibility for developing, reviewing and implementing the annual acquisition/financial assistance plan.</li> <li>? Include acquisition and financial assistance plan execution as a critical element in the performance standards of EERE managers.</li> </ul>
EERE Headquarters Operations and Data Systems	<ul style="list-style-type: none"> <li>? Strengthen the Operations and Logistics Team by adding one or more experienced acquisition and financial assistance specialists and providing training to existing staff to enhance their capabilities to assist program clients.</li> </ul>
Golden Field Office and the National Technology Laboratory Operations	<ul style="list-style-type: none"> <li>? Establish staffing standards that (1) directly relate to the types of acquisition and financial assistance transactions Golden awards and administers, and (2) that can be used to project staffing requirements as well as assess staff productivity.</li> <li>? Acquire an automated system that (1) tracks acquisition/financial assistance transactions from receipt of the procurement request to execution and, (2) provides Golden managers and customers with query and reporting capabilities concerning workload volume and status.</li> <li>? Develop aggressive processing times for all types of acquisition and financial assistance transactions that start with initiation of the procurement request through award of the instrument.</li> <li>? Communicate processing standards to the program customers, and monitor actual processing times to identify problem areas and targets for streamlining.</li> </ul>



**ATTACHMENT C**

	<b>The Panel Recommends that EERE:</b>
Strategic Goals, Objectives, and Performance Metrics	<ul style="list-style-type: none"> <li>? Include clear program and project outcome statements and (whenever possible) associated performance metrics in each EERE financial assistance award.</li> <li>? Modify the provision that is entitled “Continuations, Renewals and Extensions” to clearly identify the role metrics will play in EERE follow-on funding decisions for financial assistance actions.</li> <li>? Ensure that the NREL contract’s annual performance plan describes the relationship between the broad programmatic objectives contained in the National Energy Policy, DOE and EERE Strategic Plans, and the critical outcomes that will be evaluated.</li> <li>? Develop more objective metrics for the NREL contract’s Performance and Evaluation Plan and link them to a defined portion of the award fee pool on a predetermined basis.</li> <li>? Require each program office to implement a sound set of performance standards/metrics and monitoring procedures for each DOE laboratory that it uses.</li> </ul>
EERE Use of Past Performance Information in Acquisition and Financial Assistance Awards	<ul style="list-style-type: none"> <li>? Ensure that past performance is properly considered in acquisition decisions by requiring the Golden Field Office to fully implement requirements related to the collection, verification and recording of contractor past performance information.</li> <li>? Develop and implement policies and procedures for the collection and use of information regarding recipient past performance under financial assistance instruments.</li> </ul>
Streamlining Possibilities	<ul style="list-style-type: none"> <li>? Simplify the competition and evaluation requirements for financial assistance transactions below a certain dollar threshold (e.g. \$100,000).</li> <li>? Examine all situations that impose a higher-level review and approval requirement during the acquisition and financial assistance cycles and eliminate any unnecessary requirements.</li> </ul>

**Comparison of Sample of EERE Acquisition/Financial Assistance Instruments with EERE Strategic Plan Goals**

			<b>Relationship to DOE Annual Performance Plan/EERE Strategic Plan Goals</b>
DE-FC36-02GO12072> Cooperative Agreement with Colorado State University awarded 9/13/02 with a total approved budget of \$811,492.	Industrial Technology	Conduct industrial assessments, promote and increase the adoption of assessment recommendations, promote and support the Industrial Assessment Center program.	The instrument contains no specific reference to Annual Performance Plan goals/ proposed targets or EERE Strategic Plan goals. However, the cooperative agreement directly addresses DOE Annual Performance Plan Program Strategic Performance Goal (PSPG) ER1-2: "Partner with key energy-intensive industries to develop and apply advanced technologies and practices that reduce energy consumption, improve environmental performance, maintain and create jobs, boost productivity, and significantly improve the competitiveness of the United States." In addition, it directly addresses EERE Strategic Plan Goal 6, "Increase the Energy Efficiency of Industry," and its associated strategy: "Facilitate broader market adoption of energy efficiency technologies and practices by conducting energy assessments, developing software to analyze and optimize plant systems, and demonstrating advanced energy-saving technologies."
DE-FG51-03RO21440>Grant with Arizona Department of Commerce, Energy Department, awarded 3/1/03 with a total approved budget of \$1,847,979.	Building Technology	State special project: The near and long term options for hydrogen power park applications will be analyzed for economic, technologic and operational opportunities.	The instrument contains no specific reference to Annual Performance Plan goals/proposed targets or EERE Strategic Plan goals. However, the grant directly addresses DOE Annual Program Plan Program Strategic Performance Goal ER3-1: "In partnership with industry and government, develop, promote, and integrate energy technologies and practices that make buildings more efficient productive and affordable."
DE-AB36-99GO20628> Blanket Purchase Agreement (BPA) (contract) with the Architectural Energy Corporation in Boulder, CO awarded 6/30/99.	FEMP	Upon execution of a BPA call, perform SAVEnergy Surveys for specified buildings, energy and/or water consuming systems.	The instrument contains no specific reference to Annual Performance Plan goals/proposed targets or EERE Strategic Plan goals. However, the BPA directly addresses DOE Annual Performance Plan Program Strategic Performance Goal (PSPG) ER1-1: "Increase the energy security and decrease the environmental impact of Federal Government operations by advancing energy efficiency and water conservation, promoting the use of distributed and renewable energy, and improving utility management decisions at Federal sites." Also, it appears to address the following ER1-1 FY2003 Proposed Target: "Completing at least 80 energy assessments

**ATTACHMENT C**

			<b>Relationship to DOE Annual Performance Plan/EERE Strategic Plan Goals</b>
			including SAVEnergy Audits, industrial facility assessments, and operation and maintenance assessments to identify energy and cost saving opportunities.” In addition, it directly addresses EERE Strategic Plan Goal 8: “Lead by Example through Government’s own actions,” and its associated strategy: “Reduce energy intensity in Federal buildings by providing information, training, technical assistance, and alternative financing for efficiency improvements in new construction, building retrofits, operations and maintenance, and utility load management.”
DE-AM36-98GO10298> Indefinite Quantity Contract with Aspen Systems, Rockville, MD, awarded 9/29/98	FEMP	To acquire technical advisory and assistance services to support the FEMP Services Network in its mission to implement energy savings measures in Federal buildings.	The instrument contains no specific reference to Annual Performance Plan goals/ proposed targets or EERE Strategic Plan goals. However the Indefinite Quantity Contract directly addresses DOE Annual Performance Plan Program Strategic Performance Goal (PSPG) ER1-1: “ Increase the energy security and decrease the environmental impact of Federal Government operations by advancing energy efficiency and water conservation, promoting the use of distributed and renewable energy, and improving utility management decisions at Federal sites.” In addition, it directly addresses EERE Strategic Plan Goal 8: “Lead by Example through Government’s own actions,” and its associated strategy: “Reduce energy intensity in Federal buildings by providing information, training, technical assistance, and alternative financing for efficiency improvements in new construction, building retrofits, operations and maintenance, and utility load management.”
DE-FG36-03G013003>Grant with Advantek Consulting, Melbourne, Florida, awarded 6/19/03 with a total approved budget of \$250,000.	Industrial Technologies	Commercialize a new air conditioning technology and promote energy efficient cooling a dehumidification in manufacturing facilities, buildings and homes.	The instrument contains no specific reference to Annual Performance Plan goals/ proposed targets or EERE Strategic Plan goals. However, the grant directly addresses DOE Annual Performance Plan Program Strategic Performance Goal (PSPG) ER1-2: “Partner with key energy-intensive industries to develop and apply advanced technologies and practices that reduce energy consumption, improve environmental performance, maintain and create jobs, boost productivity, and significantly improve the competitiveness of the United States.” In addition, it directly addresses EERE Strategic Plan Goal 6, “Increase the Energy Efficiency of Industry,” and its associated strategy: “Facilitate broader market adoption of energy efficiency

**ATTACHMENT C**

			<b>Relationship to DOE Annual Performance Plan/EERE Strategic Plan Goals</b>
			technologies and practices by conducting energy assessments, developing software to analyze and optimize plant systems, and demonstrating advanced energy-saving technologies.”
<p>DE-FG36-03GO13004&gt;Grant with SAGE Electrochromics, Inc., Faribault, Minnesota, awarded 6/16/03 with a total approved budget of \$273,689.</p>	<p>Industrial Technologies</p>	<p>Develop and implement process technology improvements that are required to manufacture electrochromic glazings at high yield and lower cost.</p>	<p>The instrument contains no specific reference to Annual Performance Plan goals/proposed targets or EERE Strategic Plan goals. However, the grant directly addresses DOE Annual Performance Plan Program Strategic Performance Goal (PSPG) ER1-2: “Partner with key energy-intensive industries to develop and apply advanced technologies and practices that reduce energy consumption, improve environmental performance, maintain and create jobs, boost productivity, and significantly improve the competitiveness of the United States.” In addition, it directly addresses EERE Strategic Plan Goal 6, “Increase the Energy Efficiency of Industry,” and its associated strategy: “Facilitate broader market adoption of energy efficiency technologies and practices by conducting energy assessments, developing software to analyze and optimize plant systems, and demonstrating advanced energy-saving technologies.”</p>
<p>CRD-03-120&gt;Cooperative Research and Development Agreement (CRADA) between Midwest Research Institute (operator of NREL) and GT Equipment Technologies, Inc., Merrimack, New Hampshire.</p>	<p>Biomass</p>	<p>Design, fabrication, installation and feasibility testing of a prototype chemical vapor deposition reactor for making silicon feed stock, by a new method, to be used in photovoltaic applications.</p>	<p>The instrument contains no specific reference to Annual Performance Plan goals/proposed targets or EERE Strategic Plan goals. However, the CRADA directly addresses EERE Strategic Plan Goal 3 “Increase the viability and deployment of renewable energy technologies,” and its associated strategy: “Facilitate market adoption of renewable energy technologies by partnering with private companies to demonstrate technologies in commercial energy systems.”</p>