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DOE Uniform Reporting System for Federal Assistance

(Grants and Cooperative Agreements)

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U.S. DEPARTMENT OF ENERGY
Assistant Secretary for Management
and Administration
Office of The Controller
Office of Program and Project
Management Assessment

APRIL 1981

Guidelines

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**DEPARTMENT
OF ENERGY**

**UNIFORM
REPORTING SYSTEM
FOR FEDERAL ASSISTANCE
(Grants and Cooperative Agreements)
Guidelines**

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APRIL 1981

**U.S. DEPARTMENT OF ENERGY
Assistant Secretary for Management
and Administration
Office of The Controller
Office of Program and Project
Management Assessment
Washington, D.C. 20585**

NOTICES

CONFIDENTIALITY STATEMENT

The information required under the various provisions of the URS may be (i) information which is exempt from disclosure to the public under the exemption for trade secrets and confidential commercial information specified in the Freedom of Information Act (5 USC 522) (b) (4) (FOIA) or (ii) prohibited from public release by 18 USC 1905. DOE will determine whether any information submitted should be withheld from public disclosure in accordance with the provisions of 10 CFR Section 1004.00 of DOE's FOIA regulations. By statutory authority, DOE must provide this information when requested to the Congress or any Committee of Congress and the General Accounting Office.

GOVERNMENT PRINTING REGULATIONS

All reports described in these guidelines are subject to Title 44 of the U.S.C. and the Government Printing and Binding Regulations of the Joint Committee of the Congress of the United States (JCP Regulations). Additionally, all reports are subject to DOE Order 1340.1—*Management of Public Communications Publications, and Scientific, Technical, and Engineering Publications*.

The DOE Office of Administration Services (AD40) can provide interpretation assistance if required.

APPLICABILITY TO OTHER GOVERNMENT AGENCIES

The reports in these guidelines have been cleared in accordance with FPNR 101-11.11.

FORMS SUPPLIES

Forms described in these guidelines are available on request from:

U.S. Department of Energy
Technical Information Center
Secondary Distribution
P.O. Box 62
Oak Ridge, TN 37830

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Part I. Introduction

A. Purpose/Scope

These guidelines establish a uniform reporting system (URS) for grants and cooperative agreements. The purpose is to simplify reporting requirements, standardize reporting, and ensure that no assistance recipient submits more reports than needed to achieve accountability for public funds.

The guidelines apply when DOE provides financial assistance by the use of a grant or cooperative agreement. A grant is a legal instrument used to transfer money, property, services, or anything of value to a recipient to accomplish a public purpose of support or stimulation authorized by Federal statute. No substantial involvement by DOE is anticipated during the performance of the contemplated activity. A cooperative agreement is identical except that substantial involvement by DOE is anticipated.

These guidelines do not apply when the purpose of the agreement is to acquire—by purchase, lease, or barter—property or services for the direct use or benefit of the Federal government. In such instances the proper legal instrument is a contract and the *Uniform Reporting System for Contractors* applies.

Grants and cooperative agreements establish different types of relationships between DOE and recipients and cover a wide range of activities. It is not intended that all recipients be required to report in the same way, but that whatever information is submitted be in a standard format with common reporting conventions. For example, a grant-funded, basic research project usually would require an initial budget, a final financial status report and appropriate reports of research findings, while an industrial cooperative agreement to develop energy resources might submit detailed quarterly financial and performance reports.

The primary features of the system are:

- **Standard Forms and Procedures.** This system replaces the many reporting procedures previously imposed by DOE component organizations.
- **Standard Definitions.** Uniform terminology and data elements will minimize ambiguity of meaning and intent. A glossary of terms is provided in Appendix A.
- **Specification of Reporting Requirements.** A checklist is used to identify all reporting requirements at the time of award. The recipient is encouraged to discuss the requirements before the time of award in order to ensure that they are appropriate.

- **Planning Baselines.** The Guidelines describe planning forms which can be included in the Federal assistance application or proposal to present the planned approach and desired results.
- **Flexible Reporting Methods and Application.** Flexibility has been built into the system to ensure that the information requested is relative to the activity performed. The reporting system can accommodate a variety of programs and assistance awards by tailoring the reporting requirements to fit the activity.
- **Single Reporting for Multiple Uses.** A recipient of Federal assistance submits information only once in each reporting period. One submission serves all departmental needs.
- **Formal Problem Identification.** The reporting system provides recipients with a formal method for identifying problems, including those originated by the Federal government.

For purposes of illustration, a hypothetical project—partially funded by DOE under a cooperative agreement—using all the Program Management forms is presented in Part II, Program Management. Part III, Technical Information uses a research grant to illustrate Technical Reporting. Appendix B provides a complete example of the reporting requirements on a research grant.

Exclusion. Certain cooperative agreements are excluded from these Guidelines due to their large size, complexity, and importance. These are major system acquisitions which are covered by OMB circular A-109—Major System Acquisitions. Reporting on these is covered by the *Uniform Reporting System for Contractors*.

* * * * *

Extensive effort has gone into developing these Guidelines for the Department of Energy and Federal assistance recipients. However, it is an evolving system. Comments from users are an integral part of evaluating and maintaining the system's effectiveness. Please send any comments, recommendations, or problems to:

Department of Energy
Assistant Secretary, Management and Administration
Office of Program and Project Management Assessment
CR-331
Washington, D.C. 20585

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graph LR; A[DOE UNIFORM REPORTING SYSTEM GUIDELINES] --> B[DOE PROGRAM ANNOUNCEMENT]; B --> C[BRIEF FORMS DESCRIPTION]; C --> D[DOE PROGRAM ANNOUNCEMENT]; D --> E[MILESTONE PLAN (459B)]; D --> F[BUDGET INFORMATION FORM (CONSTRUCTION) (459D)]; D --> G[BUDGET INFORMATION FORM (459C)]; D --> H[MANAGEMENT SUMMARY REPORT (459E)]; E --> I[NEEDED PLANNING FORMS ARE SELECTED FROM THIS GROUP]; F --> I; G --> I; H --> I;
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The flowchart illustrates the process of selecting needed planning forms. It begins with a box labeled "DOE UNIFORM REPORTING SYSTEM GUIDELINES" (1). An arrow points to a box labeled "DOE PROGRAM ANNOUNCEMENT" (2). From this box, an arrow points to a box labeled "BRIEF FORMS DESCRIPTION". Below this box is another box labeled "DOE PROGRAM ANNOUNCEMENT". From this second "DOE PROGRAM ANNOUNCEMENT" box, an arrow points to a group of four boxes, each representing a different planning form: "MILESTONE PLAN (459B)", "BUDGET INFORMATION FORM (CONSTRUCTION) (459D)", "BUDGET INFORMATION FORM (459C)", and "MANAGEMENT SUMMARY REPORT (459E)". These four boxes are grouped together by a large bracket on the right. Below this group, a box states "NEEDED PLANNING FORMS ARE SELECTED FROM THIS GROUP".

1. These Guidelines contain the plans and reports of the Uniform Reporting System for Federal Assistance.
2. Before issuing a Program Announcement, the DOE program manager determines the information that will be required from the assistance recipient. The information needs of other DOE offices, such as finance, also should be considered.

URS baseline plans can be selected and included as part of the application/proposal form for programs which require measurable program performance. An application/proposal form should be developed and included in the program announcement. In effect, the URS base-

Except for research projects, the planning technique provided for in this Volume is based on the concept of prescribing specific, quantifiable, and measurable baseline information. The information presented in the baseline plans is used to augment the narrative, which is usually included in applications and proposals, and to provide a means of evaluating performance. All DOE programs do not require detailed URS baseline information. Basic research, for example, relies on the content of technical information reports for performance evaluation.

3. The application/proposal, containing the required URS plans, is submitted in accordance with the program announcement. The URS plans will serve as the base against which progress can be measured.

4. The Federal Assistance Reporting Checklist is prepared by the DOE program manager and is included in the assistance award. The Checklist describes the reporting requirements in detail; identifying which, if any, baseline plans should be resubmitted, which other reports are needed, how often they should be submitted, and to whom they should be sent. Any special reporting requirements specified in program legislation, regulation, or DOE Guidelines will be identified on the Checklist. It is once again emphasized that the *DOE Program Manager should select only the minimum essential reports required to satisfy DOE's information requirements.*
5. Financial status reports and program status reports relate directly to the baseline plans and show the financial or

schedule status of the activity as well as identifying cost or schedule problems. Financial status reports (Standard Form 269) must always be submitted; program status reports may be required depending on the nature of the activity.

6. The URS also contains technical reports. The technical reports are for those DOE programs of a technical or scientific nature and are the primary means by which DOE disseminates scientific and technical information, developed under DOE sponsored efforts, to the scientific, technical, academic, and industrial communities as well as to the general public.

C. Key Definitions

1. **Federal Assistance.** "Assistance is where the principal purpose of the relationship is the transfer of money, property, services, or anything of value to a recipient in order to accomplish a public purpose of support or stimulation authorized by Federal statute, rather than of acquisition, by purchase, lease, or barter, of property or services for the direct benefit of the Federal government." ¹ Grants and cooperative agreements are Federal assistance instruments. *Federal assistance is separate and distinct from Federal procurement, which is governed by different rules and regulations.*
2. **Grant.** A grant agreement is the legal instrument reflecting a relationship between the Federal Government and a State or local government or other recipient whenever—
 - (1) the principal purpose of the relationship is the transfer of money, property, services, or anything of value to the State or local government or other recipient in order to accomplish a public purpose of support or stimulation authorized by Federal statute, rather than acquisition, by purchase, lease, or barter, of property or services for the direct benefit or use of the Federal Government; and
 - (2) no substantial involvement is anticipated between the executive agency, acting for the Federal Government, and the State or local government or other recipient during the performance of the contemplated activity.
3. **Cooperative Agreement.** A cooperative agreement is the legal instrument reflecting a relationship between the Federal Government and a State or local government or other recipient whenever—
 - (1) the principal purpose of the relationship is the transfer of money, property, services, or anything of value to the State or local government or other recipient to accomplish a public purpose of support or stimulation authorized by Federal statute, rather than acquisition, by purchase, lease, or barter, of property or services for the direct benefit or use of the Federal Government; and
 - (2) substantial involvement is anticipated between the executive agency, acting for the Federal Government, and the State or local government or other recipient during performance of the contemplated activity.

D. Procedures Not Covered by Guidelines

These Guidelines contain direction for DOE personnel and assistance recipients on standardized application/proposal baseline plans and performance reports. Federal assistance preapplication and payment are not addressed. Information concerning preapplication and payment processes can be found in Federal circulars, DOE Assistance Regs, or the program announcement. Publication management proce-

dures prescribed in DOE Order 1340.1 are addressed briefly in Part III, Technical Information Reporting, but are not detailed. Project managers who anticipate that a public communication will be produced as a result of their grant or Federal Assistance instrument should review DOE Order 1340.1, *Management of Public Communications Publications, and Scientific, Technical, and Engineering Publications*, early in the project planning process.

E. Award Clause of the Uniform Reporting System for Federal Assistance

Appendix C contains a sample clause which the DOE awarding officer can use in the grant or cooperative agreement to invoke the Uniform Reporting System.

F. Application of Guidelines

These Guidelines apply to DOE grants and cooperative agreements with state and local governments, nonprofit organizations, institutions of higher education, hospitals, individuals, profit-making organizations, and any other eligible assistance recipients.

G. Forms

There are three types of forms—baseline plans, status reports, and technical information reports. The Federal Assistance Reporting Checklist, contained in each award, is used to identify which forms will be required for that particular effort. A brief description of the forms follows. More discussion of the baseline plans and reports is included in this volume in Parts II and III.

1. Baseline Plans

The Uniform Reporting System offers simple planning procedures and forms to augment the narrative project description contained in the application/proposal. Discrete, measurable units of the proposed work are presented in the baseline plans. The baseline plans provide a specific outline of what the assistance recipient intends to do, how it is intended to be accomplished, and the time and cost involved. These baseline plans are developed and submitted with the application/proposal to serve as the standard against which status and progress can be measured during the performance period. The following are baseline planning forms.

- *The Federal Assistance Milestone Plan* and an accompanying Milestone Log present a schedule of the planned activity, with major milestones and intermediate events identified.
- *The Federal Assistance Budget Information Form* (construction or nonconstruction) presents the planned costs.
- *The Federal Assistance Management Summary Report* presents the planned costs and the planned schedule in a capsulized format.

¹ DOE Assistance Regulations, Final Rule, 3/8/79, 600.21 (a)

2. Status Reports

The status reports provide the performance information required to determine program effectiveness. These reports provide the information which DOE requires to maintain accountability for public funds. The reports are submitted according to the frequency indicated by the DOE program manager on the Federal Assistance Reporting Checklist. The reports show actual costs, schedule progress, and total project status to date. When the status reports are compared with the baseline plans, accomplishments can be noted, problems become apparent, and corrective action can be taken. The following are status reports:

- *The Financial Status Report* presents budget status information.
- *The Federal Assistance Management Summary Report* relates planned progress and costs to actual progress and costs in a capsulized format.
- *The Federal Assistance Program/Project Status Report* presents a brief narrative description of accomplishments, problems, progress, and forecasts.

3. Technical Information Reports

Technical reports present scientific, technical, and engineering information generated by DOE sponsored RD&D efforts. The reports serve as input to DOE's central energy information data base at the Technical Information Center and to other technical information systems. The reports listed below are included in the Uniform Reporting System.

- *The Notice of Energy RD&D Project* identifies the performance objectives, the technical approach, and the expected results of research, development, and demonstration (RD&D) efforts for assimilation into the DOE Information System and the Smithsonian Scientific Information Exchange (SSIE).
- *The Technical Progress Report* periodically presents accomplishments and findings.
- *The Topical Report* describes the technical results for a specific task or phase of the activity.
- *The Final Technical Report* presents a comprehensive accounting of the completed effort.

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Part II. Program Management Reporting

A. How to Select Plans and Reports

1. General

The Guidelines are not intended to impose extraneous reporting requirements on assistance recipients. Only those plans and reports essential to monitor the activity should be selected by the DOE program manager.

Reporting requirements stem from the nature of the assistance agreement. In the case of a grant, the recipient should expect to manage the activity without DOE collaboration, participation, or intervention. The purpose of reporting is to provide a reasonable assurance that the terms of the award are not being violated.

With a cooperative agreement, the recipient should expect DOE collaboration or substantial involvement. Depending on the terms of the agreement, DOE might retain authority to redirect the work, review one stage of the work before work can begin on subsequent stages, or be involved in management in other ways. As with grants the purpose of reporting is to provide the minimum information DOE needs to carry out the responsibilities placed on it by the terms of the agreement. If, for example, the agreement allows DOE to redirect the work, it must know that work has been accomplished before it can decide whether redirection is necessary.

When designing a reporting requirement which will serve either of these two basic purposes these factors should be considered:

The Activity to be Performed. A major determinant in the selection should be the nature of the work. Program managers should consider the scope and characteristics of the activity in making an appropriate selection of baseline plans and reports. Most basic research can be characterized as scientific inquiry with uncertain results which does not show progress on a scheduled basis. On the other hand, certain conservation programs have specific goals (for example, the weatherization of X number of homes for the elderly during FY 81).

The Duration and Complexity of the Effort. The extent and complexity of the activity should suggest the kinds of information necessary for DOE either to monitor the activity or to be involved in a responsible manner.

The Value of the Effort. The amount of reporting necessary will often be determined by the overall value of the program/project. High dollar value programs or projects generally will require more reporting than low dollar programs or projects.

The Recipients's Reporting Burden. The number of reports and the frequency of submission should be proportionate to the effort exerted, in terms of cost and manpower requirements. Program managers should consider the amount of time spent on report preparation in relation to the time required to accomplish the overall objective.

Also, other factors may establish additional purposes which the reports must serve. Among these are:

The Program Legislation, Federal Regulations and Guidance. Some DOE program legislation requires specific reporting, controls, and procedures. Program managers and assistance recipients must abide by the statutory and regulatory terms of the program to ensure the collection of essential information.

The Significance of the Effort. High interest by the public, Congress, or the Administration will require current and timely information on performance.

The Information Requirements of other DOE Offices and Components. The data requirements of the DOE Finance and Procurement Office should be identified and satisfied. Any other DOE offices involved in a stewardship role should identify their data requirement for the program manager preparing the checklist. Report distribution is discussed in more detail in Section D.

Reporting serves different purposes in grants than it does in cooperative agreements. In selecting plans and reports, the first step is to determine how that purpose can best be achieved; the second step is to determine whether there are additional purposes that the reporting should accomplish.

Before an award is made, the program manager decides which plans should be submitted by applicants and which reports will be required. The Federal Assistance Reporting Checklist, prepared by the program manager and included in the award, reiterates the planning and reporting requirements and provides detailed information for report submission.

2. When Reports are Due

The date for submitting reports is identified for the recipient on the Federal Assistance Reporting Checklist in the award. How often a report is submitted is indicated by a letter code in the "Frequency" column. The frequency code due dates are provided below as they appear on the checklist:

- A (As necessary) Within 5 calendar days after event.
- F (Final) Within 90 days of the end of performance on the Federal Assistance effort.
- X (With proposal or application) Accompanying proposal, application, or with significant planning change.
- O (One time) Within 30 days after award.
- Q (Quarterly) Within 30 days after the end of a calendar quarter.
- S (Seminannually) Within 30 days after end of program half year.
- Y (Yearly) Within 30 days after end of the program year (Reports may be submitted within 90 days after end of the program year when circumstances require).

3. Distribution of Reports

The DOE program manager should be aware of the information needs of other DOE offices and should make provisions to distribute reports to them. Insofar as possible, award recipients should not be asked to submit multiple reports to several addresses.

Usually, the "addresses" column of the Federal Assistance Reporting Checklist will indicate that reports should be submitted as follows (if further distribution is required, the DOE program manager or other program officer should make such distribution):

- a. The Financial Status Report should be submitted by the recipient to the awarding officer and to the DOE Finance Office so that costs can be entered into DOE's Financial Information System. A copy of the report will usually be submitted to the program manager or other appropriate person in the program office. The DOE program manager should provide the assistance recipient with a budget and reporting (B&R) number for the current fiscal year so that the recipient can include the current B&R number on the financial status report.
- b. Other program status reports should be submitted to the DOE program manager or to a similar appropriate addressee in the program office.

- c. The technical report requirements of the DOE patent counsel and the Technical Information Center are discussed in Part III—Technical Information Reporting. These requirements should be identified on the checklist.

4. Selection Guides for Baseline Plans and Reports

The following tables suggest appropriate baseline plans and reports for the types of activity performed under grants and cooperative agreements. These tables are provided only as initial references for DOE program managers. DOE program managers are expected to apply their specific knowledge of all factors involved to make appropriate report selections. Discretion in selection may be limited by legislation (see Footnote 1, page 9).

Clearly, the information required from grantees involved in basic research or small appropriate technology projects will be much less than information required from those involved in cooperative agreement efforts.

The DOE program manager also must consider restrictions on financial reporting contained in OMB circulars and the DOE Assistance Regulations. These restrictions are shown as footnotes to the selection guide tables.

There are special cases in which more frequent or more detailed reporting may be required. Generally, these are cases in which the recipient has a history of poor performance, is not financially stable, or has a management system which does not meet prescribed standards. The procedure to be followed in such instances is explained in Paragraph 10 of OMB Circular A-102 and in Paragraph 9 of OMB Circular A-110 and should be accomplished according to procedures established in DOE Assistance Regulations.

5. Preparing the Program Announcement to Include Reporting Requirements

After determining which plans and reports are necessary for the activity, the DOE program manager will insure that the awarding officer incorporates these requirements into the program announcement. The announcement should contain the program identification number from the catalog of Federal Domestic Assistance and identify any specific program legislation for the applicant/proposer. Blank forms for the required baseline plans should be included in the program announcement as part of the application/proposal package. Additionally, the program announcement should contain a brief description of the required status reports to assist the applicant/proposer in determining the total administrative costs. A brief description of the Uniform Reporting System, each baseline plan, and each status report is provided in Appendix D. These are offered as suggested descriptions of the system, the plans, and the reports for inclusion in the program announcement where appropriate. The DOE program manager and the awarding officer should work together to develop the program

Table 1. Selection Guide for Grants

	RESEARCH PROGRAMS	HUMAN RESOURCE DEVELOPMENT PROGRAMS	CONSERVATION & PUBLIC SERVICE PROGRAMS	TECHNOLOGY/RESOURCE DEVELOPMENT & PRODUCTION PROGRAMS
MILESTONE PLAN				X
BUDGET INFORMATION FORM	X	X	X	X
MANAGEMENT SUMMARY REPORT ¹			XQF	QF
PROGRAM/PROJECT STATUS REPORT ¹		F	QF	QF
FINANCIAL STATUS REPORT ¹	YF	YF	QF	QF
NOTICE OF RD&D ²	OY			OY
TECHNICAL PROGRESS REPORT ^{1&3}	Y			Y
TECHNICAL TOPICAL REPORT	A			A
FINAL TECHNICAL REPORT ³	F			F

Table 2. Selection Guide for Cooperative Agreements

	RESEARCH PROGRAMS	HUMAN RESOURCE DEVELOPMENT PROGRAMS	CONSERVATION & PUBLIC SERVICE PROGRAMS	TECHNOLOGY/RESOURCE DEVELOPMENT & PRODUCTION PROGRAMS
MILESTONE PLAN			XY	XY
BUDGET INFORMATION FORM	X	X	X	X
MANAGEMENT SUMMARY REPORT ¹			XQF	QF
PROGRAM/PROJECT STATUS REPORT	Y	YF	QF	QF
FINANCIAL STATUS REPORT ¹	YF	YF	QF	QF
NOTICE OF RD&D ²	OY			OY
TECHNICAL PROGRESS REPORT ^{1&3}	Y			Y
TECHNICAL TOPICAL REPORT	A			A
FINAL TECHNICAL REPORT ³	F			F

¹ If recipients are state/local governments, indian tribes, institutions of higher education, hospitals, or non-profit organizations, an FSR cannot be required more often than quarterly nor less than annually. (OMB Circulars A-102 & A-110)

If recipients are state/local governments, indian tribes, institutions of higher education, hospitals or non-profit organizations and if the submission of either a "Request for Advance or Reimbursement" (SF 270) or a Federal Cash Transaction Report (SF 272) provides adequate information, DOE need not require the submission of an FSR, except that a final FSR must always be required when the "Request for Advance or Reimbursement" is used only for advances. (OMB Circulars A-102 & A-110)

If recipients are profit making organizations, individuals, or foreign organizations, and if the request for payment includes cumulative costs incurred by budget cost element, the amount previously received from DOE and the current amount requested, no additional FSR shall be requested but a final cost report shall be submitted. (DOE-AR 600.109)

² A notice of Energy RD&D must be submitted at the beginning of each project year. (DOE Order 1340.1)

³ The minimum requirement for technical reporting is a Final Technical Report. For efforts lasting longer than one year a Technical Report is required annually. (DOE Order 1340.1)

announcement to ensure that baseline plans and status report descriptions are included.

6. Preparation of the Federal Assistance Reporting Checklist (Form EIA-459A)

The DOE program manager states the reporting requirements in the program announcement via a Federal Assistance Reporting Checklist which will become a part of the assistance award. The DOE program manager completes the Checklist by providing specifics in each of the following areas:

- Selection of reports;
- Frequency of reports;
- Distribution of reports;
 - Name/Title
 - Address
- Number of copies to be submitted;
- Special instructions

- Budget & Reporting (B&R) number for cost reporting
- Program specific reports, reporting categories, or topical requirements.

Specific information for preparing a Checklist is on the reverse of the form. Addresses of report recipients must be provided on an additional page. If more space is needed in Item 5, additional pages can be attached. A completed Checklist and attachment are shown as Figures 2 and 3.

Two signature blocks are provided on the Checklist. The DOE program manager preparing the Checklist should sign Item 6. When the preparer of the Checklist exceeds the recommended selection, as noted in these Guidelines, a review and approval of at least the next level of supervision is required. *It is the reviewer's responsibility to ensure that only minimum essential data necessary for effective program/project management appears as a Checklist requirement.*

**U.S. DEPARTMENT OF ENERGY
FEDERAL ASSISTANCE REPORTING CHECKLIST**

FORM EIA-459A
(10-80)

FORM APPROVED
OMB NO 1900 0127

1. Identification Number: Cooperative Agreement DE-FC-01-00RA1234	2. Program/Project Title: Pilot Energy Awareness Training Program																		
3. Recipient:																			
4. Reporting Requirements: PROGRAM/PROJECT MANAGEMENT REPORTING ☒ Federal Assistance Milestone Plan ☒ Federal Assistance Budget Information Form ☒ Federal Assistance Management Summary Report ☒ Federal Assistance Program/Project Status Report ☒ Financial Status Report, OMB Form 289 TECHNICAL INFORMATION REPORTING ☐ Notice of Energy RD&D ☐ Technical Progress Report ☐ Topical Report ☐ Final Technical Report	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Frequency</th> <th style="text-align: center;">No. of Copies</th> <th style="text-align: center;">Addressees</th> </tr> </thead> <tbody> <tr> <td align="center">X, Y</td> <td align="center">1, 3</td> <td align="center">A, B</td> </tr> <tr> <td align="center">X, Y</td> <td align="center">1, 3</td> <td align="center">A, B</td> </tr> <tr> <td align="center">Q</td> <td align="center">1</td> <td align="center">A</td> </tr> <tr> <td align="center">Q</td> <td align="center">1</td> <td align="center">A</td> </tr> <tr> <td align="center">Q</td> <td align="center">1, 1, 1</td> <td align="center">A, B, C</td> </tr> </tbody> </table>	Frequency	No. of Copies	Addressees	X, Y	1, 3	A, B	X, Y	1, 3	A, B	Q	1	A	Q	1	A	Q	1, 1, 1	A, B, C
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X, Y	1, 3	A, B																	
Q	1	A																	
Q	1	A																	
Q	1, 1, 1	A, B, C																	
FREQUENCY CODES AND DUE DATES: A - As Necessary; within 5 calendar days after events. F - Final; 90 calendar days after the performance of the effort ends. Q - Quarterly; within 30 days after end of calendar quarter or portion thereof. O - One time after project starts; within 30 days after award. X - Required with proposals or with the application or with significant planning changes. Y - Yearly; 30 days after the end of program year. (Financial Status Reports 90 days). S - Semiannually; within 30 days after end of program fiscal half year.																			
5. Special Instructions: 1. No technical reports are required due to the nature of this program. 2. A final narrative report summarizing accomplishments and evaluating the program is due 90 days after the program ends.																			
6. Prepared by: (Signature and Date) 1/15/81 T. J. Noteworthy <i>T. J. Noteworthy</i>	7. Reviewed by: (Signature and Date) M. B. Smith <i>M. B. Smith</i> 1/19/81																		

Figure 2

FEDERAL ASSISTANCE REPORTING CHECKLIST

PURPOSE

This form serves to identify plans and reports selected by DOE as reporting requirements for the Federal Assistance Program/Project.

INSTRUCTIONS

- Item 1 — Enter the program /project identification number as it appears in the official award.
- Item 2 — Enter the program/project description as it appears in the official award.
- Item 3 — Enter the name of the recipient.
- Item 4 — Check spaces to indicate plans and reports selected. For each report checked, indicate frequency of delivery in column provided using one of the frequency of delivery codes as shown, as well as the number of copies requested and to whom they should be sent.

Federal Assistance Milestone Plan — presents, with the accompanying Milestone Log, a schedule of the planned activity.

Federal Assistance Budget Information Form — presents the planned costs.

Federal Assistance Management Summary Report — registers planned progress and costs to actual progress and costs in a capsulized format.

Federal Assistance Program/Project Status Report — periodically reports project status, explains variances and problems, and discusses any other areas of concern or achievements.

Financial Status Report, OMB Form 269 — presents the status of funds committed to the project.

Notice of energy R&D Project — provides information on unclassified DOE R&D Project for dissemination to the scientific, technical, and industrial communities and to the public. Also provides information to the Smithsonian Information Exchange and to the DOE Technical Information Center.

Technical Progress Report — periodically reports progress and/or results of DOE supported R&D and scientific projects covering a specific reporting period.

Topical Report — presents the technical results of work performed on a specific phase of a project.

Final Technical Report — presents a technical accounting of the total work performed on a project.

Frequency Codes - Each code represents a specific reporting frequency (such as Quarterly). These time periods are suggested in the program announcement and negotiated at the time of the award.

- Item 5 — Identify any special reporting requirements or instructions not identified in Item 4. (Use additional sheets as necessary.).

- Item 6 — Signature of person preparing the checklist and the date prepared. Preparation is by person responsible for program solicitation.

- Item 7 — Signature of the person reviewing the checklist and date reviewed.

Attachment to Federal Assistance Reporting Checklist

Report Distribution List

- A. T. J. Noteworthy, Program Manager
San Francisco Operations Office
U.S. Department of Energy
1333 Broadway
Oakland, California 94612
- B. S. F. Gelman, Awarding Officer
San Francisco Operations Office
U.S. Department of Energy
1333 Broadway
Oakland, California 94612
- C. A. D. Bowman, Financial Officer
San Francisco Operations Office
U.S. Department of Energy
1333 Broadway
Oakland, California 94612

Figure 3

B. How to Prepare Plans and Reports

1. General

Forms are used for the URS plans and reports. Instructions for the preparation of plan and report forms appear on the reverse side of each form. The examples in these Guidelines illustrate those instructions. Although each plan or report addresses different aspects of performance, the following data elements are common to all the forms.

- **Program/Project Identification Number**—The award number as it appears on the award, if available.
- **Program/Project Title**—The official title as it appears in the award, if available. Otherwise the title should be short and descriptive.
- **The Name of the Proposer/Recipient**—This information should appear as it does or would in the award.
- **The Planning or Reporting Period**—The period of time covered by the plan or the report, identified by inclusive dates.
- **The Program/Project Start Date**—The date identified in the award as the official start date, if available.

2. Structuring of Reporting Elements

A major facet of management is identifying and organizing the objectives of the work and planning the resources to accomplish them. Before any program begins, the prime objectives must be carefully determined and defined as well as the supporting objectives. All of the objectives must be organized and interrelated to attain the program goals, and the objectives must be communicated to all parties involved in the work.

The range of DOE Federal Assistance programs is broad and diverse. At one extreme are programs which require substantial monitoring. Plans and reports for these efforts are characterized by planning and reporting of discrete, measureable milestones or accomplishments. Examples of these efforts are the number of homes insulated or the number of schools and hospitals which have had energy audits. Other assistance work is not measurable in terms of quantity. For example, research is monitored on the basis of the quality of technical aspects of the work. Periodic review of technical reports by experts in the specific field or conversations with the researcher are the accepted methods for reviewing and evaluating basic research work. Some DOE Federal

assistance projects are characterized by a total lack of predetermined structure. Programs which promote innovation and invention are examples of this type of program.

The program announcement will describe broad areas of scientific or engineering endeavors which is in the public interest to fund. In these programs the applicant/proposer will describe the structure of the proposed work. Clearly, it is in the best interest of the applicant/proposer to establish a logical and understandable approach for the work effort, and the Federal Assistance Milestone Plan provides sufficient flexibility to accommodate a wide range of work structures.

In those cases where a work planning and reporting structure is desired, the DOE program manager will determine the reporting elements which are required to monitor the work objectively. An explicit description of these reporting elements should be included in the program announcement in order for all applicants/proposers to respond uniformly. This facilitates the review and evaluation of applications/proposals and, later, facilitates the monitoring process by having a reporting standard for measuring progress on similar work.

A management tool that can assist a manager in organizing his project is the work breakdown structure. For illustration, a work breakdown structure is depicted in Figure 4.

Level I refers to the program or project objective. For some programs, DOE will define level I and level II elements on the Federal Assistance Reporting Checklist. In the example, level I corresponds to "Pilot Energy Awareness Training Program," and is numbered 1.0.

Level II consists of the component tasks essential to fulfill the objective. In the example, there are five tasks which must be accomplished in order to establish, conduct and evaluate the "Pilot Energy Awareness Training Program." These level II components are commonly referred to as elements of work and numbered progressively 1.1, 1.2, 1.3, 1.4, and 1.5.

Level III outlines the sub-tasks necessary for the completion of the level II tasks. For example, in order to "Produce Training Materials" (1.2), there are four sub-tasks which need to be performed. These are numbered 1.2.1, 1.2.2, 1.2.3, and 1.2.4. These sub-tasks are not necessarily a sequential ordering of work to be performed, but represent a breakdown of the level II task.

EXAMPLE WORK BREAKDOWN STRUCTURE FOR PILOT ENERGY AWARENESS TRAINING PROGRAM

Figure 4

3. Federal Assistance Milestone Plan (Form EIA-459B)

Purpose

The Federal Assistance Milestone Plan (FAMP) presents the schedule for the planned work. The FAMP establishes the recipient's time schedule for accomplishing the planned events and milestones for each reporting element identified in the program announcement. The form is normally accompanied by a Milestone Log which list events and milestones together with the planned completion date of each.

Standard DOE charting symbols and charting conventions (described on the reverse side of the form) are used to chart the intermediate events and milestones. Detailed preparation instructions appear on the reverse side of the form. Intermediate events and critical milestones are further identified in an attached Milestone Log, and include the identification number (such as 1. A.), descriptive name of the event or milestone, and the scheduled date of completion. A sample baseline Milestone Plan and a companion Milestone Log are discussed as Figures 5 and 6.

General Instructions

The Federal Assistance Milestone Plan will be prepared to the level of detail specified in the program announcement. A schedule should be developed for the total effort from start to finish. The FAMP should provide more detail in the current year and less detail for later years.

Discussion of the Example, Figure 5

Item 6—Identification Number. The identification number is a milestone reference number given to the task by the recipient or taken from the Work Breakdown

Structure. In this example, the milestone identification numbers correspond to the numbers given to the Work Breakdown Structure elements.

Item 7—Planning Category (Work Breakdown Structure Tasks). A short descriptive title is entered for each activity. In the example, the titles correspond to the Work Breakdown Structure elements.

Item 8—Program/Project Duration. The blocks extending left to right represent convenient units of time which cover the duration of the work effort. In this example, the first month of planned activity is April, identified by an "A" in the first block.

Item 9—Comments. This column is provided for the convenience of the planner and allows the addition of any comments, notes, names of performers or sub-grantees, or other appropriate items. For Task 1.4, there is a comment that 30 seminars will be conducted.

Associated with the FAMP is the Milestone Log.

Discussion of the Example, Figure 6

The purpose of the Milestone Log is to list the events and milestones which are depicted on the Milestone Plan. Also, there are columns for the planned and actual occurrence dates for each of the events listed.

For example, activity 1.1 on the Milestone Plan has three events occurring during its duration. "Draft Training Plan Prepared" (1.1A), "Draft Circulated for Comments" (1.1B), and "Approved Training Plan Completed" (1.1). The planned occurrence dates for these events are 4/30/81, 5/14/81, and 5/29/81 respectively. Since the Milestone Log is not used as a required status report, the "Actual Completion Date" Column is for the convenience of the user only.

[illegible]

Figure 5

If this form is used as a plan:

No grant or cooperative agreement may be awarded unless a completed application has been received (DOE Organizational Act: PL. 95-91: 42 USC 7254 and Federal Grant and Cooperative Agreement Act of 1977: PL 95-224: 41 USC 508).

If this form is used as a report:

No further monies or other benefits may be paid out under this program unless this report is completed and filed as required by existing law and regulations (DOE Organizational Act: PL. 95-91: 42 USC 7254 and Federal Grant and Cooperative Agreement Act of 1977: PL. 95-224: 41 USC 508).

See DOE/CR-0001-3 for provisions concerning confidentiality of information.

FEDERAL ASSISTANCE MILESTONE PLAN

PURPOSE

The Milestone Plan is used as a planning tool, establishing the time schedule for accomplishing the planned work. Usually, it is accompanied by the Milestone Log.

INSTRUCTIONS

- Item 1 - Enter the Federal grant or agreement identification number for the current year as it appears in the official award, if known.
- Item 2 - Enter the identifying name or description of the program/project, and, if applicable, the project identification number.
- Item 3 - Enter the name and address of the performer responsible for managing the task.
- Item 4 - Enter the original start date of the program/project.
- Item 5 - Enter the official completion date as of the latest modification.
- Item 6 - Enter the milestones' identification numbers from the work breakdown structure or as assigned by the DOE program office or managing office.
- Item 7 - Enter a brief, identifying description of the milestones.
- Item 8 - Enter the first letter of each month of the program/project duration in the appropriate boxes if the duration is 24 months or less. Divide the program/project time period up into intervals of two or more months for durations longer than 24 months and enter the first letter of the last month of each interval in the appropriate box.
- Item 9 - Enter the name of the organization responsible for performing the work if different than in Item 4 or any note for clarification of line entries.
- Item 10 - Enter any explanatory notes. If more space is required, attach additional sheets and so indicate in this block.
- Item 11 - Enter the signature of the Federal Assistance Recipient and the date signed to verify that the information is reasonable, based on knowledge of the project.
- Item 12 - Signature of the DOE reviewer and the date signed, which indicates that the information on the plan has been reviewed and appears reasonable.

CHARTING INFORMATION

SYMBOLS

- △ Major Milestone
- ▽ Intermediate Event (Deliverable, Supporting Milestone, or Decision Point)
- ▲ Intermediate Event completed early or late
- ◇ Proposed Scheduled Deviation (late or early) for a major milestone
- Activity Bar
- Dollar Ceiling
- Time Now
- ⋮ Continues beyond Time frame shown

EXAMPLES

- A Major milestone with an activity bar
- B Time now and work done
- C Schedule Deviation (not yet approved)
- D First change approved (slippage)
- E Improvement, not contractually implemented
- F First change approved (improvement)
- G Activity ahead of schedule
- H Activity behind schedule
- I Late and on time completion of intermediate events A and B, respectively.
- J Same as Example I above except that here a time line is used in place of an activity bar
- K Original major milestone date and four subsequent approved changes (all slippage) to that date
- L Original major milestone date and two subsequent approved changes (one slippage, one improvement) to that date
- M Intermediate event schedule deviation

MILESTONE LOG

**Pilot Energy Awareness
Training Program**

PROGRAM/PROJECT TITLE

IDENTIFICATION NO.	DESCRIPTION	PLANNED COMPLETION DATE	ACTUAL COMPLETION DATE	COMMENTS
1.1A	Draft Training Plan Prepared	4/30/81		
1.1B	Draft Circulated For Comments	5/14/81		
1.1	Approved Training Plan Completed	5/29/81		
1.2A	Training Modules Developed	7/10/81		
1.2B	Registration Materials Designed	7/17/81		
1.2C	Audio-visual Aids Designed	7/31/81		
1.2D	Handouts Designed	7/31/81		
1.2	All Training Materials Printed	8/31/81		
1.3A	Training Locations Selected	6/12/81		
1.3B	Training Scheduled	6/26/81		
1.3C	Advertising Campaign Developed	7/17/81		
1.3D	Ads Run In Local Papers	1/08/82		
1.3	Training Preparation Completed	1/08/82		
1.4A	Registration Materials Received And Sorted	1/15/82		
1.4B	Training Sessions Held	1/29/82		
1.4	Training Completed	1/29/82		
1.5A	Evaluation Criteria Established	8/07/81		
1.5B	Evaluation Survey Conducted	2/05/82		
1.5C	Evaluation Data Analyzed	3/05/82		
1.5	Evaluation Report Prepared	3/31/82		

Figure 6

4. Federal Assistance Budget Information Form (Form EIA-459C)

Purpose

One of the two available Federal Assistance Budget Forms (Construction and Non-Construction) is used to establish the planned budget for the complete effort. It is usually submitted in the application or proposal to provide basic cost information for the assistance award. The cost information provided should represent a well-prepared cost plan for the total effort.

General Instructions

Before the Budget Information Form can be completed, the planned schedule or activity should be examined to determine what resources (manpower, materials, facilities) will be required to accomplish the work. The cost of these can be projected against the schedule of activities. The cost can be planned on a monthly, quarterly, or annual basis and totaled on the Budget Information Form. An example of a completed Budget Information Form for projects which do not involve construction or land as discussed as Figure 7.

If the major purpose of the effort is construction, land acquisition or land development, and the application is for \$10,000 or greater, the Federal Assistance Budget

Information Form for construction should be used. This form is shown in Figures 7A and 7B. It has not been filled out because the hypothetical training program does not involve construction. Otherwise, if the application is for less than \$10,000 and does not require clearinghouse approval (OMB Circular A-95), and environmental impact statement, nor the relocation of persons, businesses or farms, the Budget Information Form shown in Figure 7 will be used.

Discussion of the Example, Figure 7

Items 1-5. These items display the identifying characteristics of the program/project of concern.

Section A—Budget Summary. In this section the total budget is presented for the particular program. Since this project pertains to a single Federal Assistance program with no functional or activity breakdown, only line 1 is used.

Section B—Budget Categories. In this section the total budget is presented for each of the cost categories of direct costs with indirect costs computed at a rate agreed upon at the time of award or, in the case of many recipients, predetermined by a single Federal agency assigned the responsibility of negotiating a rate accepted by all Federal agencies.

FEDERAL ASSISTANCE BUDGET INFORMATION FORM

FORM EIA-459C
(10/80)

FORM APPROVED
OMB No. 1900-0127

1. Program/Project Identification No DE-EC-01-00RA1234	2. Program/Project Title Pilot Energy Awareness Training Program (P.E.A.T.P.)
3. Name and Address ACE Utility Company Utopia, Illinois	4. Program/Project Start Date 4/01/81 5. Completion Date 3/31/82

SECTION A - BUDGET SUMMARY

Grant Program, Function or Activity (a)	Federal Catalog No (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. P.E.A.T.P.	81.007	\$	\$	\$ 197,300	\$ 97,700	\$295,000
2.						
3.						
4.						
5. TOTALS		\$	\$	\$ 197,300	\$ 97,700	\$295,000

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) P.E.A.T.P	(2)	(3)	(4)	
a. Personnel	\$ 160,200	\$	\$	\$	\$ 160,200
b. Fringe Benefits	17,500				17,500
c. Travel	30,800				30,800
d. Equipment	4,400				4,400
e. Supplies	8,700				8,700
f. Contractual	20,400				20,400
g. Construction	- 0 -				- 0 -
h. Other	- 0 -				- 0 -
i. Total Direct Charges	242,000				242,000
j. Indirect Charges	53,000				53,000
k. TOTALS	\$ 295,000	\$	\$	\$	\$ 295,000
7. Program Income	- 0 -	\$	\$	\$	- 0 -

Figure 7

FEDERAL ASSISTANCE BUDGET INFORMATION FORM

INSTRUCTIONS

- Item 1 - Enter the Federal Grant or agreement identification number for the current year as it appears in the official award, if known.
- Item 2 - Enter the Program/Project official title as it appears in the award.
- Item 3 - Enter name and address of the agency or office responsible for coordination and administration of the Program/Project.
- Item 4 - Enter the official start date.
- Item 5 - Enter the official completion date as of the latest official modification.

Section A. Budget Summary

Lines 1-4, Columns (a) and (b).

For applications pertaining to a single Federal grant program (Federal Domestic Assistance Catalog number) and not requiring a functional or activity breakdown, enter on Line 1 under Column (a) the catalog program title and the catalog number in Column (b).

For applications pertaining to a single program requiring budget amounts by multiple functions or activities, enter the name of each activity or function on each line in Column (a), and enter the catalog number in Column (b). For applications pertaining to multiple programs where none of the programs require a breakdown by function or activity, enter the catalog program title on each line in Column (a) and the respective catalog number on each line in Column (b).

For applications pertaining to multiple programs where one or more programs require a breakdown by function or activity, prepare a separate sheet for each program requiring the breakdown. Additional sheets should be used when one form does not provide adequate space for all breakdown of data required. However, when more than one sheet is used, the first page should provide the summary totals by programs.

Lines 1-4, Columns (c) through (g).

For new applications, leave Columns (c) and (d) blank. For each line entry in Columns (a) and (b), enter in Columns (e), (f), and (g) the appropriate amounts of funds needed to support the project.

For continuing grant program applications, submit these forms before the end of each funding year if required by Program Manager. Enter in Columns (c) and (d) the estimated amounts of funds which will remain unobligated at the end of the grant funding period only if the award instructions provide for this. Otherwise, leave these columns blank. Enter in Columns (e) and (f) the amount of funds needed for the upcoming period. The amount(s) in

Column (g) should be the sum of the amounts in Columns (e) and (f).

For supplemental grants and changes to existing grants, do not use Columns (c) and (d). Enter in Column (e) the amount of the increase or decrease of Federal funds and enter in Column (f) the amount of increase or decrease of non-Federal funds. In Column (g) enter the new total budgeted amount (Federal and non-Federal) which includes the total previous authorized budgeted amounts plus or minus, as appropriate, the amounts shown in Columns (e) and (f). The amount(s) in Column (g) should not equal the sum of the amounts in Columns (e) and (f).

Line 5 — Show the totals for all columns used.

Section B. Budget Categories

In the column headings (1) through (4), enter the titles of the same programs, functions, and activities shown on Lines 1-4, Column (a), Section A. When additional sheets were prepared for Section A, provide similar column headings on each sheet. For each program, function or activity, fill in the total requirements for funds (both Federal and non-Federal) by object class categories.

Lines 6a-h — Show the estimated amount for each direct cost budget (object class) category for each column with program, function or activity heading.

Line 6i — Show the totals of Lines 6a to 6h in each column.

Line 6j — Show the amount of indirect cost. Refer to FMC 74-4.

Line 6k — Enter the total of amounts on Lines 6i and 6j. For all applications for new grants and continuation grants the total amount in Column (5), Line 6k, should be the same as the total amount shown in Section A, Column (g), Line 5. For supplemental grants and changes to grants, the total amount of the increase or decrease as shown in Columns (1)-(4), Line 6k, should be the same as the sum of the amounts in Section A, Columns (e) and (f) on Line 5. When additional sheets were prepared, the last two sentences apply only to the first page with summary totals.

Line 7 — Enter the estimated amount of income, if any, expected to be generated from this project. Do not add or subtract this amount from the total project amount. Show under the program narrative statement the nature and source of income. The estimated amount of program income may be considered by the Program Manager in determining the total amount of the grant.

THIS REPORT IS REQUIRED IN ACCORDANCE WITH 42 U.S.C. 7254 AND 40 U.S.C. 471 ET SEQ. FAILURE TO REPORT MAY RESULT IN CONTRACT TERMINATION OR PENALTIES AS PROVIDED BY LAW.

SEE DOE/CR-0001/3 FOR PROVISIONS CONCERNING CONFIDENTIALITY OF INFORMATION.

FEDERAL ASSISTANCE BUDGET INFORMATION FORM (CONSTRUCTION)

FORM EIA-459D
(10/80)

FORM APPROVED
OMB No. 1900-0127

1. PROGRAM/PROJECT IDENTIFICATION NO.	2. PROGRAM/PROJECT TITLE
3. NAME AND ADDRESS	4. PROGRAM/PROJECT START DATE
	5. COMPLETION DATE

SECTION A — GENERAL

1. Federal Domestic Assistance Catalog No. _____
2. Functional or Other Breakout _____

SECTION B — CALCULATION OF FEDERAL GRANT

Cost Classification	Use Only for Revisions		Total Amount Required
	Latest Approved Amount	Adjustment + or (-)	
1. Administration Expense	\$	\$	\$
2. Preliminary Expense			
3. Land, Structures, Right-of-way			
4. Architectural Engineering Basic Fees			
5. Other Architectural Engineering Fees			
6. Project Inspection Fees			
7. Land Development			
8. Relocation Expenses			
9. Relocation Payments to Individuals and Businesses			
10. Demolition and Removal			
11. Construction and Project Improvement			
12. Equipment			
13. Miscellaneous			
14. Total (Lines 1 through 13)			
15. Estimated Income (if applicable)			
16. Net Project Amount (Line 14 minus Line 15)			
17. Less: Ineligible Exclusions			
18. Add: Contingencies			
19. Total Project Amount (Excluding Rehabilitation Grants)			
20. Federal Share Requested of Line 19			
21. Add Rehabilitation Grants Requested (100%)			
22. Total Federal Grant Requested (Lines 20 & 21)			
23. Grantee Share			
24. Other Shares			
25. Total Project (Lines 22, 23 & 24)	\$	\$	\$

Figure 7A

FEDERAL ASSISTANCE BUDGET INFORMATION FORM
(CONSTRUCTION)

INSTRUCTIONS

Item 1 — Enter the Federal Grant or agreement identification number for the current year if an award has been made.

Item 2 — Enter the Program/Project title.

Item 3 — Enter name and address of the agency or office responsible for coordination and administration of the Program/Project.

Item 4 — Enter the official start date.

Item 5 — Enter the official completion date as of the latest official modification.

Section A — General

1. Show the Federal Domestic Assistance Catalog Number from which the assistance is requested. When more than one program or Catalog Number is involved and the amount cannot be distributed to the Federal grant program or catalog number on an overall percentage basis, prepare a separate set of forms for each program or Catalog Number. However, show the total amounts for all programs in Section B of the basic application form.

2. Show the functional or other categorical breakouts, if required by the Federal grantor agency. Prepare a separate set of forms for each category.

Section B — Calculation of Federal Grant

When applying for a new grant, use the Total Amount Column only. When requesting revisions of previously awarded amounts, use all columns.

Line 1 — Enter amounts needed for administration expenses including such items as travel, legal fees, rental of vehicles and any other expense items expected to be incurred to administer the grant. Include the amount of interest expense when authorized by program legislation and also show this amount under Section E — Remarks.

Line 2 — Enter amounts pertaining to the work of locating and designing, making surveys and maps, sinking test holes, and all other work required prior to actual construction.

Line 3 — Enter amounts directly associated with the acquisition of land, existing structures, and related right-of-way.

Line 4 — Enter basic fees for architectural engineering services.

Line 5 — Enter amounts for other architectural engineering services, such as surveys, tests, and borings.

Line 6 — Enter fees for inspection and audit of construction and related programs.

Line 7 — Enter amounts associated with the development of land where the primary purpose of the grant is land improvement. Site work normally associated with major construction should be excluded from this category and shown on Line 11.

Line 8 — Enter the dollar amounts needed to provide relocation advisory assistance, and the net amounts for replacement (last resort) housing. Do not include relocation administration expenses on this Line; include them on Line 1.

Line 9 — Enter the estimated amount of relocation payments to be made to displaced persons, business concerns and non-profit organizations for moving expenses and replacement housing.

Line 10 — Enter the gross salaries and wages of employees of the grantee who will be directly engaged in performing demolition or removal of structures from developed land. This Line should show also the cost of demolition or removal of improvements on developed land under a third party contract. Reduce the cost of this Line by the amount of expected proceeds from the sale of salvage, if so instructed by the Federal grantor agency. Otherwise, show the proceeds on Line 15.

Line 11 — Enter amounts for the actual construction of, addition to, or restoration of a facility. Also include in this category the amounts of project improvements such as sewers, streets, landscaping and lighting.

Line 12 — Enter amounts for equipment both fixed and movable exclusive of equipment used for construction. For example, include amounts for permanently attached laboratory tables, built-in audio visual systems, movable desks, chairs, and laboratory equipment.

Line 13 — Enter amounts for items not specifically mentioned above.

Line 14 — Enter the sum of Lines 1-13.

Line 15 — Enter the estimated amount of program income that will be earned during the grant period and applied to the program.

Line 16 — Enter the difference between the amount on Line 14 and the estimated income shown on Line 15.

Line 17 — Enter amounts for those items which are part of the project but not subject to Federal participation (See Section C, Line 26g, Column (1)).

Line 18 — Enter the estimated amount for contingencies. Compute this amount as follows. Subtract from the net project amount shown on Line 16 the ineligible project exclusions shown on Line 17 and the amount which is excluded from the contingency provisions shown in Section C, Line 26g, Column (2). Multiply the computed amount by the percentage factor allowed by the grantor agency in accordance with the Federal program guidance. For those grants which provide for a fixed dollar allowance in lieu of a percentage allowance, enter the dollar amount of this allowance.

Line 19 — Show the total amount of Lines 16, 17, and 18. (This is the amount to which the matching share ratio prescribed in program legislation is applied.)

Line 20 — Show the amount of Federal funds requested exclusive of funds for rehabilitation purposes.

Line 21 — Enter the estimated amounts needed for rehabilitation expense if rehabilitation grants to individuals are made for which grantees are reimbursed 100% by the Federal grantor agency in accordance with program legislation. If the grantee shares in part of this expense show the total amount on Line 13 instead of on Line 21 and explain in Section E — Remarks.

Line 22 — Show the total amount of the Federal grant requested.

Line 23 — Show the amount from Section D, Line 27h.

Line 24 — Show the amount from Section D, Line 28c.

Line 25 — Self-explanatory.

**FEDERAL ASSISTANCE BUDGET INFORMATION FORM
(CONSTRUCTION)**

SECTION C — EXCLUSIONS		
26 Classification	Ineligible for Participation (1)	Excluded from Contingency Provisions (2)
a.	\$	\$
b.		
c.		
d.		
e.		
f.		
g. Totals	\$	\$

SECTION D — PROPOSED METHOD OF FINANCING NON-FEDERAL SHARE	
27. Grantee Share	\$
a. Securities	
b. Mortgages	
c. Appropriations (By Applicant)	
d. Bonds	
e. Tax Levies	
f. Non-Cash	
g. Other (Explain)	
h. TOTAL — Grantee Share	
28. Other Shares	
a. State	
b. Other	
c. Total Other Shares	
29. TOTAL	\$

SECTION E — REMARKS

INSTRUCTIONS

Section C — Exclusions

Line 26 a-g — Identify and list those costs in Column (1) which are part of the project cost but are not subject to Federal participation because of program legislation or Federal grantor agency instructions. The total amount on Line g should agree with the amount shown on Line 17 of Section B. Show in Column (2) those project costs that are subject to Federal participation but are not eligible for inclusion in the amount used to compute contingency amounts as provided in the Federal grantor agency instructions.

Section D — Proposed Method of Financing Non-Federal Share

Line 27 a-g — Show the source of the grantee's share. If cash is not immediately available, specify the actions completed to date and those actions remaining to make cash available under Section E — Remarks. Indicate also the period of time that will be required after execution of the grant agreement to obtain the funds. If there is a non-cash contribution, explain what this contribution will consist of.

Line 27 h — Show the total of Lines 27 a-g. This amount must equal the amount shown in Section B, Line 23.

Line 28 a — Show the amount that will be contributed by a State or state agency, only if the applicant is not a State or a state agency. If there is a non-cash contribution, explain what the contribution will consist of under Section E — Remarks.

Line 28 b — Show the amount that will be contributed from other sources. If there is a non-cash contribution, explain what this contribution will consist of under Section E — Remarks.

Line 28 c — Show the total of Lines 28a and 28b. This amount must be the same as the amount shown in Section B, Line 24.

Line 29 — Enter the totals of Line 27h and Line 28c.

Section E — Other Remarks

Make any remarks pertinent to the project and provide any other information required by these instructions or the grantor agency. Attach additional sheets, if necessary.

Figure 7B

5. Federal Assistance Management Summary Report (Form EIA-459E)

Purpose

The Federal Assistance Management Summary Report (FAMSR) can be used as a baseline plan document as well as a status report. As a planning document, it is a concise, top-level summary of planned costs and schedule. The plan is presented on a single page in a graphic format with supporting data. The graphic format permits rapid visual comparison of cost and schedule. When the period of performance is twelve months or less, the FAMSR can take the place of the Federal Assistance Budget Information Form and the Federal Assistance Milestone Plan.

General Instructions

The cost graphs are cumulative presentations, which can present twelve months of work. The cost chart permits the planned costs to be shown in quarterly increments.

The milestone portion of the FAMSR establishes the recipient's time schedule for accomplishing the planned events and milestones for each reporting element identified in the program announcement. Discussion of an example of a completed Federal Assistance Management Summary Report showing planned costs and schedule follows as Figure 8.

Discussion of the Example, Figure 8

Item 3—Reporting Period. This block is used primarily to indicate the Reporting Period when the form is used as a report. For programs/projects that are longer than one year, this block is used to indicate the planning period in the baseline plan. When it is used as a plan and the project is less than one year long, the block need not be filled in. If the project is more than one year long, the block should show total project length. Since this example is only for one year, the block has not been filled in.

Item 8—Months or Quarters. The time schedule can be identified by months or quarters. In the example, the first quarter of the budget period is identified in the first three blocks with "1st". Note that the quarters are true calendar quarters. The months also are indicated with the first initial of the month.

Item 9—Cost Status. The dollar scale is expressed in units of a thousand, as noted. A total dollar value for the fiscal year is represented by a solid line at the planned dollar ceiling of 295 thousand. Planned cost figures, entered at the base of the graph in the blocks provided, are cumulative and are entered in the last block for each quarter. On the graph, the quarterly points are plotted at the end of each quarter. For the first quarter, "58" is entered in the "J" column to indicate total planned costs up to the end of the first quarter. A broken line joining the points depicts planned costs over time.

Item 10—Cost Chart. This section allows the recipient to show the breakout of funds among two to four possible fund sources or by activity as presented on the Milestone Plan. Blocks are provided for total planned and actual costs for each quarter, cumulative to date, and the fiscal year. A block is provided to identify the variance between the total planned and total actual per quarter. A block is also provided for total planned costs for all project years.

Item 11—Major Milestone Status. The milestones are entered with an identification number and short descriptive title. Line entries should show an estimated number of units planned for completion in the column titled "Units Planned/Units Completed." The example indicates that 30 seminars are planned to be completed during the project. When quantification of results is not possible, such as for the last milestone—"1.5—Prepare Evaluation Report," no unit measure should be entered. The activity bar indicates the interval of time planned for performing the task, using the same schedule shown in Item 8 above.

If this form is used as a report:

No further monies or other benefits may be paid out under this program unless this report is completed and filed as required by existing law and regulations (DOE Organizational Act: PL. 95-91: 42 USC 7254 and Federal Grant and Cooperative Agreement Act of 1977: PL. 95-224: 41 USC 508).

If this form is used as a plan:

No grant or cooperative agreement may be awarded unless a completed application has been received (DOE Organizational Act: PL. 95-91: 42 USC 7254 and Federal Grant and Cooperative Agreement Act of 1977: PL. 95-224: 41 USC 508).

See DOE/CR-0001-3 for provisions concerning confidentiality of information.

FEDERAL ASSISTANCE MANAGEMENT SUMMARY REPORT

PURPOSE

A graphic presentation of costs and milestone status that provides rapid visual analysis and trend forecasting. The funding levels should represent all available resources.

INSTRUCTIONS

- Item 1 — Enter the Federal grant or agreement identification number for the current year as it appears in the official award.
- Item 2 — Enter the program/project official title as it appears in the award and, if applicable, the project identification number.
- Item 3 — For Baseline Planning — if the program/project duration is 12 months or less, omit this item. For durations greater than 12 months, one copy of this form must be completed for each 12 month period (funding year) within the program/project duration. Enter the beginning and ending dates for the year or part year for which the costs and activities are to be displayed.
For Status Reporting — enter the start and completion dates for the current reporting period.
- Item 4 — Enter the name and address of the agency or office responsible for managing the project.
- Item 5 — Enter the official start date of the original agreement.
- Item 6 — Enter the official completion date as of the latest modification.
- Item 7 — Enter the current Federal government fiscal year (FY 79).
- Item 8 — Enter the first letter of each month of the period in the 12 blocks, if reporting by quarters, use three column spaces separated by heavy vertical lines and identify the quarter, such as first quarter and so on.
- Item 9a — Show the unit of dollars used, such as "hundreds" or "thousands".
- b — Enter the appropriate dollar scale for the large grid.
- c — Enter the planned cumulative accrued costs for each month or quarter. Then,
- On the grid, use a solid line extending horizontally to show the dollar ceiling. Then,
 - Enter the actual cumulative accrued costs for each month or quarter for the current reporting period. Then,
 - Subtract the planned cost from the actual costs for each month or quarter and show the difference (variance). Show the minus amounts in parentheses. Then,
 - On the grid, use a dashed line to plot the planned cumulative costs by the dollar scale and the month or quarter. Then,
 - Use a solid line to plot the actual cumulative costs for each month or quarter up to and including the month or quarter being reported. If any cost projection will vary from the planned cost for the remainder of the period, indicate this by a dotted line extending from the solid line.
- Item 10 — Show planned and actual costs by the source of funding, such as DOE, other Federal agencies (HUD, HEW), state, or other sources for each quarter, as well as the cumulative to date and the total funding source. Also show the total planned costs for the life of the program or project.
- Item 11 — Enter the current period milestone descriptions. Milestones are activities or tasks needed to be completed to accomplish the project's objectives. Milestones are measurable units of work and can be elements from the work breakdown structure. Then,
- In the column labeled Units Planned, Completed, show the appropriate figures for the current reporting period. Enter, when quantification is possible, the number of items to be produced, serviced, or acted upon.
 - Show the milestones graphically, using the charting information below.

- Item 12 — Enter any brief explanatory remarks regarding schedule deviations. (Include detailed explanations in a Project Status Report, if required).
- Item 13 — Enter the signature and date of the recipient's activity manager for reference.
- Item 14 — Enter the signature of the DOE program manager responsible for monitoring the program/project to verify the plan has been reviewed and appears reasonable. The date of the review should also be entered.

CERTAIN PROGRAMS MAY REQUIRE ADDITIONAL INSTRUCTIONS WHICH WILL BE ATTACHED TO THIS FORM.

CHARTING INFORMATION

SYMBOLS

- Major Milestone
- Intermediate event (Deliverable, Supporting Milestone, or Decision Point)
- Intermediate Event completed early or late
- Proposed Scheduled Deviation (late or early) for a major Milestone
- Activity Bar
- Dollar Ceiling
- Time Now
- Continues beyond Time frame shown

EXAMPLES

- A Major milestone with an activity bar
- B Time now and work done
- C Schedule Deviation (not yet approved)
- D First change approved (slippage)
- E Improvement, not contractually implemented
- F First change approved (improvement)
- G Activity ahead of schedule
- H Activity behind schedule
- I Late and on time completion of intermediate events A and B, respectively.
- J Same as Example I above except that here a time line is used in place of an activity bar
- K Original major milestone date and four subsequent approved changes (all slippages) to that date
- L Original major milestone date and two subsequent approved changes (one slippage, one improvement to that date)
- M Intermediate event schedule deviation

Federal Assistance Management Summary
Report Instructions
(Opposite Page)

6. Federal Assistance Program/Project Status Report (Form EIA-459F)

Purpose

The Federal Assistance Program/Project Status Report (FAPSR) is the recipient's concise narrative assessment of the status of the work. The FAPSR is used by DOE management to monitor project status and to provide early recognition of potential problem areas.

General Instructions

The FAPSR is used to discuss technical accomplishments, variations from baseline plans or the technical approach, and actual or anticipated problems and actions taken or proposed to resolve them. The recipient also will provide an assessment of the current situation including a forecast of the near future and any impact on program accomplishment. Discussion of an example of a completed Federal Assistance Program/Project Status Report follows as Figure 9.

Discussion of the Example, Figure 9

Item 7—Approach Changes. A brief description of any changes in the work effort should be provided in this section. This would include a description of any technical changes as well as program changes. If more

information is necessary, attach additional pages. In the example, the box is checked to indicate no changes.

Item 8—Performance Variances, Accomplishments, or Problems. This section should include a discussion of the problems and variances, their causes, and the effects on the project. Any accomplishments during the reporting period should be noted. The example refers to the destruction of the training facility at one of the selected sites, which had an impact on the training seminars conducted, as well as, the costs incurred for those seminars.

Item 9—Open Items. This section is used to discuss any items which have not yet been resolved between the recipient and DOE. In the example, discussion of alternative approaches to resolving the schedule deviation and cost underrun situation are stated.

Item 10—Status Assessment and Forecast. This section of the report allows the recipient to present an analysis of the situation. Proposed solutions and expectations of future progress can also be discussed. The example discusses ACE's recommendation regarding the open item discussed above.

Item 11—Description of Attachments. In the example, one copy of each training module and accompanying training aids have been attached.

**U.S. DEPARTMENT OF ENERGY
FEDERAL ASSISTANCE PROGRAM/PROJECT STATUS REPORT**

FORM EIA-459F
(10/80)

FORM APPROVED
OMB No. 1900-0127

1. Program/Project Identification No. DE-FC-01-00RA1234	2. Program/Project Title Pilot Energy Awareness Training Program	3. Reporting Period 7/1/81 through 9/30/81
4. Name and Address <p align="center">ACE UTILITY COMPANY Utopia, Illinois</p>		5. Program/Project Start Date 4/1/81
		6. Completion Date 3/31/82

7. Approach Changes

☒ None

8. Performance Variances, Accomplishments, or Problems

The training modules were developed on time and within costs as were all related training materials. The advertising campaign is well underway and registration response has been excellent. Six training seminars have been conducted, 3 in Livonia and 3 in Mapleton with an average attendance of 62 persons per seminar.

The facility reserve for 4 training seminars in Eliot was destroyed by fire. This has caused a cost underrun because the planned costs for these 4 seminars were not incurred. See "Open Item" for a further discussion of this problem.

☐ None

9. Open Items

The training seminars in Eliot have been temporarily postponed due to the destruction of the facility that had been reserved. An alternate facility could not be found immediately, but one has been reserved for use in November. This presents the problem of either temporarily assigning additional personnel to the training staff or rearranging the schedule of the present training staff to conduct the seminars in Eliot. The first alternative would entail a cost overrun on the project for the salaries of the additional staff. For the second alternative, all the trainers' schedules would have to be revised to allow for doubling up of the number of seminars that each trainer would conduct during the third quarter. Discussions are being held between DOE and ACE to determine the course of action to be followed.

☐ None

10. Status Assessment and Forecast

ACE recommends that the second alternative of rearranging the trainers' schedules be chosen. This could be accomplished by adding to the workload of the training staff for the seminars planned for the third quarter. The trainers released by this action would then be able to conduct the sessions in Eliot. This would not cause any cost overruns and would not necessitate hiring and training new staff members.

The variance in costs caused by not conducting the seminars in Eliot in September will be made up by incurring these costs in the next reporting period.

☐ No Deviation from Plan is Expected

11. Description of Attachments

☐ None
 One copy of each training module and accompanying training aids.

12. Signature of Recipient and Date Susan Print <i>Susan Print</i> 10/14/81	13. Signature of DOE Reviewing Representative and Date T. J. Noteworthy <i>T. J. Noteworthy</i> 10/29/81
---	--

Figure 9

No further monies or other benefits may be paid out under this program unless this report is completed and filed as required by existing law and regulations (DOE Organizational Act: PL. 95-91; 42 USC 7254 and Federal Grant and Cooperative Agreement Act of 1977: PL. 95-224; 41 USC 508)

See DOE/CR-0001-3 for provisions concerning confidentiality of information.

FEDERAL ASSISTANCE PROGRAM/PROJECT STATUS REPORT

PURPOSE

A concise narrative describing the current status of the effort. The report allows Federal assistance recipients to communicate developments, achievements, changes and problems to DOE.

INSTRUCTIONS

- Item 1 — Enter the Federal grant or agreement identification number for the current year as it appears in the official award.
- Item 2 — Enter the program/project official title as it appears in the award and, if applicable, the project identification number.
- Item 3 — Enter the start and completion dates for the current reporting period.
- Item 4 — Enter the name and address of the recipient office responsible for managing the project.
- Item 5 — Enter the official start date of the original agreement.
- Item 6 — Enter the official completion date as of the latest modification.
- Item 7 — Provide a description of any changes from the work plan, including technical changes, the explanation as to why these changes occurred, and what the impact on performance will be. If there were no changes during the reporting period, check the box for "none."
- Item 8 — Include a discussion of accomplishments, problems and/or variances, their causes and the effects on the effort. If no performance variances, accomplishments, nor problems occurred during the reporting period, check "none."
- Item 9 — Discuss any unresolved issues or items that require action by DOE or recipient. If there are no unresolved issues which require action or coordination, check "none."
- Item 10 — Present analysis of program/project status, proposed solutions to problems, and future expectations regarding the project. If no deviations from the plan are forecast, enter a check in the box provided.
- Item 11 — Provide a short list of program/project related attachments. If no attachments accompany the report, check "none."
- Item 12 — The recipient should sign and date the report so that, if questions arise, they can be directed to the appropriate individual.
- Item 13 — The DOE reviewing representative, usually the DOE program manager responsible for monitoring the program, signs and dates the form to indicate it has been reviewed and appears reasonable.

Federal Assistance Program/Project
Status Report Instructions
(Opposite Page)

7. Financial Status Report (OMB Standard Form 269)

Purpose

The Financial Status Report provides information on the status of the funds for all nonconstruction programs and projects. This report focuses on the Federal share of fund outlays. (For programs/projects involving construction, refer to OMB Circular No. A-102, Exhibit 4—"Outlay Report and Request for Reimbursement for Construction Programs").

General Instructions

Reported costs may be requested on an accrual basis. If the recipient's accounting system does not provide costs on an accrual basis, then a best estimate of accrued cost should be accepted.

Specific instructions for completion of the Financial Status Report are provided on the forms. Discussion of an example of the Financial Status Report follows as Figure 10.

Discussion of the Example, Figure 10

Item 7—Basis. The "cash" or "accrual" block should be marked in accordance with program division policy on reporting accrued costs.

Item 8—Project/Grant Period. The dates entered in this space are the same as those entered in item 4 and item

5 of the Federal Assistance Budget Information Form—4/1/81 to 3/31/82.

Item 9—The dates entered in this space correspond to the time period covered by this report—7/1/81 to 9/30/81.

Item 10—The funds expended for the entire work effort are reported in this column. The period covered by this report is for the second quarter of the project. The net outlays for the first quarter are entered on line 10 a. (\$58,000). The total outlays for this reporting period are entered on line 10 b. (\$83,000). Line 10 e., "Net outlays to date," is the summation of the net outlays previously reported and this report period (\$141,000). Line 10 f. is the non-Federal share, and line 10 g. is the Federal share of those outlays. Line 10 k. is the total Federal share of outlays, and line 10 l. is the Federal share of outlays cumulated to date. Line 10 m. is the balance of Federal funds and is the difference between lines 10 k. and 10 l.

Item 11—The method of calculating indirect costs, as specified in the Federal assistance instrument, is indicated in this space. This example indicates that there is a predetermined indirect cost rate of 22%, and that it is applied to the total amount of direct costs.

Item 12—This line allows the recipient to refer to other performance reports for more information.

FINANCIAL STATUS REPORT (Follow Instructions on the back)			1. Federal Agency and Organizational Element to which Report is Submitted Department of Energy		2. Federal Grant or Other Identifying Number DE-FC-01-00RA1234		OMB Ap- proved No. 00-R0180	Page of 1 1 Pages		
3. Recipient Organization (Name and complete address, including ZIP code) ACE Utility Company Utopia, Illinois			4. Employer Identification Number 1082		5. Recipient Account Number or Identifying Number SF370		6. Final Report ☐ Yes ☒ No		7. Basis ☐ Cash ☒ Accrual	
			8. Project/Grant Period (See Instructions)				9. Period Covered by this Report			
			From (Month, day, year) 4/01/81		To (Month, day, year) 3/31/82		From (Month, day, year) 7/01/81		To (Month, day, year) 9/30/81	
10			STATUS OF FUNDS							
Programs/Functions/Activities		(a)	(b)	(c)	(d)	(e)	(f)	TOTAL (g)		
		P.E.A.T.P.								
a. Net Outlays previously reported		\$ 58,000	\$	\$	\$	\$	\$	\$	58,000	
b. Total outlays this report period		83,000							83,000	
c. Less: Program income credits		-0-							-0-	
d. Net outlays this report period (Line b minus line c)		83,000							83,000	
e. Net outlays to date (Line a plus line d)		141,000							141,000	
f. Less: Non-Federal share of outlays		47,000							47,000	
g. Total Federal share of outlays (Line e minus line f)		94,000							94,000	
h. Total unliquidated obligations		-0-							-0-	
i. Less: Non-Federal share of unliquidated obligations shown on line h		-0-							-0-	
j. Federal share of unliquidated obligations		-0-							-0-	
k. Total Federal share of outlays and unliquidated obligations		197,000							197,000	
l. Total cumulative amount of Federal funds authorized		103,000							103,000	
m. Unobligated balance of Federal funds		94,000							94,000	
11. Indirect Expense	a. Type of Rate (Place "X" in appropriate box)		☒ Predetermined ☐ Final ☐ Fixed		13. Certification I certify to the best of my knowledge and belief that this report is correct and complete and that all outlays and unliquidated obligations are for the purpose set forth in the award documents.		Signature of Authorized Certifying Official <i>Susan Print</i> Typed or Printed Name and Title Susan Print, Director		Date Report Submitted	
	b. Rate 22%	c. Base 68248	d. Total Amount 14752	e. Federal Share 9884						
12. Remarks: Attach any necessary explanation or information required by sponsoring Federal agency in compliance with governing legislation.					Telephone (Area code, number and extension) 765-4727					

INSTRUCTIONS

Please type or print legibly. Items 1, 2, 3, 6, 7, 9, 10d, 10e, 10g, 10i, 10l, 11a, and 12 are self-explanatory, specific instructions for other items are as follows:

Item	Entry	Item	Entry
4	Enter the employer identification number assigned by the U.S. Internal Revenue Service or FICE (institution) code, if required by the Program Manager.	10c	Enter the amount of all program income realized in this period that is required by the terms and conditions of the Federal award to be deducted from total project costs. For reports prepared on a cash basis, enter the amount of cash income received during the reporting period. For reports prepared on an accrual basis, enter the amount of income earned since the beginning of the reporting period. When the terms or conditions allow program income to be added to the total award, explain in remarks, the source, amount and disposition of the income.
5	This space is reserved for an account number or other identifying numbers that may be assigned by the recipient.	10f	Enter amount pertaining to the non-Federal share of program outlays included in the amount on line e.
9	Enter the month, day, and year of the beginning and ending of the project period. For formula grants that are not awarded on a project basis, show the grant period.	10h	Enter total amount of unliquidated obligations for the project or program, including unliquidated obligations to subgrantees and contractors. Unliquidated obligations are: Cash basis—obligations incurred but not paid; Accrued expenditure basis—obligations incurred but for which an outlay has not been recorded. Do not include any amounts that have been included on lines a through g. On the final report, line h should have a zero balance.
10	The purpose of vertical columns (a) through (f) is to provide financial data for each program, function, and activity in the budget as approved by the Program Manager. If additional columns are needed, use as many additional columns as needed and indicate page number in space provided in upper right, however, the totals of all programs, functions or activities should be shown in column (g) of the first page. For agreements pertaining to several Catalog of Federal Domestic Assistance programs that do not require a further functional or activity classification breakdown, enter under columns (a) through (f) the title of the program. For grants or other assistance agreements containing multiple programs where one or more programs require a further breakdown by function or activity, use a separate form for each program showing the applicable functions or activities in the separate columns. For grants or other assistance agreements containing several functions or activities which are funded from several programs, prepare a separate form for each activity or function when requested by the Program Manager.	10j	Enter the Federal share of unliquidated obligations shown on line h. The amount shown on this line should be the difference between the amounts on lines h and i.
10a	Enter the net outlay. This amount should be the same as the amount reported in Line 10a of the last report. If there has been an adjustment to the amount shown previously, please attach explanation. Show zero if this is the initial report.	10k	Enter the sum of the amounts shown on lines g and j. If the report is final, the report should not contain any unliquidated obligations.
10b	Enter the total gross program outlays (less rebates, refunds, and other discounts) for this report period, including disbursements of cash realized as program income. For reports that are prepared on a cash basis, outlays are the sum of actual cash disbursements for goods and services, the amount of indirect expense charged, the value of in-kind contributions applied, and the amount of cash advances and payments made to contractors and subgrantees. For reports prepared on an accrued expenditure basis, outlays are the sum of actual cash disbursements, the amount of indirect expense incurred, the value of in-kind contributions applied, and the net increase (or decrease) in the amounts owed by the recipient for goods and other property received and for services performed by employees, contractors, subgrantees, and other payees.	10m	Enter the unobligated balance of Federal funds. This amount should be the difference between lines k and i.
		11b	Enter rate in effect during the reporting period.
		11c	Enter amount of the base to which the rate was applied.
		11d	Enter total amount of indirect cost charged during the report period.
		11e	Enter amount of the Federal share charged during the report period. If more than one rate was applied during the project period, include a separate schedule showing bases against which the indirect cost rates were applied, the respective indirect rates, the month, day, and year the indirect rates were in effect, amounts of indirect expense charged to the project and the Federal share of indirect expense charged to the project to date.

**Financial Status Report Instructions
(Opposite page)**

8. Federal Assistance Management Summary Report (Form EIA-459E)

Purpose

The Federal Assistance Management Summary Report (FAMSR), which was described earlier as a baseline plan document, is also used as a status report. As such, it provides a concise, top-level summary of performance for cost and schedule against the baseline plan. The data is presented on a single page in graphic format with supporting data. The graphic format permits rapid visual comparison of cost and schedule.

General Instructions

The cost graphs are cumulative presentations. The milestone status chart, on the bottom half of the page, compares planned and actual progress for the same time interval as shown above. Instructions for completing the FAMSR are provided on the reverse side of each form. A discussion of the FAMSR used as a report follows as Figure 11.

Discussion of the Example, Figure 11

Item 3—Reporting Period. The reporting period shown in this example is the second quarter—7/1/81 through 9/30/81.

Item 7—Fiscal Year. The fiscal year (FY) is 4/1/81 to 3/31/82 and identified here by the recipient as FY 81.

Item 8—Months or Quarters. The time schedule is identified by month, starting with the first month of the budget period, April. The schedule has also been identified by quarter.

Item 9—Cost Status. The dollar scale is expressed in units of a thousand, as noted. A total dollar line is drawn solidly across the chart to show the budget year's

planned ceiling of \$295 thousand. The planned cost line is represented by a dashed line. Actual costs are plotted on the graph and shown as a solid line. In the example, actual costs total \$141,000 to date and the "141" point is plotted on the graph. Please note the planned accrued costs for the same period come to the "147" point on the graph. The graph illustrates a cost underrun. It also shows a projected costs line for future quarters based on the recipient's experience to date. The projected costs line is shown as a dotted line joining the actual cost line at 12/31/81. The recipient has projected that actual costs will return to planned cost in the next quarter.

Item 10—Cost Chart. This block allows the recipient to display a breakout of funds for the program indicating the contributing sources. If there is only one source of funds, the breakout of funds in item 10 should be by activity, as presented in the Milestone Plan. In the example, funds are provided by DOE and the ACE Utility Company. The planned amount from each source is entered for each quarter. Also the actual funds required from each fund source are shown to date. Totals (planned and actual) for each quarter and cumulative to date are entered at the bottom. Note the total cumulative to date figures ("141" and "147") correspond to the points plotted on the graph. The variance for both quarters and cumulative to date is also identified.

Item 11—Major Milestone Status. Progress is indicated by filling the milestone bars with a solid tone to correspond with the progress achieved during the reporting period. The vertical dashed line is a "time now" line which is an indication of the end of the reporting period. The example shows two activities completed, two activities on schedule, and one activity behind schedule. By comparing actual progress to the "time now" line, a quick assessment of schedule status can be made.

If this form is used as a report:

No further monies or other benefits may be paid out under this program unless this report is completed and filed as required by existing law and regulations (DOE Organizational Act: PL. 95-91: 42 USC 7254 and Federal Grant and Cooperative Agreement Act of 1977, PL. 95-224: 41 USC 508).

If this form is used as a plan:

No grant or cooperative agreement may be awarded unless a completed application has been received (DOE Organizational Act: PL. 95-91: 42 USC 7254 and Federal Grant and Cooperative Agreement Act of 1977: PL. 95-224: 41 USC 508).

See DOE/CR-0001-3 for provisions concerning confidentiality of information.

FEDERAL ASSISTANCE MANAGEMENT SUMMARY REPORT

PURPOSE

A graphic presentation of costs and milestone status that provides rapid visual analysis and trend forecasting. The funding levels should represent all available resources.

INSTRUCTIONS

- Item 1 — Enter the Federal grant or agreement identification number for the current year as it appears in the official award.
- Item 2 — Enter the program/project official title as it appears in the award and, if applicable, the project identification number.
- Item 3 — For Baseline Planning — if the program/project duration is 12 months or less, omit this item. For durations greater than 12 months, one copy of this form must be completed for each 12 month period (funding year) within the program/project duration. Enter the beginning and ending dates for the year or part year for which the costs and activities are to be displayed.
For Status Reporting — enter the start and completion dates for the current reporting period.
- Item 4 — Enter the name and address of the agency or office responsible for managing the project.
- Item 5 — Enter the official start date of the original agreement.
- Item 6 — Enter the official completion date as of the latest modification.
- Item 7 — Enter the current Federal government fiscal year (FY 79).
- Item 8 — Enter the first letter of each month of the period in the 12 blocks, if reporting by quarters, use three column spaces separated by heavy vertical lines and identify the quarter, such as first quarter and so on.
- Item 9a — Show the unit of dollars used, such as "hundreds" or "thousands".
- b — Enter the appropriate dollar scale for the large grid.
- c — Enter the planned cumulative accrued costs for each month or quarter. Then,
- On the grid, use a solid line extending horizontally to show the dollar ceiling. Then,
 - Enter the actual cumulative accrued costs for each month or quarter for the current reporting period. Then,
 - Subtract the planned cost from the actual costs for each month or quarter and show the difference (variance). Show the minus amounts in parentheses. Then,
 - On the grid, use a dashed line to plot the planned cumulative costs by the dollar scale and the month or quarter. Then,
 - Use a solid line to plot the actual cumulative costs for each month or quarter up to and including the month or quarter being reported. If any cost projection will vary from the planned cost for the remainder of the period, indicate this by a dotted line extending from the solid line.
- Item 10 — Show planned and actual costs by the source of funding, such as DOE, other Federal agencies (HUD, HEW), state, or other sources for each quarter, as well as the cumulative to date and the total funding source. Also show the total planned costs for the life of the program or project.
- Item 11 — Enter the current period milestone descriptions. Milestones are activities or tasks needed to be completed to accomplish the project's objectives. Milestones are measurable units of work and can be elements from the work breakdown structure. Then,
- In the column labeled Units Planned, Completed, show the appropriate figures for the current reporting period. Enter, when quantification is possible, the number of items to be produced, serviced, or acted upon.
 - Show the milestones graphically, using the charting information below.

- Item 12 — Enter any brief explanatory remarks regarding schedule deviations. (Include detailed explanations in a Project Status Report, if required).
- Item 13 — Enter the signature and date of the recipient's activity manager for reference.
- Item 14 — Enter the signature of the DOE program manager responsible for monitoring the program/project to verify the plan has been reviewed and appears reasonable. The date of the review should also be entered.

CERTAIN PROGRAMS MAY REQUIRE ADDITIONAL INSTRUCTIONS WHICH WILL BE ATTACHED TO THIS FORM.

CHARTING INFORMATION

SYMBOLS

- △ Major Milestone
- ▽ Intermediate event (Deliverable, Supporting Milestone, or Decision Point)
- ▲ Intermediate Event completed early or late
- ◇ Proposed Scheduled Deviation (late or early) for a major Milestone
- Activity Bar
- Dollar Ceiling
- Time Now
- Continues beyond Time frame shown

EXAMPLES

- A Major milestone with an activity bar
- B Time now and work done
- C ◇ Schedule Deviation (not yet approved)
- D First change approved (slippage)
- E Improvement, not contractually implemented
- F First change approved (improvement)
- G Activity ahead of schedule
- H Activity behind schedule
- I Late and on time completion of intermediate events A and B, respectively.
- J Same as Example I above except that here a time line is used in place of an activity bar
- K Original major milestone date and four subsequent approved changes (all slippages) to that date
- L Original major milestone date and two subsequent approved changes (one slippage, one improvement to that date)
- M Intermediate event schedule deviation

Part III. Technical Information Reporting

A. Purpose

Scientific, technical, and engineering information acquired in the performance of DOE-supported efforts is communicated to DOE through Technical Reports. These reports are also inputs to the DOE Central Energy Information data base and related information systems. The Office of Technical Information, through its Technical Information Center (TIC), Oak Ridge, Tennessee, ensures that the results of DOE sponsored research, development, and demonstration projects are reported promptly and that reports are distributed within DOE, to the scientific community and, when suitable, made available to the general public.

Not all DOE assistance programs produce technical reports. Small grants that involve research, development, or demonstration projects may only require a final technical report. Although the following instructions for technical reports are rather extensive, they should only be applied to those programs where they are appropriate.

The publications listed below provide detailed information concerning the reporting and dissemination of technical information:

- DOE Order 1340.1 *Management of Public Communication Publications, and Scientific, Technical, and Engineering Publications.*
- DOE Order 1340.2 *Manual for the Preparation and Processing of Scientific, Technical, and Engineering Publications.*
- DOE/TIC-4500 *Standard Distribution for Unclassified Scientific and Technical Reports.*
- M-3679 *Standard Distribution for Classified Scientific and Technical Reports.*
- DOE/TIC-4600 *DOE Technical Information Center, Its Function and Services.*

The Guidelines for technical reporting apply to two kinds of documents—reports which are expressly required by DOE to keep it informed of progress and results on DOE-sponsored research, development, and demonstration projects, and published works such as journal articles which are the product of DOE-sponsored projects. The former may be broken down into three types: Technical Progress Report, Topical Report, and Final Technical Report.

Technical Progress Reports summarize the work performed during a specific reporting period and include the technical

and scientific results achieved during the period. Progress reports must be submitted at least once a year on research, development, and demonstration projects and may be requested more frequently.

Topical Reports are comprehensive statements of the technical results of work performed on specific phases of grants or cooperative agreements. They also can be detailed descriptions of significant scientific or technological advances.

A Final Technical Report is required on all research, development, and demonstration grants or cooperative agreements within 90 days of completion. It is a technical accounting of the total work performed during the project. It is to be comprehensive description of the results achieved and includes—in support of the investigations undertaken—tabulations of data, figures, photographs, and bibliographic citations. Where applicable, it summarizes all topical and technical progress reports.

Journal articles, professional and reference books, theses, translations of foreign language materials, and conference proceedings that are the result of DOE assistance, are to be sent to the DOE Technical Information Center as part of the technical information reporting.

A Notice of Energy RD&D Project (DOE Form 538) is submitted to DOE/TIC at the beginning of all RD&D efforts sponsored by DOE. The information obtained from these forms is furnished to the Smithsonian Scientific Information Exchange (SSIE) by TIC. For on-going efforts, this report is usually submitted at the beginning of each project year. The Federal Assistance Reporting Checklist will indicate the number of submissions needed. A Sample of Form 538 is provided as Figure 12.

University-Type Contractor and Grantee Recommendations for Disposition of Scientific and Technical Documents (DOE Form RA-427) accompanies each technical report from universities, state and local governments, and other nonprofit organizations. These forms provide DOE's Technical Information Center with the recipient's recommendation as to the appropriate announcement and distribution of the document. A sample of DOE Form RA-427 is included as Figure 13.

B. Selection of Technical Reports

The program announcement will describe the general technical reporting requirements that are expected for grants or cooperative agreements. The DOE program manager

will determine which reports will be required, their frequency of submission, and their distribution within DOE based on the scope of the grant or cooperative agreement. Tables 3 and 4 present suggested DOE distribution and submission frequency for technical reports. These requirements are recorded on the Federal Assistance Reporting Checklist, and the appropriate addresses for distribution are noted on the distribution list.

When determining the reporting requirements, the program manager should consider:

- Federal government policy—the type and frequency of reports should be the minimum necessary to permit DOE to meet its responsibilities effectively.
- Other pertinent policies and directions of DOE such as the publications listed in paragraph A. In particular, attention is directed to DOE Order 1340.1 in regard to the preparation of documents that may become public communications. If the quantity of any technical report exceeds the Standard Distribution List (TIC-4500) by 100 or more copies, then the report is considered as a Public Communications Publication (PCP). A PCP requires preparation of a DOE Form IR-2 (on DOE-F-1340.3) *Request for Public Communication Approval* in accordance with DOE Order 1340.1, *Management of Public Communications Publications and Scientific, Technical, and Engineering Publications*. Approvals for this form by the Office of Public Affairs (OPA) is required for final design and/or printing prior to publication.
- Applicable policies, directives, and criteria established by the responsible DOE organization, such as, the program division.
- Personal knowledge of the nature and scope of the technical work to be performed, and an assessment of the rate at which technical information will be developed, become available, and be disseminated.
- The requirements that a Technical Progress Report and a Notice of Energy RD&D Project (DOE Form 538) must be submitted at least once each year, and that a Final Technical Report be submitted at the completion/termination of all research, development, and demonstration grants/agreements.

C. How to Prepare Reports

1. Contents of Reports

Each report of a scientific, technical, and engineering information nature should begin with a statement of the original objectives of the project and a concise summary of the progress achieved during the reporting period. The body of the report should contain a full account of progress, problems encountered, plans for the next reporting period, and an assessment of the prospects for future progress. The author(s) of the report should clearly identify technical factors which impact—either positively or negatively—on plans for achieving the objectives on schedule and within the funds available.

The report should include sufficient detail to allow the work to be reproduced by others. Each report should include a thorough account of activities aimed at the utilization of project results, such as, investigations of user needs, work or collaboration with potential users, and activities to disseminate project results. Also included should be a discussion of how these activities have affected the course of the project. A separate section of the report could appropriately be devoted to utilization activities. Scientific and technical reports should not include administrative, managerial, or fiscal information unsuitable for wide dissemination. They should not include proposals for further support. Such proposals should be submitted separately to protect their privacy.

The following instructions are generally applied to all technical reports, that is, those prepared for DOE and those publications prepared for the general public under DOE auspices. The program manager should consider the expected output of the grant or cooperative agreement to determine if there are any circumstances involved that are not addressed in these guidelines. The recipient should refer to the *Scientific, Technical and Engineering Publications Handbook* for further guidance.

2. Review of Drafts

Usually the technical reports will be submitted in final form, but it may be specified in the grant or agreement that the recipient will submit a draft to the DOE program manager and the government technical representative. In this case, if the assistance recipient receives no response from DOE within three weeks, the report can be submitted in final form. In order to avoid premature disclosure of inventions, all final scientific engineering and technical reports must be reviewed by the DOE Patent Office before they are released to the public.

3. Front Cover and Title Page

Figure 14 shows a sample of standard cover with all the components in the correct locations and relative type sizes.

A sample title page for use with a final technical report is shown in Figure 20.

4. Report Numbering

A standard report code system has been established for technical information reporting. The report number is essential for proper identification, control, filing, indexing, abstracting, and retrieval of the report. Major DOE laboratories and contractors that have been assigned TIC-approved identifying codes should use their approved system. Those preparing technical reports who do not have TIC-approved identifying codes are to number them according to the following instructions. Unique numbers for each report are created by combining a DOE code with the final seven characters from the grant award number and adding suffix numbers sequentially to distinguish each report prepared under the

Table 3. DOE Technical Information and Reporting Distribution

REPORT TYPE DISTRIBUTION (No. of copies- each addressee)	TECHNICAL PROGRESS REPORT	TOPICAL REPORT	FINAL TECHNICAL REPORT	JOURNAL ARTICLE MANUSCRIPT	JOURNAL ARTICLE REPRINT	CONFERENCE PAPER OR PROCEEDINGS	TRANSLATIONS	THESES	BOOKS	NOTICE OF ENERGY RD & D PROJECT
PROGRAM MANAGER	4	4	4	4	4	4	4	4	4	3
GRANTS SPECIALIST	1	1	1	1	1	1	1	1	1	1
PATENT COUNSEL	1	1	1	1	1	1	1	1	1	1
TIC	*	*	*		2	*	*	2	2	1

*SUBMIT A REPRODUCIBLE MASTER OR PRINTED COPIES AS CALLED FOR IN DOE/TIC-4500 OR M-3679

Table 4. Suggested Frequency Guide for Technical Reports

	FREQUENCY*
TECHNICAL PROGRESS REPORT	Y
TOPICAL REPORT	A
FINAL TECHNICAL REPORT	F
JOURNAL ARTICLES	A
NOTICE OF ENERGY RD & D PROJECT	OY

*THE MINIMAL REQUIREMENTS FOR TECHNICAL REPORTING ARE SUBMISSION OF A NOTICE OF ENERGY RD & D PROJECT AT THE BEGINNING OF EACH PROJECT YEAR, AN ANNUAL TECHNICAL PROGRESS REPORT FOR PROJECTS LONGER THAN ONE YEAR, AND A FINAL TECHNICAL REPORT.

LEGEND

O — ONE TIME AFTER PROJECT STARTS

Y — YEARLY

A — AS NECESSARY

F — FINAL REPORT

grant. For new grants the sequence should begin with one. It is essential that the two alphabetic characters and the succeeding five-digit number from the grant award number be used. If there is a modification number, normally shown .M001, and so on, it is not used in the report number. When a report contains more than one volume or part, or is released as a later edition or revision, this is noted by adding the following suffixes to the basic number: Vol.—Volume; Pt.—Part; Rev.—Revision; Ed.—Edition; Add.—Addendum, and so on.

The design of the report number is shown in the following examples.

Example: From grant number FG-AC03-79FE01834.M001, the report numbers would be:

- DOE-FE/01834-1
- DOE-FE/01834-1 Rev.
- DOE-FE/01834-1 Rev.2
- DOE-FE/01834-2

Two special report series, conference proceedings and translations, have been established by TIC. Numbers in these series are assigned by TIC to all proceedings and translations, included in the Energy Data Base. The appropriate numbers should be requested from TIC before conference papers, proceedings, or translations are issued.

For conference papers or proceedings, TIC requires the following information:

- Name of the conference;
- Sponsor;
- Author of the papers;
- Date(s) the conference was or will be held; and
- Location (city, state and country).

The author of a paper should obtain the basic conference number for the paper before submitting it to TIC, and should include the number on the document either as a primary number or a secondary number if it already has an approved report code.

Federal assistance recipients contemplating translations should contact TIC before arranging for translation to determine if the item already has been translated or is currently being translated. If no translation exists or is under way, TIC will assign a number to the item for use by the translating organization. This number should be used as the primary number or, for those who already have an approved report translation code, as a secondary number.

5. Distribution Categories

The DOE Technical Information Center (TIC) in conjunction with DOE Headquarters Offices establishes distribution categories for scientific and technical re-

ports. Guidance in determining the correct category number may be found in *Standard Distribution for Unclassified Scientific Reports* (DOE/TIC-4500) for unclassified reports and in *Standard Distribution for Classified Scientific and Technical Reports* (M-3679). Once the category number has been obtained, it should be printed on the upper right hand corner of the cover or title page.

6. Notices

The following notice will appear on the inside front cover or on the title page:

DISCLAIMER

This report was prepared as an account of work sponsored by the United States Government. Neither the United States nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, mark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

The following notices should appear on the inside front cover or on the title page when appropriate:

PATENT STATUS

This technical report is being transmitted in advance of DOE patent clearance, and no further dissemination or publication will be made of the report without prior approval of the DOE Patent Counsel.

TECHNICAL STATUS

This technical report is being transmitted in advance of DOE review, and no further dissemination or publication will be made of the report without prior approval of the DOE Project/Program Manager.

D. Patent Clearance

Technical Reports are likely to contain patentable subject matter not previously disclosed to the DOE Patent Counsel as inventions. Such reports submitted to DOE are presumed to be susceptible to publication or are available to members of the public upon request unless:

- The report is classified;
- The report contains a "Limited Rights" legend [such legend denotes the presence of proprietary data in the report and is not normally affixed to a report without

authorization by the DOE Contracting (Awarding) Officer] or

- The instructions on DOE Form RA-427 accompanying the report preclude its availability to the public and its publication. The distribution of the report is limited to those addressees approved by DOE Patent Counsel. All technical reports not falling into one of these exceptions will be submitted for patent clearance.

Usually, patent clearance will consist of a prepublication review of reports by the responsible DOE patent group.

The prepublication review procedure takes place before the report is sent out on any distribution with exceptions approved by DOE Patent Counsel. If inventions not yet protected by patent applications are found in the reports, the assistance recipient will be advised as to how such inventions should be referred to or otherwise treated in the reports to render them publishable, if possible. Once DOE Patent Counsel has notified the assistance recipient that a report has received patent clearance, the assistance recipient may then send the report to TIC with patent clearance noted on Form 427.

INSTRUCTIONS NOTICE OF ENERGY RD&D PROJECT

NOTICE

If in the past six months you have completed an Inventory of Federal Energy Related Environment and Safety Research or programmatic office project description, complete only the new data element on this form and send it and a copy of the form completed earlier to Department of Energy, Technical Information Center, Post Office Box 62, Oak Ridge, TN. 37830.

1. DESCRIPTIVE TITLE OF WORK

Be as specific as possible. Since an index in the published inventory is generated from words in the titles, use words that are descriptive of the work done. Please limit the length to a maximum of 100 characters plus spaces.

Example: "Design of a Better Mousetrap" not "Pest Control".

2. PERFORMING ORGANIZATION CONTROL NUMBER

A unique internal identification number that is used by the performing organization to facilitate project control. If the organization uses no number, this space will be left blank. PROJECT STATUS: Check status of project.

3. CONTRACT OR GRANT NUMBER

The DOE contract or grant number under which the work is being performed. For WPAS-type projects, the master contract number should be inserted. Inter-agency agreements use the IAA number.

4. CONTRACTOR'S PRINCIPAL INVESTIGATOR/PROJECT MANAGER AND MAILING ADDRESS WHERE WORK IS PERFORMED

Name of person chiefly responsible for the performance of the project or who is most familiar with this project. Persons should be permanently employed by organization (not summer employees or graduate students). Give telephone number, including area code and extension (if you have FTS number, please include it), at which the principal investigator can be reached. The address should be for the person at the specific facility doing the work.

5. A. NAME OF ORGANIZATION

In large organizations that have several levels of subdivision, or subsidiaries, include the name of the smallest autonomous unit performing the research. For universities, include the name of the specific school, departments, etc., where the research is being done.

Examples: "Halliburton Company, Otis Engineering", "University of Maryland, Institute of Fluid Dynamics and Applied Mathematics", "U.S. Department of Defense, Air Force Cambridge Research Laboratory".

B. MAILING ADDRESS

Provide the mailing address if different from that given in Item 4.

C. TYPE OF ORGANIZATION PERFORMING THE WORK

From the following list, select the description that best characterizes the research organization doing this study and circle the two-letter code on the form.

IN — Private industry	ST — Regional, state or local government facility
NP — Foundation or laboratory not operated for profit	EG — Electric or gas utility
TA — Trade or professional organization	FF — Federally funded R&D centers or laboratory operated
US — Federal agency	for an agency of the U.S. Government
CU — College, university, or trade school	XX — Other (define on questionnaire)

6. SUPPORTING ORGANIZATION

List the DOE Assistant Secretary and office sponsoring the work; the technical representative (including phone number) who directly monitors the contracted work; his address if different from DOE Headquarters; and the specific person administering the grant or contract.

7. PROJECT SCHEDULE

If current activity is a continuation of a previous project, the start date should indicate the initiation of the prior work. The expected completion date should also be entered. If the project is a continuing activity with no set completion date, enter N/A for not applicable.

8. FUNDING

Provide funding in DOLLARS. If funding is received from more than one organization, list each agency separately in the space provided. Funding should indicate budget obligations (funding level) per year. For example, if budget obligation is \$20,000 for 2 years, state the funding level as \$10,000 per year. If Applicable, fill in parts D, E, F, or G. Use of this Section is optional on Federal Financial Assistance Programs: grants, direct payments, cooperative agreements, loan guarantees, and other related programs.

9. SUMMARY OF WORK

Enter a Project Summary (limit 200 words) covering the following:

Objectives. State project objectives, quantifying where possible (e.g., "Demonstrate 95% recovery of sulphur from raw gas with molten salt recycling at a rate of one gallon per minute").

Approach. Describe the technical approach to the project, i.e., how the work is to be done.

Expected Product/Results. Describe the final products or results expected from the project and their importance and relevance.

(over)

U.S. DEPARTMENT OF ENERGY
NOTICE OF ENERGY RD&D PROJECT

APPROVED FOR USE BY
SMITHSONIAN SCIENCE INFORMATION EXCHANGE

FORM APPROVED
OMB NO. 38 R-0190

1. Descriptive title of work
CONCEPTUAL DESIGN FOR A COMPLETE PILOT SCALE MHD/STEAM SYSTEM

2. Performing organization control number 88-88080

3. Contract or grant number
FG-AC03-80FE01834

Work status ☒ New ☐ Continuing ☐ Terminated

4. Contractor's principal investigator/project manager and address where work is performed

A. Name (Last, First, MI) DUNDAS, DERRICK

B. Phone: FTS- _____

C. Research organization

business address: Street 361 NORTH PEABODY STREET

Com.- 123-4567

City ALGODONES

State COLORADO

Zip 94999

5. A. Name of performing organization ROCKY MOUNTAIN UNIVERSITY

PHYSICS DEPARTMENT

(Organization)

(Department)

B. Mailing address (If different from 4C)

C. Circle only one code for TYPE OF ORGANIZATION PERFORMING R&D
(See instructions):

CU FF IN NP ST TA US XX EG

D. Location where the work is being performed

E. Country sponsoring research

6. Supporting organization

A. Program division or office (Full name) ASSISTANT SECRETARY FOR FOSSIL ENERGY

B. Technical monitor (Last, First, MI) WATERS, JAMES T.

C. Phone: FTS- 252-5000

D. Address (If different from DOE Hqs.) _____

Com.- 202-252-5000

E. Administrative monitor (Last, First, MI) PERIWINKLE, GAYLORD G.

7. Project schedule

A. Start date MAY 1980
(Month) (Year)

B. Expected completion date APRIL 1982
(Month) (Year)

8. Funding in thousands of dollars (Funds represent budget obligations for operating and capital equipment)

	Funding organization(s)	Current FY <u>80</u>	Next FY _____
A.	<u>DOE-RA</u>	<u>175</u>	
B.			
C.			

D. For DOE projects, enter budgeting and reporting classification code _____

E. Interagency agreement (Specify funding agency) _____

F. Agency in-house effort (Check if applicable) ☐ _____

G. EPA "pass-thru" funding (Check if applicable) ☐ _____

Note: Funding Section utilization is optional on Federal Financial Assistance Programs: grants, direct payments, cooperative agreements, loan guarantees, and other related programs.

9. Descriptive summary of work (Limit to 200 words. Include objective, approach, results to date and their significance, and expected product. Quantify where possible).

THIS PROJECT IS EXPECTED TO PROVIDE CONCEPTUAL DESIGNS BASED ON EXISTING DATA FOR AN ETF (PILOT-SCALE) PLANT THAT IS A COMPLETE MHD/STEAM SYSTEM. A MAJOR GOAL OF THE ETF IS TO PROVIDE COMPONENT, SUBSYSTEM AND SYSTEM DATA NECESSARY FOR SCALE-UP TO COMMERCIAL, DEMONSTRATION-PLANT SIZES. THE ETF IS TO BE CAPABLE OF TESTING FOR 2000 CONTINUOUS HOURS AT DESIGN CONDITIONS.

Figure 12

10. List the five most descriptive publications in the last year that are available to the public which have resulted from the project (Please give a complete bibliographic citation. Use additional sheets if necessary).

N/A

11. General technology categories (Enter applicable code of codes from instructions).

A1												
----	--	--	--	--	--	--	--	--	--	--	--	--

12. Type of research activity (Check applicable activities)

A. ☐ Basic research	H. ☐ Mathematical model development
B. ☐ Applied research	I. ☐ Data analysis/assessments
C. ☐ Laboratory scale R&D	J. ☐ Information systems management
D. ☐ Technology development	K. ☐ Policy analysis
E. ☐ Field study	L. ☐ Socioeconomic
F. ☒ Pilot plant scale R&D	M. ☐ Other (Specify) _____
G. ☐ Full scale demonstration	N. ☐ Not applicable

13. keywords (Please list 5 keywords).

MAGNETO HYDRODYNAMICS
STEAM SYSTEMS
DEMONSTRATION PLANTS
MHD/STEAM SYSTEMS
MAGNETICS

14. Is this research project solely an ANALYTICAL/PAPER STUDY?
(Non-experimental, paper and pencil, computer analysis, etc.).

YES _____ NO X

15. Respondent's Name: DUNDAS, DERRICK Phone No.: 998-123-4567 Date: May 15, 1980
Street: 361 NORTH PEABODY STREET
City: ALGODONES State: COLORADO Zip: 94999

10. PUBLICATIONS AVAILABLE TO THE PUBLIC

List publications available to the public that have resulted directly from this project. List only the publications for the last 12 months. Give author(s), title, journal reference or report number, and source from which report or publication may be secured if different from author (e.g., GPO, NTIS, TIC, etc.).

11. GENERAL TECHNOLOGY CATEGORY

Enter the letter and number for the general technology category supported by your project as shown below. Multiple numbers may be entered when the project supports more than one category.

The Multi-Technology category (Item F1) should be used only if your project has a pervasive application or influence on all, or nearly all, technology areas. Examples: R&D on instrumentation, materials research, meteorological research.

The General Science category (Item F2) should be used only if your project, or some portion of it, is basic in nature and not directly related to any specific energy technology.

Insert one or more of the following category codes:

Fossil Fuels (including synfuel)

- A1 — Fossil Fuels (general)
- A2 — Coal Conversion — Liquefaction
- A3 — Coal Conversion — Gasification
- A4 — Oil and Gas
- A5 — Oil Shale
- A6 — Biomass — Pyrolysis

Nuclear

- B1 — Nuclear (general)
- B2 — Fission — Converters
- B3 — Fission — Breeders
- B4 — Fusion — Magnetic
- B5 — Fusion — Laser

Geothermal

- C1 — Geothermal (general)
- C2 — Hydrothermal
- C3 — Geopressurized
- C4 — Hot Dry Rock

Solar

- D1 — Solar (general)
- D2 — Direct Heat/Cool
- D3 — Electric
- D4 — Ocean, Wind
- D5 — Biomass

Conservation

- E1 — Conservation (general)
- E2 — End Use
- E3 — Improved Conversion Efficiency
- E4 — Energy Storage

Other

- F1 — Multi-Technology
- F2 — General (or Basic) Science
- F3 — Medical Application of Nuclear Technology
- F4 — Hydroelectric
- F5 — Other (identify on the form)

12. TYPE OF RESEARCH ACTIVITY

Check the types of research activity that are most applicable to this project.

13. KEYWORDS

List the five terms describing the technical aspects of the project. List specific chemicals and CAS number, if applicable.

14. ANALYTICAL/PAPER STUDY

Identify this project as being a paper or non-experimental study.

15. RESPONDENT

Name and address of person filling out the questionnaire. Give telephone number, including extension (if you have FTS number, please include it) at which person can be reached. Record the date the form was completed. The information in Item 15 will not be published.

UNIVERSITY CONTRACTOR, GRANTEE AND COOPERATIVE AGREEMENT
RECOMMENDATIONS FOR ANNOUNCEMENT AND DISTRIBUTION OF DOCUMENTS

See Instructions on Reverse Side

1. DOE Report No. DOE/CS/4567	3. Title Noise Suppression Using Advanced Airfoil Design in High Tip Speed Wind Driven Generators
2. Contract No. Grant DE-FG-01-00CS4567	
4. Type of Document ("X" one) ☒ a. Scientific and technical report ☐ b. Conference paper: Title of conference _____ Date of conference _____ Exact location of conference _____ Sponsoring organization _____ ☐ c. Other (Specify planning, educational, impact, market, social, economic, thesis, translations, journal article manuscript, etc.) _____	
5. Recommended Announcement and Distribution ("X" one) ☒ a. DOE's normal announcement and distribution procedures may be followed. ☐ b. Make available only within DOE and to DOE contractors and other U.S. Government agencies and their contractors.	
6. Reason for Recommended Restrictions _____	
7. Patent and Copyright Information Does this information product disclose any new equipment, process or material? ☐ No ☒ Yes If so, identify page nos. <u>27</u> Has an invention disclosure been submitted to DOE covering any aspect of this information product? ☒ No ☐ Yes If so, identify the DOE (or other) disclosure number and to whom the disclosure was submitted. Are there any patent-related objections to the release of this information product? ☒ No ☐ Yes If so, state these objections. Does this information product contain copyrighted material? ☒ No ☐ Yes If so, identify the page numbers _____ and attach the license or other authority for the government to reproduce.	
8. Submitted by Name and Position (Please print or type) ADAMS, CHARLES W., DR. Organization PIERCE STATE UNIVERSITY, DEPARTMENT OF PHYSICS Signature <u>Charles W. Adams</u> Date <u>7-15-81</u>	

FOR DOE OR OTHER AUTHORIZED
USE ONLY

9. Patent Clearance ("x" one)
☐ a. DOE patent clearance has been granted by responsible DOE patent group.
☐ b. Report has been sent to responsible DOE patent group for clearance.

Figure 13

THIS REPORT IS REQUIRED IN ACCORDANCE WITH 42 U.S.C. 7254 AND 40 U.S.C. 471 ET SEQ. FAILURE TO REPORT MAY RESULT IN CONTRACT TERMINATION OR PENALTIES AS PROVIDED BY LAW

INSTRUCTIONS

SEE DOE CR 0001.3 FOR PROVISIONS CONCERNING CONFIDENTIALITY OF INFORMATION

Who uses this form: DOE contract administrators will designate the DOE contractors and grantees who are to use this form. Generally speaking, it will be used by educational institutions and other "not for profit" institutions. DOE national laboratories and other major contractors will generally use the longer Form RA-426.

When to use: DOE contractors are required under their contracts to transmit specified types of documents to the DOE. Some, but not all, of these are transmitted by DOE contract administrators to the DOE Technical Information Center (TIC) and may be incorporated into the DOE technical information documentation system. Types of documents that will be transmitted to TIC are identified in instructions that the contractor receives from his contract administrator. Each such document is to be accompanied by one copy of this transmittal form recommending to TIC appropriate announcement and distribution of the document. Documents which the contractor may be required to submit to the DOE under his contract but which are not of the type to be transmitted to TIC, e.g., contract proposals, should not be accompanied by a copy of this transmittal form.

Where to send: Send the document and the attached Form RA-427 to the DOE contract administrator for transmittal to TIC unless the DOE contract administrator specifies otherwise.

Item instructions:

Item 1. The DOE report number will be constructed as follows and will consist of a prefix and a suffix. The prefix will consist of code DOE and seven characters for the applicable contract number (two alphabetic and five numeric). The suffix is a sequential number assigned by the contractor generating the report. Slashes and hyphens will be used as shown in the examples in the next column.

Reports issued in more than one binding or reissued as revisions on later editions will be identified by adding the additional suffixes to the basic number: e.g., Rev., Revision; Vol., Volume; Pt., Part; Add., Addendum; Ed., Edition.

Examples

If the contract number is DE-AC01-78RA01834.M002, the reports generated will be numbered:

DOE/RA/01834-1

DOE/RA/01834-2

DOE/RA/01834-2 Rev.1

(The modification number, if any, normally shown as .M002, etc., following the basic five-digit number, is not used in the report number.)

- Item 2.** Self-explanatory.
- Item 3.** Give title exactly as on the document itself.
- Item 4.** Self-explanatory.
- Item 5.** The "normal announcement and distribution procedures" for unclassified documents may include abstracting in *Energy Research Abstracts (ERA)* and distribution to appropriate DOE/TIC-4500 ("Standard Distribution of Unclassified Scientific and Technical Reports") addressees, to libraries that through purchase of microfiche maintain collections of DOE reports, and to the National Technical Information Service (NTIS) for sale to the public. Check 5b if there is need for limiting announcement and distribution procedures described above.
- Item 6.** Self-explanatory.
- Item 7.** Self-explanatory.
- Item 8.** Enter name of person to whom inquiries concerning the recommendations on this form may be addressed.
- Item 9.** DOE contract administrator or patent group representative should check *a* or *b* and forward this form and document to:
USDOE-TIC
P.O. Box 62
Oak Ridge, TN 37830

(Preferred location) DOE/RA/01834-3	(Optional location)	DOE Report No.
CONCEPTUAL DESIGN FOR A COMPLETE PILOT-SCALE MHD/STEAM SYSTEM		Title and Subtitle
DERRICK D. DUNDAS		Author(s)
ROCKY MOUNTAIN UNIVERSITY		Federal Assistance Recipient's Name
PREPARED FOR THE U.S. DEPARTMENT OF ENERGY		DOE Sponsorship

Figure 14. Sample Standard Cover

Appendix A

Glossary

Accrual Basis of Accounting—Recognizes revenues in the period earned and recognizes cost in the period incurred, regardless of when payment is received or made. (DOE Order 2100—*Glossary of Financial Terms*.)

Accrued Cost—Accrued cost is the value (purchase price) of goods and services used or consumed within a given period of time, regardless of when ordered, received, or paid for.

Accrued expenditures—Accrued expenditures are the charges incurred by the recipient during a given period requiring the provision of funds for: (1) goods and other tangible property received; (2) services performed by employees, contractors, subgrantees, and other payees; and (3) other amounts becoming owed under programs for which no current services or performance is required such as annuities, insurance claims, and other benefit payments. (OMB Circulars A-102 and A-110.)

Activity—An effort or operation which is conducted over a period of time and results in the accomplishment of a unit of work.

Applied cost—The value (purchase price) of goods and services used, consumed, given away, lost or destroyed within a given period of time, regardless of when ordered, received, or paid for. For operating programs, applied cost represent the value of resources consumed or used. For procurement and manufacturing programs, applied cost represent the value of material received or produced. For capital outlay programs, applied costs represent the value of work put in place. For loan activities, applied cost represents assets acquired (even though no resource has been consumed). In the case of appropriations for programs that are essentially operating in nature, equipment is included in applied cost when it is placed in use. For all programs, accrued annual leave is included in applied cost when the leave is earned, rather than when taken, even though it may be unfunded at the time; and, depreciation cost and other unfunded costs are included where appropriate (DOE Order 2100—*Glossary of Financial Terms*.)

Baseline—A quantitative expression of projected costs, schedule, or technical progress to serve as a base or standard for measurement during the performance of an effort; the established plan against which the status of resources and the progress of a project can be measured.

Ceiling—The negotiated or stated limit applicable to obligations and costs which are set by legislation or arrangement and

cannot be exceeded. (DOE Order 2100—*Glossary of Financial Terms*.)

Conservation and Public Service Programs—Projects operating under this category are directed toward energy-saving measures or are in support of governmental or quasi-governmental organizations in their function of effectively implementing those measures.

Cooperative Agreements—The legal instrument which reflects the relationship between the Federal government and a state government or other recipient whenever the principal purpose of the relationship is the transfer of money, property, services, or anything of value to the state government or other recipient to accomplish a public purpose of support or stimulation authorized by Federal statute. When DOE enters into a cooperative agreement, substantial involvement is anticipated between DOE, acting for the Federal government, and the state government or other recipient during the performance of the contemplated activity.

Cost Variance—The difference between the budgeted cost and the actual cost for work performed. It indicates whether costs are being accrued as planned. On the Federal Assistance Management Summary Report and the Federal Assistance Program/Project Status Report, the cost variance is the difference between planned and actual costs for a specified period of time.

Direct Cost—Cost readily identified with particular activities. Items of direct cost are incurred specifically to carry out the agreement, such as, materials consumed in the effort and compensation of employees for time and effort devoted to the execution of the program. (Paraphrased from Federal Management Circular 74.4, Attachment A.)

Federal Assistance—The provision of money, services, or property to a nonfederal recipient for the purpose of supporting or stimulating activities in the national interest. Federal assistance may be Congressionally specified and directed, or may be Congressionally authorized and encouraged within general parameters for specific definition and implementation by a particular component of the Executive Branch.

Federal Assistance Instrument—The legal document which serves to identify the responsibilities of the government and recipients when Federal assistance is provided.

Follow-on Year—An additional 12 month period, immediately succeeding the current budget period in which the program or project activity continues. A Federal Assistance Management Summary Report could be submitted each follow-on year. Also, a Federal Assistance Milestone Plan could be updated yearly.

Grant—A type of legal document between the Federal government and a state or local government or other recipient to transfer money, property, services, or anything of value from the Federal government to the recipient in order to accomplish a public purpose of support or stimulation authorized by Federal statute. It does not include acquisition—by purchase, lease, or barter—of property or services for the direct benefit or use of the Federal government. No substantial involvement is anticipated between DOE, acting for the Federal government, and the recipient during performance of the contemplated activity.

Grantee—The recipient who or entity which accepts a grant award and thereby assumes legal and financial responsibility and accountability both for the awarded funds or property and for the performance of the grant-supported activity.

Human Resource Development—A series of organized work efforts, conducted within a specific time and designed to encourage behavioral change. Included in this category would be educational seminars, training courses, skill development workshops, or heightened awareness projects.

Indirect Costs—Costs incurred for a common or joint purpose benefiting more than one objective or program, and not readily assignable to one specific effort. For example, indirect costs which are incurred by educational institutions are usually those for general administration, library, and departmental administration expenses. (Paraphrased FMC 74-4.)

In-Kind Contributions—The value of noncash items provided by the recipient and nonfederal parties. In-kind contributions may be in the form of real property, nonexpendable personal property, goods or services which are directly benefiting and specifically identifiable with the project or program.

Intermediate Events—Detailed events which are necessary for and lead to the completion of a milestone. An intermediate event signals completion of a subtask crucial to the milestone effort.

Local Government—A local unit of government; specifically, a county, municipality, city, town, township, local public authority, special/school district, intrastate district, council of governments, sponsor group representative organization, and other regional or intrastate government entity, or any agency or instrumentality of a local government exclusive of institutions of higher education and hospitals.

Matching Grant—Both the Federal government and the recipient provide funds to the activity based on a formula. Usually, a minimum percentage for a matching share is prescribed by program legislation and the share requirements are included in the grant agreement, such as Federal government gives "X" dollars if state gives "Y" dollars.

Milestone—An important or critical event that must occur in order to achieve the project objective(s).

Nonprofit Organization—Any corporation, trust, foundation, trade association, or other institution (1) which is entitled to exemption under Section 501(c) of the Internal Revenue Code or (2) which is not organized for profit and no part of the net earnings of which inure to the benefit of any private shareholder or individual.

Objective—A general, comprehensive statement of a desired end. From this statement specific goals can be generated.

Production or Resource Development—Projects under this category are designed to produce energy saving devices or apply existing technology in an innovative way in order to reduce energy consumption or make existing energy resources usable.

Program—An organized set of activities directed toward a common purpose, objective, or goal undertaken or proposed by DOE in order to carry out responsibilities assigned to it. It is characterized by a plan of action designed to accomplish a definite objective.

Program Manager—An official in the program division or field office who has been assigned responsibility for accomplishing a specific set of program objectives. This involves planning, directing and controlling one or more assistance activities, initiation of any award processes necessary to get assistance activities started, and monitoring of assistance activities.

Project—A major endeavor within a program which has a firmly scheduled beginning, intermediate, and ending date milestones, prescribed performance requirements, and prescribed costs and close management planning and control. A project is not constrained to any specific element of the budget structure, such as, operation or construction.

Project Period—The total time for which the program office administratively approves the project and administratively commits itself to its financial support. Approval of continuation requests will be based on availability of funds, evidence of satisfactory progress, and continued relevance to DOE's sponsoring program office. The project period is divided into several budget periods. The total period includes the project period as initially awarded and any extension thereto. A continuing grant encompasses the total project period.

Recipient—An inclusive term for all agencies, governments, other organizations, and individuals receiving Federal assistance in the form of grants or cooperative agreements from the Department of Energy.

Task—Any definable unit of work. It must have an identifiable start and ending and usually produces some recognizable result.

Technical Information Dissemination—The preparation and widespread distribution of technical information and data developed through the energy program by the DOE Technical Information Center to encourage broad public knowledge, understanding, and application.

Work Breakdown Structure (WBS)—A product-oriented task hierarchy of all work to be performed in accomplishing project objectives. The product(s) may be hardware, software, support services, tests, documentation, or other quantified elements of the project objectives. The task hierarchy has, as its first level, the major end-item of the project. The successive levels provide increasingly detailed definition of the individual work

tasks that contribute to the production of end items. The scope and number of levels in the task hierarchy depend on the scope and complexity of the individual project.

Work Breakdown Structure Element—Any of the individual items or entries in the WBS hierarchy, regardless of level.

Appendix B.

Research Project Example

This example portrays a research grant from the Department of Energy to a university. The project is intended to establish the relationship, if any, between the use of four recently developed airfoil designs for the suppression of blade tip induced noise in large wind driven generators.

The example illustrates the plan and reports which might be submitted on a project of this type. Also included is a discussion of how each plan and report is used in this example.

Figures 15 and 16 are the Federal Assistance Reporting Checklist and Reports Distribution List respectively. They illustrate the plan and reports which would be submitted by a recipient of a research grant. The Reports Distribution List indicates who will receive those plans and reports.

U.S. DEPARTMENT OF ENERGY
FEDERAL ASSISTANCE REPORTING CHECKLIST

FORM EIA-485A (10-80) FORM APPROVED OMB NO. 1800-0127

1. Identification Number: Grant DE-FG-01-00CS4567		2. Program/Project Title: Noise Suppression In Wind Driven Generators	
3. Recipient: Pierce State University			
4. Reporting Requirements:		Frequency	No. of Copies
PROGRAM/PROJECT MANAGEMENT REPORTING			
☐ Federal Assistance Milestone Plan			
☒ Federal Assistance Budget Information Form	X	1,1,1	A,B,C
☐ Federal Assistance Management Summary Report			
☐ Federal Assistance Program/Project Status Report			
☒ Financial Status Report, OMB Form 269	F	1,1,1	A,B,C
TECHNICAL INFORMATION REPORTING			
☒ Notice of Energy RD&D	O	1,3,1,1	A,B,D,F
☒ Technical Progress Report	A	1,4,1,1	A,B,D,F
☒ Topical Report	A	1,4,1,1	A,B,D,F
☒ Final Technical Report	F	1,4,1,1	A,B,D,F
FREQUENCY CODES AND DUE DATES: A - As Necessary; within 5 calendar days after events. F - Final: 90 calendar days after the performance of the effort ends. O - Quarterly; within 30 days after end of calendar quarter or portion thereof. Q - One time after project starts; within 30 days after award. X - Required with proposals or with the application or with significant planning changes. Y - Yearly; 30 days after the end of program year. (Financial Status Reports 90 days). S - Semiannually; within 30 days after end of program fiscal half year.			
5. Special Instructions: Technical Reports sent to TIC should be in the form of a reproduction master.			
6. Prepared by: (Signature and Date) <i>J. S. Anderson 1/16/81</i>		7. Reviewed by: (Signature and Date) <i>C. L. Dixon 2/24/81</i>	
J. S. Anderson		C. L. Dixon	

Figure 15

ATTACHMENT TO FEDERAL ASSISTANCE REPORTING CHECKLIST

Report Distribution List

A. Cassandra L. Dixon
Administrative Monitor
Office of Conversion
Department of Energy, M.S. 153
Washington, D.C. 20545

B. Jason S. Anderson
Program Manager
Department of Energy, M.S. 728
Washington, D.C. 20545

C. Ad D. Beans
Financial Officer
Department of Energy, M.S. 62
Washington, D.C. 20545

D. Department of Energy
Technical Information Center
P.O. Box 62
Oak Ridge, TN 37830

E. Sally Lessor
Awarding Officer
Department of Energy, M.S. 1508
Washington, D.C. 20545

F. Patent Office
Department of Energy
Richmond, VA 23245

Figure 16

Federal Assistance Budget Information Form

Discussion of the Example, Figure 17

Items 1-5. These items display the identifying characteristics of the program/project.

Section A—Budget Summary. In this section the total budget is presented for the particular grant program. Since this project pertains to a single Federal grant program with no functional or activity breakdown, only line 1 is used.

Section B—Budget Categories. In this section the total budget is presented for each of the cost categories of direct costs with indirect costs computed at a rate determined by an agreement between the grantee and the grantor or as a result of an audit of the grantee's operation by the grantor agency.

FEDERAL ASSISTANCE BUDGET INFORMATION FORM						
FORM EIA-285C (10-80)					FORM APPROVED OMB No. 1800-0127	
1. Program/Project Identification No. Grant DE-EG-01-00CS4567		2. Program/Project Title Noise Suppression in Wind Driven Generators				
3. Agency and Address Department of Physics Pierce State University, Piedmont, MO 69021					4. Program/Project Start Date 7/1/80	
					5. Completion Date 6/30/81	
SECTION A - BUDGET SUMMARY						
Grant Program, Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Research & Dev. Solar	81,037	•	•	• 113,000	• -0-	• 113,000
2.		•	•			
3.		•	•			
4.		•	•			
5. TOTALS		•	•	• 113,000	• -0-	• 113,000
SECTION B - BUDGET CATEGORIES						
6. Object Class Categories	7. Grant Program, Function or Activity				Total (g)	
	(a) Research & Dev. Solar	(b)	(c)	(d)		
a. Personnel	• 60,535	•	•	•	• 60,535	
b. Fringe Benefits	6,265				6,265	
c. Travel						
d. Equipment	5,200				5,200	
e. Supplies	3,714				3,714	
f. Construction						
g. Construction	5,000				5,000	
h. Other						
i. Total Direct Charges	80,286				80,286	
j. Indirect Charges	32,286				32,286	
8. TOTALS		• 113,000	•	•	•	• 113,000
9. Program Income		•	•	•	•	•

Figure 17

Financial Status Report

Discussion of the Example, Figure 18

Item 7—The “cash” or “accrual” block should be marked in accordance with program policy on reporting.

Item 8—The dates entered in this space are the same as those entered in item 4 and item 5 in the Federal Assistance Budget Information Form.

Item 9—The dates entered in the space correspond to the time period covered by this report—7/1/80 to 6/30/81.

Item 10—The total funds expended on the research effort are reported in this section. The period covered by this report is the entire life of the project. Therefore, the total costs for this project are entered in 10b at \$113,000. The Net Outlays this Report Period (10d) and the Net Outlays to Date (10e) are equal to the Total Net Outlays this report period (10b). The

total Federal Share of Outlays to date is entered in 10g also at \$113,000. Line items 10h through 10j are zero because no other financial commitments have been made to date. Line 10l is the total amount of Federal funds authorized and is equal to the total Federal Share of Outlays (line 10g). Since this report sums all costs on a total project basis, column 10g is the same as 10a.

Item 11—The method of calculating indirect costs, as specified in the Federal assistance instrument, is indicated in this space. This example shows that there is a predetermined indirect cost rate of 40% and that it is applied to the total amount of direct costs.

Item 12—This line allows the recipient to refer to other performance reports for more information.

FINANCIAL STATUS REPORT <small>(Follow Instructions on the back)</small>				1. Federal Agency and Organizational Element to which Report is Submitted Department of Energy		2. Federal Grant or Other Identifying Number DE-FG-01-00CS4567		OMB Approved No. 00-R0180	Page of 1 1
3. Recipient Organization (Name and complete address, including ZIP code) Pierce State University Piedmont, Missouri 69201				4. Employer Identification Number 1001		5. Recipient Account Number or Identifying Number 1234		6. Final Report ☒ Yes ☐ No	
				7. Basis ☐ Cash ☒ Accrual					
8. Project/Grant Period (See Instructions)				9. Period Covered by this Report					
From (Month, day, year) 7/01/80				To (Month, day, year) 6/30/81		From (Month, day, year) 7/01/80			
						To (Month, day, year) 6/30/81			
10 STATUS OF FUNDS									
Programs/Functions/Activities		(a) Noise Sup- pression Project	(b)	(c)	(d)	(e)	(f)	TOTAL (g)	
a. Net Outlays previously reported		\$ -0-	\$	\$	\$	\$	\$	\$ -0-	
b. Total outlays this report period		113,000						113,000	
c. Less: Program income credits		-0-						-0-	
d. Net outlays this report period (Line b minus line c)		113,000						113,000	
e. Net outlays to date (Line a plus line d)		113,000						113,000	
f. Less: Non-Federal share of outlays		-0-						-0-	
g. Total Federal share of outlays (Line e minus line f)		113,000						113,000	
h. Total unliquidated obligations		-0-						-0-	
i. Less: Non-Federal share of unliquidated obligations shown on line h		-0-						-0-	
j. Federal share of unliquidated obligations		-0-						-0-	
k. Total Federal share of outlays and unliquidated obligations		113,000						113,000	
l. Total cumulative amount of Federal funds authorized		113,000						113,000	
m. Unobligated balance of Federal funds		-0-						-0-	
11. Indirect Expense		a. Type of Rate (Place "X" in appropriate box) ☐ Provisional ☒ Predetermined ☐ Final ☐ Fixed		13. Certification		Signature of Authorized Certifying Official		Date Report Submitted	
		b. Rate 80,714		c. Total Amount 32,286		d. Federal Share 32,286		7/15/81	
12. Remarks: Attach any necessary explanation or information required by sponsoring Federal agency in compliance with governing legislation.				I certify to the best of my knowledge and belief that this report is correct and complete and that all outlays and unliquidated obligations are for the purpose set forth in the award docu- ments.		Typed or Printed Name and Title Charles Adams, Director		Telephone (Area code, number and extension) (402) 370-8791	

269-101

STANDARD FORM 269 (7-79)
Prescribed by Office of Management and Budget

Figure 18

Notice of Energy RD&D Project

Figure 19 is the Notice of Energy RD&D Project report. It is required for all RD&D efforts except weapon systems. It is submitted shortly after the award is given and updated annually

for the duration of the effort. The purpose of this report is to inform the scientific community of research efforts being undertaken.

FORM DOE 538 (Rev. 10-80)		U.S. DEPARTMENT OF ENERGY NOTICE OF ENERGY RD&D PROJECT		FORM APPROVED OMB NO. 38 R-0180						
APPROVED FOR USE BY SMITHSONIAN SCIENCE INFORMATION EXCHANGE										
1. Descriptive title of work RESEARCH IN NOISE SUPPRESSION USING ADVANCED AIR-FOIL DESIGNS IN HIGH TIP SPEED WIND DRIVEN GENERATORS										
2. Performing organization control number <u>99-99090</u>		3. Contract or grant number <u>GRANT DE-FG-01-00CS4567</u>								
Work status: ☒ New ☐ Continuing ☐ Terminated										
4. Contractor's principal investigator/project manager and address where work is performed										
A. Name (Last, First, MI) <u>ADAMS, CHARLES W., DR.</u>		B. Phone: FTS- <u>370-8791</u>								
C. Research organization business address: Street <u>PIERCE STATE UNIVERSITY</u> City <u>PIEDMONT</u> State <u>MISSOURI</u> Zip <u>69201</u> Com. <u>(402) 370-8791</u>										
5. A. Name of performing organization <u>PIERCE STATE UNIVERSITY</u> DEPARTMENT OF PHYSICS (Organization) (Department)										
B. Mailing address (If different from 4C) C. Circle only one code for TYPE OF ORGANIZATION PERFORMING R&D (See instructions): ☒ CU ☐ FF ☐ IN ☐ NP ☐ ST ☐ TA ☐ US ☐ XX ☐ EG										
D. Location where the work is being performed										
E. Country sponsoring research										
6. Supporting organization										
A. Program division or office (Full name) <u>CONSERVATION AND SOLAR ENERGY</u>										
B. Technical monitor (Last, First, MI) <u>ANDERSON, JASON S.</u>		C. Phone: FTS- <u>376-3062</u>								
D. Address (If different from DOE Hqs.)										
E. Administrative monitor (Last, First, MI) <u>DIXON, CASSANDRA L.</u> Com. <u>(402) 376-3062</u>										
7. Project schedule										
A. Start date <u>July</u> 1980 (Month) (Year)		B. Expected completion date <u>June</u> 1981 (Month) (Year)								
8. Funding in thousands of dollars (Funds represent budget obligations for operating and capital equipment)										
A. <table border="1" style="width: 100%; border-collapse: collapse;"><tr><th style="text-align: left;">Funding organization(s)</th><th style="text-align: center;">Current FY</th><th style="text-align: center;">Next FY</th></tr><tr><td style="text-align: center;">CS</td><td style="text-align: center;">38</td><td style="text-align: center;">75</td></tr></table>		Funding organization(s)	Current FY	Next FY	CS	38	75			
Funding organization(s)	Current FY	Next FY								
CS	38	75								
B. <table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="height: 15px;"></td><td></td><td></td></tr></table>										
C. <table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="height: 15px;"></td><td></td><td></td></tr></table>										
D. For DOE projects, enter budgeting and reporting classification code <u>C5 - 0000001</u>										
E. Interagency agreement (Specify funding agency)										
F. Agency in-house effort (Check if applicable) ☐										
G. EPA "pass-thru" funding (Check if applicable) ☐										
Note: Funding Section utilization is optional on Federal Financial Assistance Programs: grants, direct payments, cooperative agreements, loan guarantees, and other related programs.										
9. Descriptive summary of work (Limit to 200 words. Include objective, approach, results to date and their significance, and expected product. Quantify where possible). THE OBJECTIVE OF THIS RESEARCH PROJECT IS TO ESTABLISH THE RELATIONSHIP, IF ANY, BETWEEN THE USE OF FOUR RECENTLY DEVELOPED AIRFOIL DESIGNS TO THE SUPPRESSION OF BLADE TIP INDUCED NOISE IN LARGE WIND DRIVEN GENERATORS. WHILE THERE IS AMPLE DATA ON THE EFFICIENCY OF THESE ADVANCED AIRFOIL DESIGNS, NO INFORMATION EXISTS WHICH CAN INDICATE WHETHER THEIR USE CAN SERVE TO SUPPRESS NOISE USUALLY ASSOCIATED WITH WIND DRIVEN GENERATORS EMPLOYING BLADES LONG ENOUGH TO RESULT IN HIGH BLADE TIP SPEEDS. THE PIERCE STATE WIND TUNNEL WILL BE USED TO GATHER EMPIRICAL DATA WHICH SERVES TO INDICATE WHAT KIND OF RELATIONSHIPS EXIST. IT IS EXPECTED THAT IF SUCH RELATIONSHIPS CAN BE IDENTIFIED THEY WILL BE USEFUL IN THE DESIGN OF WIND DRIVEN GENERATORS IN AREAS WHERE NOISE GENERATION IS A PROBLEM FOR THE SURROUNDING POPULATION.										

Figure 19

10. List the five most descriptive publications in the last year that are available to the public which have resulted from the project (Please give a complete bibliographic citation. Use additional sheets if necessary).

N/A

[illegible]

12. Type of research activity (Check applicable activities)

A. ☐ Basic research	H. ☐ Mathematical model development
B. ☐ Applied research	I. ☐ Data analysis/assessments
C. ☒ Laboratory scale R&D	J. ☐ Information systems management
D. ☐ Technology development	K. ☐ Policy analysis
E. ☐ Field study	L. ☐ Socioeconomic
F. ☐ Pilot plant scale R&D	M. ☐ Other (Specify) _____
G. ☐ Full scale demonstration	N. ☐ Not applicable

13. keywords (Please list 5 keywords).

NOISE SUPPRESSION
AIRFOILS
WIND DRIVEN GENERATORS
BLADE TIP SPEED
SOUND GENERATION

14. Is this research project solely an ANALYTICAL/PAPER STUDY?
(Non-experimental, paper and pencil, computer analysis, etc.). YES _____ NO X _____

15. Respondent's Name: ADAMS, CHARLES W., DR. Phone No.: 402-370-8791 Date: 7-15-80
Street: PIERCE STATE UNIVERSITY
City: PIEDMONT State: MISSOURI Zip: 69201

City: PIEDMONT State: MISSOURI Zip: 69201

State: MISSOURI

Zip: 69201

<p>DOE/CS/4567 Distribution Category UC-60</p>	<p>DOE Report Number Distribution Category No. and Subcategory Letter</p>
<p>NOISE SUPPRESSION USING ADVANCED AIRFOIL DESIGN IN HIGH TIP SPEED WIND DRIVEN GENERATORS</p>	<p>Title and Subtitle</p>
<p>ANNUAL REPORT FOR THE PERIOD 1 JULY 1980—30 JUNE 1981</p>	<p>Type of Report and Period Covered</p>
<p>DR. C.W. ADAMS</p>	<p>Author(s)</p>
<p>PIERCE STATE UNIVERSITY PIEDMONT, MISSOURI 69201</p>	<p>Federal Assistance Recipient's Name</p>
<p>PREPARED FOR THE U.S. DEPARTMENT OF ENERGY ASST. SECRETARY FOR CONSERVATION AND SOLAR ENERGY OFFICE OF SOLAR ENERGY UNDER GRANT DE-FG-01-00CS4567</p>	<p>DOE Sponsorship and DOE Award Number</p>

Figure 20 Sample Title Page for Final Technical Report

University Contractor, Grantee and Cooperative Agreement Recommendations For Announcement and Distribution of Documents

Figure 21 is University-Type Contractor and Grantee Recommendations for Disposition of Scientific and Technical Document. This form is used by the originator of a technical report to indicate the distribution appropriate for it.

DOE Form RA-427
(10/80)

U.S. DEPARTMENT OF ENERGY

OMB NO. 038-R0190

UNIVERSITY CONTRACTOR, GRANTEE AND COOPERATIVE AGREEMENT RECOMMENDATIONS FOR ANNOUNCEMENT AND DISTRIBUTION OF DOCUMENTS

See Instructions on Reverse Side

1. DOE Report No. DOE/CS/4567	3. Title Noise Suppression Using Advanced Airfoil Design in High Tip Speed Wind Driven Generators
2. Contract No. Grant DE-FG-01-00CS4567	
4. Type of Document ("X" one) ☒ a. Scientific and technical report ☐ b. Conference paper: Title of conference _____ Date of conference _____ Exact location of conference _____ Sponsoring organization _____ ☐ c. Other (Specify planning, educational, impact, market, social, economic, thesis, translations, journal article manuscript, etc.)	
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6. Reason for Recommended Restrictions	
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USE ONLY

9. Patent Clearance ("X" one)
☐ a. DOE patent clearance has been granted by responsible DOE patent group.
☐ b. Report has been sent to responsible DOE patent group for clearance.

Figure 21

Appendix C

Sample Clause for Federal Assistance Instruments

The Federal assistance recipient shall prepare and submit (postage prepaid) the plans and reports indicated on the Federal Assistance Reporting Checklist to the addresses and in the number of copies designated on the checklist. Preparation of the specified plans and reports shall be in accordance with the *DOE Uniform Reporting System for Federal Assistance Guidelines*. The level of detail the recipient provides in the plans and reports shall be commensurate with the scope and com-

plexity of the task and shall be as delineated in Block 4—Reporting Requirements—and Block 5—Special Instructions. The prime recipient shall be responsible for acquiring data from any subcontractors, or subrecipients to ensure that data submitted are compatible with the data elements which prime recipients submit to DOE. Plans and reports submitted in compliance with this provision are in addition to any other reporting requirements of the Federal assistance instrument.

Appendix D

Suggested Program Announcement Description of the Uniform Reporting System and Individual Reports

Purpose

The URS is a set of standard forms and procedures for communicating planning results and reporting the conduct and results of DOE assisted activities. Recipients of DOE grants and parties to DOE cooperative agreements are required to provide DOE with the necessary minimum level of information, through the use of selected URS forms, to enable DOE to carry out its fiscal, accountability and program responsibilities.

Reporting Objectives

Both planning and performance information is provided to the DOE program manager through the URS. Planning data, acquired through URS baseline planning forms, provide a summary level cost and schedule baseline against which performance data can be compared to ensure the responsible administration of Federal assistance programs. Performance data collected provide measures of program status and results achieved.

Reporting Requirements

The scope and level of detail of baseline information and the frequency and nature of performance reporting have been determined by the program manager. Proposed URS reporting requirements are identified in the program announcement. Copies of the baseline plan forms required for this program also are included as part of the application package. The final selection of required URS reports will be specified in the Federal Assistance Reporting Checklist incorporated in the award instrument. The determination of URS reports required was made in consideration of the type of activity being assisted, the duration and complexity of the anticipated effort, probable amount of award funding, and relevant OMB guidelines.

Baseline, status, and technical reports proposed as requirements for this program are described on the following pages. More complete descriptions of these reports are available in the *Uniform Reporting System for Federal Assistance (Grants and Cooperative Agreements) Guidelines, Vol. II* available from the DOE Technical Information Center, Secondary Distribution, P.O. Box 62, Oak Ridge, TN 37830

Baseline Plans

Federal Assistance Management Summary Report—This report is a single page form on which the applicant enters pro-

jected cost and activity data. The cost data to be entered must depict projected total costs for the life of the project on at least a quarterly (three month) basis. The activity data required is a delineation of the project's major milestones and bar charts displaying the projected schedule for attainment of these milestones. This report is used for both the baseline plan and project status reporting.

Federal Assistance Milestone Plan—The Milestone Plan is used to portray the major milestones of the proposed project in bar chart format. It covers the entire project period and is to be organized by major project activities (Work Breakdown Structure Level 2, for example).

Federal Assistance Budget Information Form—The Budget Information Form is to be used by the applicant to provide summary level data on the proposed project total budget. The total project budget is broken down into Federal and non-Federal funds for each major activity. A second breakdown of the total budget for each major activity by object of expenditure (personnel, travel, and so on) also is requested.

Federal Assistance Budget Information Form (Construction)—The Budget Information Form for Construction is to be used by the applicant to provide summary level data on the proposed project total budget. The total product is broken down by cost classification. Space is provided for listing those parts of the project not subject to Federal participation and for showing the proposed method of financing the nonfederal share.

Status Reports

Federal Assistance Management Summary Report—This report is a single page form (see copy of form presented as a required baseline plan) on which the applicant provides summary cumulative cost and activity data for each reporting period. More detailed instructions are on the back of the form.

Federal Assistance Program/Project Status Report—This report is a single page form on which the award recipient enters brief narrative discussions of the following topics: approach changes; performance variances, accomplishments, or problems; open items; and status assessment and forecast. Each of these topics is addressed, as appropriate, for a given reporting period and the report is submitted every (____ month(s)/year) during the life of the project.

Financial Status Report, OMB Form 269—This form is used to provide DOE with regular periodic accounting of project funds expended. The accounting may be on either a cash or accrual basis. Actual total expenditures and obligations incurred, but not paid, are reported for each reporting period for each major activity identified on the Management Summary Report. Provision is made to identify the Federal and nonfederal share of project outlays for each identified activity.

Technical Reports

Notice of Energy Research, Development, and Demonstration Project—This notice provides information to the scientific community as well as to other interested parties of the project being undertaken. Performing and supporting organizations are identified on the form, as well as the performance period, amount of funding, and scientific and technical manpower directly involved in the effort. This report is required at the

time of project initiation and yearly thereafter during the life of the project.

Technical Progress Report—A technical progress report is required every (quarter/six months/year). This report summarizes the work performed during the reporting period and describes technical or scientific achievements realized.

Topical Report—A topical report is a comprehensive discussion of the technical results of work performed on specific phases of the project. This report can be used to provide detailed descriptions of significant project breakthroughs, as in an advance of the state of the art.

Final Technical Report—A final technical report is to be provided within ninety days of the completion of the project. It must provide a description of the total work performed and a comprehensive discussion of the results achieved. Detailed data supporting the discussions is to be provided in tabular or other appropriate format.

APPENDIX E

REFERENCES

1) OMB Circular A-21
(formerly FMC 73-8)	Cost Principles for Educational Institutions
2) OMB Circular A-87
(formerly FMC 74-4)	Cost Principles Applicable to Grants & Contracts/State & Local Governments
3) OMB Circular A-88
(formerly FMC 73-6)	Indirect Cost Rates, Audit & Audit Follow-up at Educational Institutions
4) OMB Circular A-89	Catalogue of Federal Domestic Assistance
5) OMB Circular A-95	Evaluation, Review & Coordination of Federal & Federally Assisted Programs & Projects
6) OMB Circular A-102	Uniform Administrative Requirements for Grants-In-Aid to State & Local Governments
7) OMB Circular A-109	Major Systems Acquisitions
8) OMB Circular A-110	Grants & Agreements w/ Institutions of Higher Education, Hospitals & Other Non Profit Organizations
9) OMB Circular A-111	Jointly Funded Assistance of State and Local Governments & Non Profit Organizations
10) OMB Circular A-122	Cost Principles for Non Profit Organizations
11) FMC Circular 73-2	Audit of Federal Operations and Programs by Executive Branch Agencies
12) DOE Assistance
Regulations	10 CFR 600
13) DOE Order 1340.1	Management of Public Communications Publications and Scientific, Technical, and Engineering Publications
14) TC 1075	Withdrawal of Cash from the Treasury for Advances Under Federal Programs
15) TC 1082	Modification to States of Grants-in-Aid Information (formerly OMB A-98)