

**FINANCIAL ASSISTANCE
ANNOUNCEMENT OF
FUNDING OPPORTUNITY**



**CLEAN COAL POWER INITIATIVE
DE-PS26-04NT42061**

Catalog of Federal Domestic Assistance (CFDA) Number:

81.089 – Fossil Energy Research and Development

CONTACT: JoAnn C. Zysk

TELEPHONE NO.: 412-386-6600

FAX NO.: 412-386-6137

E-MAIL: zysk@netl.doe.gov

**ISSUING OFFICE: U.S. DEPARTMENT OF ENERGY
National Energy Technology Laboratory
P. O. Box 10940
Wallace Road
Pittsburgh, PA 15236-0940**

ISSUE DATE: February 13, 2004

DUE DATE: June 15, 2004

Information regarding this Announcement is available on the Department of Energy, Industry Interactive Procurement System (IIPS) web site at: <http://e-center.doe.gov>

FINANCIAL ASSISTANCE ANNOUNCEMENT, DE-PS26-04NT42061

CLEAN COAL POWER INITIATIVE

To: ALL PROSPECTIVE APPLICANTS

The Clean Coal Power Initiative (CCPI) is a cost-shared government/industry collaboration to implement the President's National Energy Policy recommendation to increase investment in clean coal technology. This recommendation, one of several dealing with electricity, addresses our National challenge of ensuring the reliability of our electric supply while simultaneously protecting our environment. Under CCPI, the Government and industry would collaborate to demonstrate advanced coal-based, power generation technologies that reduce barriers to continued and expanded coal use and that affirm technology readiness for widespread commercial deployment to provide clean, reliable, and affordable electricity. As part of this Initiative, the DOE's Office of Fossil Energy, through its National Energy Technology Laboratory (NETL), is soliciting applications for cost-shared projects.

The attached CCPI Round 2 Announcement is seeking projects that: (1) demonstrate advanced coal-based technologies that have progressed beyond the research and development stage to a point of readiness for testing at a scale that can be readily replicated into commercial practice within the electric power industry; and (2) accelerate the likelihood of deploying the demonstrated technologies for widespread commercial use in the electric power sector. DOE's highest priorities for CCPI Round 2 are gasification, mercury control, sequestration, and sequestration-ready technologies that have potential for progressing substantially toward performance targets identified by DOE for advanced coal power technologies in a Coal Power Program Roadmap. Proposed technologies must be integrated within existing or new power plant facilities that use coal for at least 75% of their energy input and that produce at least 50% of their energy-equivalent output in the form of electric power. Additionally, prospective projects must show the potential for timely market penetration upon successful demonstration of the technology or concept.

The attached Announcement will be open for application submission for a period of 123 days. Any resultant awards are expected to be cooperative agreements and will require at least 50% cost sharing. Specific aspects related to: (1) area of interest; (2) application evaluation; (3) application preparation instructions; (4) projected funding (including cost-sharing requirements); and (5) the timing sequence for application submissions, review, selection, and award of financial assistance instruments, can be found in the Announcement.

All applications in response to the attached Announcement are required to be submitted electronically through the DOE Industry Interactive Procurement System (IIPS). All requests for explanation or interpretation of any part of the Announcement must be submitted through the "Submit Question" feature in the IIPS. Once a question is submitted, it cannot be edited. Questions submitted as well as the Government's response to these questions may be viewed by using the "View Questions" feature in IIPS. The Government reserves the right not to respond to questions submitted by telephone, e-mail or in person at any time.

While this letter highlights some important elements of the Announcement, it is not an integral part of the Announcement. In the event of any conflict between the contents of this letter and the attached Announcement, the language in the Announcement will prevail.

All communications concerning the Announcement should cite the Announcement number, and must be submitted to the Contract Specialist, Ms. Jo Ann C. Zysk through the “Submit Question” feature in the IIPS Secured Services site at <http://e-center.doe.gov>.

Sincerely,

Raymond Johnson
Contracting Officer
Acquisition and Assistance Division
National Energy Technology Laboratory

TABLE OF CONTENTS

SECTION I – FUNDING OPPORTUNITY DESCRIPTION.....	4
A. Summary	4
B. Background Information	4
C. Announcement Objectives.....	6
D. Program Areas of Interest.....	6
SECTION II – AWARD INFORMATION.....	9
A. Type of Award Instrument (OCT 2003).....	9
B. Estimated Funding (OCT 2003)	9
C. Availability of Applicant Funds (JAN 2004)	9
D. Maximum and Minimum Award Size (OCT 2003).....	9
E. Expected Number of Awards (OCT 2003).....	9
F. More Than One Application (JAN 2003).....	9
G. Project Performance Period (OCT 2003)	9
H. Announcement Definitions (MAR 2002)	9
SECTION III – ELIGIBILITY INFORMATION	12
A. Eligible Applicants (OCT 2003)	12
B. Cost Sharing or Matching (OCT 2003)	12
C. Application Preparation Costs (DEC 1999)	13
D. Cost Overruns (OCT 2003)	13
E. Other (OCT 2003)	14
1. False Statements (AUG 1999).....	14
2. Additional Eligibility Requirements of the Energy Policy Act of 1992 (MAR 2002).....	14
3. Property Management and Disposition (OCT 2003)	14
4. Small and Small Disadvantaged Business (OCT 2003)	15
5. Determination of Responsibility (JAN 2001).....	15
6. Evaluation Personnel (FEB 2003)	15
7. DOE Treatment of Application Information (MAR 2002).....	15
8. Application Clarification (JULY 1999).....	15
9. Award Without Discussions (AUG 2000).....	15
10. Government Right to Reject or Negotiate (AUG 2000)	15
11. Anticipated Selection Date (OCT 2003).....	15
12. Notice of Award (OCT 2003).....	15
13. Application Acceptance Period (OCT 2003).....	16
14. Disposition of Applications (MAR 2002)	16
15. Presubmission Review and Clearances (AUG 1999)	16
16. Simpson-Craig Amendment (MAY 2001)	16
17. Minority Economic Impact (MEI) Loans Not Available (JULY 1999)	16
18. Unsuccessful Applications (MAR 2002).....	16
19. Performance of Work in the United States (FEB 2001)	16
20. National Environmental Policy Act Compliance (MAR 2002).....	17
21. Pre-Selection Project-Specific Environmental Questionnaire (MAR 2002).....	17
22. Post-Selection Environmental Review (MAR 2002).....	17
23. Post-Award Environmental Monitoring (MAR 2002).....	17
24. U. S. Competitiveness Provision (MAR 2002).....	17
25. Recovery of Government’s Investment (MAR 2002)	18
26. Site Documentation (MAR 2002).....	18
27. Project Specific Development Activities (MAR 2002)	18
28. Post-Selection Information (MAR 2002)	18
SECTION IV – APPLICATION AND SUBMISSION INFORMATION.....	19
A. General	19
B. Unnecessarily Elaborate Applications (FEB 2003).....	19
C. Content and Form of Application Submission (OCT 2003).....	19
1. DUNS sm Number	19

2.	Pre-application (OCT 2003)	19
3.	Application	19
i.	Application File	21
ii.	Budget File.....	21
iii.	Budget Detail and Royalty Information	22
iv.	Public Abstract.....	25
v.	Project Narrative File	25
vi.	Certifications and Assurances	27
vii.	Attachment 1 – Repayment Plan.....	27
viii.	Attachment 2 – Funding Plan.....	28
ix.	Attachment 3 – Financial Business Plan	29
x.	Attachment 4 – Financial Commitments, Financial Statements, and Financial Management System	29
D.	Submission Date and Time.....	30
E.	Intergovernmental Review	31
F.	Funding Restrictions.....	31
G.	Other Submission Requirements	31
SECTION V – APPLICATION REVIEW INFORMATION		34
A.	Introduction (MAY 2000)	34
B.	General (JULY 1999).....	34
C.	Criteria.....	34
1.	Preliminary Review Criteria (OCT 2003)	34
2.	Merit Review Criteria.....	34
3.	Other Selection Factors (OCT 2003)	36
D.	Review and Selection Process	37
1.	Merit Review (OCT 2003)	37
2.	Selection (OCT 2003).....	37
3.	Notice of Selection (OCT 2003).....	38
4.	Discussions and Award (OCT 2003)	38
E.	Anticipated Announcement and Award Dates	38
SECTION VI – AGENCY CONTACT(S).....		39
Questions on the Announcement -- IIPS (OCT 2003).....		39
SECTION VII – OTHER INFORMATION.....		40
A.	Modifications (OCT 2003).....	40
B.	Government Right to Reject or Negotiate (OCT 2003).....	40
C.	Commitment of Public Funds (OCT 2003)	40
D.	Proprietary Application Information (OCT 2003).....	40
E.	Notice Regarding Eligibility of Organizations Described in Section 501(c)(4) of the Internal Revenue Code (OCT 2003) (Applicable to nonprofit organizations excluding institutions of higher education) (OCT 2003)	40
F.	Evaluation by Non-Federal Reviewers (OCT 2003)	41
G.	Intellectual Property Developed under this Program (OCT 2003)	41
H.	Notice of Right to Request Patent Waiver (OCT 2003)	41
I.	Notice Regarding Eligible/Ineligible Activities (AUG 1999)	42
SECTION VIII – ATTACHMENTS.....		43

SECTION VIII – ATTACHMENTS

Attachment A – DOE Application Cover Sheet

Attachment B – Public Abstract Form

Attachment C – Application for Federal Assistance (SF 424)

Attachment D – Financial Assistance Certifications and Assurances

Attachment E – Federal Assistance Budget Information (DOE F 4600.4)

Attachment F – Model Cooperative Agreement

Attachment G – Model Repayment Agreement

Attachment H – Funding Plan

CLEAN COAL POWER INITIATIVE

SECTION I – FUNDING OPPORTUNITY DESCRIPTION

A. Summary

The United States Department of Energy, National Energy Technology Laboratory (DOE/NETL, or DOE) is competitively soliciting applications for a requirement titled “Clean Coal Power Initiative.”

The Clean Coal Power Initiative (CCPI) is a cost-shared collaboration between the Government and industry to implement the President’s National Energy Policy (NEP) recommendation to increase investment in clean coal technology by demonstrating advanced coal-based, power generation technologies. This recommendation, one of several in the NEP dealing with coal, power, electricity, and the environment, addresses a National challenge to ensure a reliable electric supply while simultaneously protecting the environment. The CCPI goal is to accelerate the readiness of advanced technologies for commercial deployment, thus ensuring that the United States has clean, reliable, and affordable electricity and power.

The CCPI provides the opportunity to demonstrate advanced technologies that have progressed beyond the research and development stage to a point of readiness for operation at a scale that can be readily replicated into commercial markets. Critical needs and performance targets for advanced coal power technologies are published in a Roadmap (www.netl.doe.gov/coalpower/ccpi/pubs/CCT-Roadmap.pdf) that provides DOE’s overall plan to develop the technology needed for future energy plants that use coal to produce electricity and cost-competitive transportation fuels and other valuable energy products. This Coal Power Program Roadmap supports Presidential Initiatives for Clear Skies (mercury, sulfur dioxide, and nitrogen oxides controls), Clean Coal Power (technologies leading to near-zero emissions), Climate Change (research to reduce carbon dioxide emissions), and Homeland Security (development of technologies for low-cost, abundant domestic energy resources).

In January 2003, the CCPI Round 1 Announcement resulted in the selection of eight projects covering (1) new emissions control and integrated advanced coal combustion/emissions control technologies for complying with the President’s Clear Skies Initiative, (2) higher efficiency power plant projects to contribute to climate change goals, and (3) advanced gasification and combustion systems for demonstrating clean energy production from coal waste piles.

For this CCPI Round 2 Announcement, DOE’s priorities are technology advancements for gasification-based electricity production, advanced mercury control, and sequestration and sequestration-readiness.

DOE anticipates award of multiple Cooperative Agreements. The total Federal funding anticipated to be available for all awards is approximately \$280 million. The cost share by the industrial participant must be at least 50% for each budget period under the Cooperative Agreement, and DOE expects the participant’s share to be proportionately greater than 50% for projects with reduced technological risk or uncertainty. Applicants must submit a Repayment Agreement in accordance with the guidelines in the Announcement. Each project shall be broken down into phases aligned with Project Definition (optional), Design, Construction, and Demonstration/Operations. Projects will also be broken down into budget periods for funding purposes.

This Announcement will be open to receive applications for a period of 123 days. DOE anticipates a selection announcement by the end of calendar year 2004.

B. Background Information

The National Energy Policy (NEP) is designed to help the private sector and State and local governments to promote dependable, affordable, and environmentally sound production and distribution of energy, including a major emphasis on electricity, for America’s future. A primary goal of the NEP is to add electricity supply

from diverse sources, including coal – our most abundant energy source. The NEP identified research on clean coal technologies as an objective for increasing the attractiveness of coal as an energy source for new generating plants. In addition to maintaining a reliable fuel mix for the Nation’s future, energy supplied from coal will reduce the potential for price spikes and energy disruptions resulting from excessive reliance on fuels prone to shortages due to fluctuations in supply and demand or to transportation delays. While other fuels may offer environmental and capital cost advantages, their benefits are reduced when considering the issue of long-term availability at a stable price.

To implement the NEP’s recommendation for increased investment in clean coal technology, the President established a Coal Research Initiative. A goal of this Initiative is to produce public benefits through research and development on coal-related technologies with potential to improve the competitiveness of coal in future energy supply markets. A major component of the Coal Research Initiative is a Clean Coal Power Initiative (CCPI) for industry-led, cost-shared collaboration to demonstrate advanced coal-based power generation technologies.

The commitment to clean coal power will effectively respond to the National challenge of enhancing electricity supply and availability to address growing electricity demand. More specifically, the CCPI addresses the importance of that challenge through a focus on demonstration of emerging clean coal technologies and on opportunities for timely deployment of those technologies into commercial markets.

Overall, the mission of DOE’s Coal and Power Systems Program is to help assure the availability of abundant, low-cost, domestic energy to fuel economic prosperity and strengthen energy security. That mission is being achieved through development of technological capability to eliminate environmental concerns associated with coal use. Near-term objectives focus on the ability to meet all existing and anticipated environmental regulations at low cost and to increase the power generation efficiency for existing and new plants. For the longer term, the objectives are to nearly double coal power plant efficiencies (from 33% to 60%), to progress toward achieving near-zero emissions from coal-based power generation technologies, to create the capability to produce low-cost hydrogen from coal, and to sequester (capture and store) all carbon from future coal plants at affordable costs of electricity, thus allowing coal to remain a key, strategic fuel for the United States.

To help achieve NEP objectives for coal, DOE developed a Roadmap that establishes specific economic, environmental, and security technology performance goals for near term (e.g., 2010) and longer range (e.g., 2020) coal plants as shown in the table below. The Roadmap is focused on improving environmental performance and maintaining a competitive cost of electricity from existing plants and achieving a target of a competitive, near-zero emissions plant by 2020. The Roadmap addresses current and emerging environmental regulations and National environmental initiatives.

COAL POWER PROGRAM ROADMAP – PERFORMANCE TARGETS

PLANT CHARACTERISTIC	TARGET YEAR	
	2010	2020
Plant efficiency	45% to 50%	50% to 60%
Availability	>85%	>90%
Plant capital costs	\$900-\$1000 per kilowatt	\$800-\$900 per kilowatt
Cost of electricity	\$0.031 per kilowatt-hour	<\$0.03 per kilowatt-hour
Sulfur oxide removal	99%	>99%
Nitrogen oxide emissions	0.05lb/MM Btu	<0.01lb/MM Btu
Particulate emissions	0.005lb/MM Btu	0.002 lb/MM Btu
Particulate removal efficiency	99.99% of 0.1-10 micron particles	
Mercury removal	90%	95%
By-product use	50%	~100%

Cooling water use		~0
Carbon dioxide management	Demonstrations of capture and sequestration	Integrated capture and sequestration
Carbon dioxide management cost	<10% increase in COE for >90% removal	
Co-production plant efficiency	45% to 65%	60% to 75%
Co-production plant capital cost	\$35,000/bpd	<\$25,000/bpd <\$10,000/scfd H ₂
Co-production fuel cost	\$30/bbl	<\$30/bbl \$3-\$5/10 ⁶ Btu H ₂

The goal of this Announcement is to support cost-shared demonstrations of technologies that can achieve progress toward Roadmap objectives consistent with DOE’s Coal Power Program priorities for CCPI Round 2.

C. Announcement Objectives

The CCPI Round 2 Announcement is seeking projects that (1) demonstrate advanced coal-based technologies that have progressed beyond the research and development stage to a point of readiness for operation at a scale that can be readily replicated into commercial practice within the electric power industry and (2) accelerate the likelihood of deploying the demonstrated technologies for widespread commercial use within the electric power sector. Technologies must have potential for achieving progress toward the performance targets of the Coal Power Program Roadmap and support DOE’s highest priorities for CCPI Round 2 (i.e., gasification, mercury control, and sequestration). Proposed technologies must be integrated within existing or new power plant facilities that use coal for at least 75% of the energy input and produce electricity as at least 50% of the energy-equivalent output. Additionally, prospective projects must be at a sufficient scale to show the potential for timely market penetration upon successful demonstration of the technology or concept.

D. Program Areas of Interest

DOE is interested in applications, consistent with Announcement objectives, for: (1) demonstrating technologies that will move the existing fleet of plants toward environmental performance targets, (2) demonstrating technologies that will help achieve goals of the President’s Clear Skies Initiative and environmental control levels anticipated by proposed regulations and/or legislation, and (3) integrated new plant technologies that will demonstrate progress toward environmental and plant performance targets.

Example technology areas are described below. These descriptions are provided for guidance only.

Gasification and New Plant Technologies

New plant, advanced power generation technologies that can achieve both the efficiency and environmental performance targets of the Coal Power Program Roadmap are critical for the long-term reliance on coal as a major contributor to reliable and affordable sources of energy for the United States. In particular, gasification-based technologies have shown promise for meeting Roadmap goals and also offer potential for fuel flexibility and for co-producing electricity and valuable liquid and gaseous byproducts. Currently, capital costs of these advanced systems are higher and availability is lower than those of conventional pulverized coal-fired power plant technologies. Successive demonstrations of gasification technologies, each with significant improvement, are required to achieve performance targets of the Coal Power Program Roadmap. Therefore, applications for improved gasification systems that increase electric power generating performance, improve system operating reliability, or reduce process uncertainties are encouraged. Applications are also encouraged for integrated

improvements that would provide new plant technologies capable of substantially reducing emissions of sulfur, nitrogen, particulate, mercury, and other potentially hazardous air pollutants toward levels targeted for achievement in the Roadmap. New plant technologies with integrated systems need to be demonstrated to move the capabilities of advanced power generation and co-production concepts toward the year 2020 Coal Power Program performance targets: near-zero emissions, substantially higher efficiencies as compared with today's conventional plants, and reduced capital and operating costs.

Mercury Control Technologies

Applications for mercury control technologies are encouraged. Improved mercury control technologies are absolutely vital for maintaining the viability of coal as a contributor to low-cost electricity and energy resource stability. The U.S. Environmental Protection Agency has announced its intent to regulate mercury emissions from coal-fired power generation facilities. In addition, legislation, including the President's Clear Skies Initiative, has been introduced before the U.S. Congress for the purpose of controlling mercury emissions from coal-fired power generation facilities. The commercial demonstration of new technologies for mercury emissions control is urgently needed to comply with future electric utility mercury regulations or the Clean Air Act's Maximum Achievable Control Technology requirements. Improved technologies capable of controlling elemental and oxidized mercury emissions from existing and future power generation systems burning various coals, including bituminous and sub-bituminous coals and lignite, are required.

Carbon Management Technologies

Approximately one-third of carbon emissions in the United States are produced by power plants. Because projected growth in electricity demand is expected to increase the use of coal as a major source of fuel, an important focus of the Coal Power Program Roadmap is carbon management (capture and sequestration) from coal-based power generation facilities. Long term solutions to carbon management require significant advancements over current generation power generation systems. A strong link exists between improved efficiency of coal power systems and carbon capture; that is, the cost of carbon capture per unit of product is less for a more efficient process. For example, heat and pressure integration between CO₂ capture and the balance of the power system can reduce parasitic steam and CO₂ recompression loads. Coal gasification, coal combustion systems using oxygen combustion, advanced steam reforming, chemical looping, and new approaches for removing carbon dioxide from stack gases can produce a CO₂-rich exhaust stream that may be amenable for transport and storage.

Applications for tests of sequestration-ready carbon dioxide capture and of sequestration technologies that demonstrate advancements beyond the current state of technology and that are integrated with advanced or existing power generation systems are encouraged. Demonstrations of cost effective and efficient advanced power plant technologies (e.g., chemical looping or oxygen-blown combustion and gasification systems) that enable carbon management by producing enriched carbon dioxide streams are needed. Projects that replicate ongoing or completed carbon separation or sequestration are not encouraged.

Environmental Control Technologies

Energy efficient technologies that improve the overall air, water, and solid waste performance of coal-based power generation systems are critical to the continued contribution of coal to the Nation's energy mix. Applications for low-cost emissions control strategies that effectively integrate systems for controlling multiple pollutants are encouraged. Improved technologies are required, particularly for reducing mercury emissions, but also for reducing nitrogen oxides, sulfur dioxide, and particulate emissions to levels that approach or achieve the targets specified in the Roadmap. Technologies for water utilization and conservation (e.g., advanced cooling systems) reduce requirements for fresh water, and production of marketable products from solid residues (e.g., fly ash, flue gas treatment; etc.) can improve the economics and reduce the environmental impact of coal-based power production. Applications for demonstrating advances toward 100%

utilization of solid products and economical reduction or elimination of fresh water usage to meet cooling requirements are encouraged.

SECTION II – AWARD INFORMATION

A. Type of Award Instrument (OCT 2003)

The Department of Energy anticipates awarding cooperative agreements under this Program Announcement. A special award condition describing the Government's substantial involvement in the cooperative agreement is located in Section VI.B.2.d. A model cooperative agreement is found in Section VIII. Clauses may be added or deleted while negotiating terms for the specific projects.

B. Estimated Funding (OCT 2003)

DOE anticipates that approximately \$280 million will be available for awards under this Announcement. The total value of DOE's share of the selected projects shall not exceed the amount of funds DOE has available at the time of selection.

C. Availability of Applicant Funds (JAN 2004)

Applicants that propose a Project Definition Phase as Budget Period 1 must commit the total funding projected at time of award for the non-DOE share of Budget Period 1 costs. These applicants must commit the total funding projected for the non-DOE share of the remainder of the project by the end of Budget Period 1. Applicants that do not propose a Project Definition Phase must commit all funding projected at time of award for the non-DOE share of the total project cost.

D. Maximum and Minimum Award Size (OCT 2003)

Ceiling (i.e., the maximum amount for an individual award made under this Announcement): The total amount of appropriated funds available for the Announcement.

Floor (i.e., the minimum amount for an individual award made under this Announcement): None.

E. Expected Number of Awards (OCT 2003)

DOE anticipates that multiple awards will result from this Announcement.

F. More Than One Application (JAN 2003)

You may submit more than one application. Each application must have its own unique title on the subject line (i.e., project title and principal investigator/project director, if any). For each application, you must first click on "Create Application" and then complete the information request.

G. Project Performance Period (OCT 2003)

The Government anticipates the project performance period will be commensurate with the complexity of technology, scale of demonstration and extent of modifications at the project site. If the cooperative agreement is not awarded within 10 months following the notification of selection, DOE reserves the right to terminate negotiations.

Awards will have budget periods that are specific to the project and funding. The Applicant may propose as Budget Period 1 a Project Definition Phase, as defined in Section H below.

H. Announcement Definitions (MAR 2002)

“Budget Period” means the interval of time, specified in the award, into which a project is divided for budgeting and funding purposes.

“Demonstration Facility” means the physical plant, equipment, and all other related facilities constructed and operated during the Demonstration Project.

“Demonstration Project” or “Project” means the complete set of activities described in the Statement of Project Objectives of any resulting Cooperative Agreement for the technology demonstration, including integrated testing to determine performance characteristics of the power system used to support demonstration of a non-power generating technology.

“Host Site or Site” means the general location, either within the property boundary of an identified electric power generating or other facility or on a parcel of land with clearly identified ownership and generally defined boundaries, where the demonstration facility will be operated.

“Participant” or “Recipient” means the legal entity that is responsible for all aspects of Project performance under the Cooperative Agreement.

“Phase” means the set of related tasks which taken together make up a major category of work under the Demonstration Project (e.g., Project Definition, Design, Construction, or Demonstration).

“Project Definition” means the completion of the following items:

- Project Management Plan - a detailed plan that expands on the application to provide technical, cost, and schedule baselines at lower levels of the Work Breakdown Structure for the Project and that includes management controls and procedures for implementing the Project.

Technology Baseline - all decisions about flowsheets, major equipment types, equipment placement, and demonstration configuration will be made,

Schedule Baseline - the schedule will be of sufficient detail to allow cost estimating,

Cost Baseline - the estimate will be of a quality and accuracy to support the project
- Financing - all financial commitments pertaining to the non-DOE share of total Project costs will be signed and implemented.
- NEPA - all requested information to satisfy DOE’s responsibility under the National Environmental Policy Act will have been submitted and the NEPA process will be completed or near completion.

“Project Specific Development Activities” means those development tasks, undertaken at an existing facility, that are eligible for cost sharing. Such eligible tasks are process performance definition, component design verification, materials selection, and evaluations of alternative designs, which are tasks conducted specifically to develop design and engineering data, where such data does not exist, for the unique feedstocks and other materials that are proposed for use in the Demonstration Project. These tasks do not include construction of any new facilities.

“Project Team” means those organizations or parties responsible for proposing and accomplishing all phases of the Demonstration Project. The Project Team includes the prospective Recipient, technology owners, and other third parties identified in the application (excluding parties whose sole function is as a source of funds or as an existing commercial user of products typical of those to be produced by the Demonstration Project) who are essential to the successful completion of the proposed Demonstration Project. Where a legal entity has been or

will be created to conduct the project, DOE will consider the participating organizations or parties (partners, joint venture members, etc.) as Project Team members.

“Selection” means the determination by DOE for certain proposed Demonstration Projects to proceed into negotiations that may lead to an Award.

“United States” means The United States of America and its 50 states, the District of Columbia, the Commonwealth of Puerto Rico, and any possession or trust territory of the United States.

SECTION III – ELIGIBILITY INFORMATION

A. Eligible Applicants (OCT 2003)

Eligibility for participation in this Announcement is full and open and all interested parties may apply except as otherwise set forth herein.

Any nonprofit or for-profit organization, university or other institution of higher education, or non-federal agency or entity is eligible to apply, unless otherwise prohibited by the Simpson-Craig Amendment. Further discussion is provided in Paragraph E.16 below.

Applicants that are seeking financial assistance under this Announcement are subject to the eligibility requirements of Section 2306 of the Energy Policy Act of 1992 (EPAAct). Further discussion is provided in Paragraph E.2 below.

National Laboratories, Managing and Operating (M&O) contractors, and Federally Funded Research and Development Centers (FFRDCs) are not eligible for an award as the prime recipient. Such entities will be permitted to participate as team members on CCPI projects to the extent such participation is consistent with DOE policy and allowed by the terms of the organization's operating contract. A list of the FFRDC is available at www.nsf.gov.

B. Cost Sharing or Matching (OCT 2003)

The cost share or match must be at least 50% of the total allowable cost of the project (i.e., the sum of the recipient's share of allowable cost and the Federal Government share of allowable cost equals the total allowable cost of the project) and must come from non-Federal sources. (See Section IV.C.3.x – Commitment Letters from Third Parties Contributing to Cost Sharing and 10 CFR Part 600 for the applicable cost sharing requirements.

Applicants shall share at least 50% of the total project costs and at least 50% during each budget period of the project. Cost sharing ratios may vary between budget periods but not within a budget period. All costs will be shared between DOE and the recipient on an "as expended", dollar-for-dollar basis. In order to be recognized as allowable cost sharing, a cost must be otherwise allowable in accordance with the applicable Federal cost principles and DOE Regulations (10 CFR 600.123) governing cost sharing. Cost sharing may be in various forms or combinations, which includes but is not limited to cash outlays and in-kind contributions. All allowable project costs, whether in-cash or in-kind, shall be shared by DOE when such costs are incurred by applying the share ratios set forth in the Cooperative Agreement. The value of in-kind contributions not requiring cash outlays (i.e., existing assets) shall be prorated over the life of the project, beginning when the in-kind contribution is initially required for performance of the Cooperative Agreement.

Provided below is a nonexclusive list of costs that are unallowable as project costs and cost sharing:

- Costs incurred in negotiating a Cooperative Agreement with DOE are not allowable as direct charges to the project.
- Allowable costs under past, present, or future Federal Government contracts, grants or Cooperative Agreements may not be charged against this Cooperative Agreement. Likewise, the Recipient may not charge costs allowable under this project, including any portion of its cost share to the Federal Government under any other contracts, grants, or Cooperative Agreements.
- Appropriated Federal funds other than the DOE cost share are not allowable as a source of funding for the purposes of this Announcement.

- The day-to-day operating costs of the demonstration site will not be recognized as an allowable cost for cost sharing purposes. Only the operating costs directly associated with the proposed work effort (i.e., incremental costs distinct from the daily operational costs) may be recognized as allowable costs for cost-sharing purposes if adequately supported and properly documented.
- DOE will not share in the acquisition costs of any fuel other than coal, under this Clean Coal Power Initiative, unless prior written approval is obtained from the DOE Contracting Officer.
- Previously expended research or development costs are unallowable.
- DOE shall not accept valuation for property sold, transferred, exchanged, or manipulated in any way to acquire a new basis for depreciation purposes or to establish a fair use value in circumstances that would amount to a transaction for the purpose of the Cooperative Agreement.
- Interest on borrowings (however represented) and other financial costs such as bond discounts, cost of financing and refinancing capital (net worth plus long-term liabilities), are unallowable project costs. This includes interest on funds borrowed for construction.
- DOE will not share in both the direct cost and depreciation on the same item. Depreciation is not allowable for cost sharing on any item charged to the project as a direct cost. For example, DOE will cost share the direct cost on equipment or facilities purchased or constructed for the project, but will not also cost share the depreciation.
- The value of patents and data contributed to the project is unallowable.
- Facilities' capital cost of money shall be an unallowable cost on all real property or equipment acquired by or on behalf of the Recipient in connection with the performance of the project.
- Foregone fees, foregone profits, or foregone revenues as well as replacement power costs are not allowable costs.
- Fee or profit paid to any member of the proposing team having a substantial and direct interest in the commercialization of the demonstration technology is unallowable. Competitive subcontracts placed with the prior written consent of the Contracting Officer and subcontracts for routine supplies and services are not covered by this prohibition.
- Business losses are unallowable.

C. Application Preparation Costs (DEC 1999)

This Announcement does not obligate the Government to pay any costs incurred in the preparation and submission of applications or in making necessary studies or designs for the preparation thereof or to acquire, or contract for any services.

D. Cost Overruns (OCT 2003)

The Government is under no obligation to share any cost overruns (i.e., costs incurred during the Demonstration Project that are more than those estimated at the date of award). DOE does not plan to set-aside funds for overruns. However, if appropriated funds are available in the future for supporting overruns, the Government's share of overruns will not exceed the Government's percentage cost share for the overall project and then only up to 25 percent of the original Government contribution as specified in the initial Cooperative Agreement.

E. Other (OCT 2003)

1. False Statements (AUG 1999)

Applications must set forth full, accurate and complete information as required by this Announcement (including attachments). The penalty for making false statements in applications is prescribed in 18 U.S.C. 1001.

2. Additional Eligibility Requirements of the Energy Policy Act of 1992 (MAR 2002)

Applications proposing technology development that falls under Titles XX-XXIII of the Energy Policy Act (P.L. 102-486), EPAAct, are subject to the eligibility requirements stated in Section 2306 of the Act. Such technologies include but are not limited to fuels cells, advanced turbines and natural gas end-use technologies.

An applicant private sector firm shall be eligible to receive financial assistance under this section only if it is a United States-owned company, or the firm is incorporated in the United States and has a parent company that is incorporated in a country which affords treatment to United States-owned companies that is comparable to treatment the United States affords foreign-owned companies in the following areas: access to government-supported joint ventures in energy research and development, local investment opportunities, and protection of intellectual property.

In addition, the applicant must show that the project, as a whole, is in the economic interest of the United States. To fulfill this requirement, the applicant must consider the contributions of all participants in the project, including any contractors or suppliers that the applicant has named and relied upon in its application. This can be evidenced by: (1) investment in the United States in research, development, and manufacturing, such as the manufacture of major components or subassemblies in the United States; (2) significant contributions to employment in the United States; (3) agreement with respect to any technology arising from assistance provided under this Announcement to promote the manufacture within the United States of products resulting from that technology, taking into account the goals of promoting the competitiveness of United States industry, and to procure parts and materials from competitive suppliers.

For-profit organizations proposing work under Titles XX-XXIII shall complete the EPAAct Section 2306 certification provided in the Financial Assistance Assurance Package (See Section VIII, Attachment D) of the Announcement. In the event that information provided in the application is insufficient for DOE to make the required eligibility determination, DOE may request additional information from the applicant.

3. Property Management and Disposition (OCT 2003)

Title to all real property, equipment and supplies (excluding Government-furnished property) acquired by or on behalf of the Recipient in connection with performance of the Project shall vest upon acquisition in the Recipient. The Recipient shall make such property available for use in the Project. During the term of the Cooperative Agreement, the Recipient may, with the DOE Contracting Officer's prior approval, encumber its title to or dispose of such property. If the property is sold or Recipient otherwise receives financial benefit from the property disposition, during the term of the Cooperative Agreement, the Recipient shall share the financial benefit with the DOE in the same share ratio as the total project cost sharing. After project completion, the Recipient has no further obligation to DOE with respect to the property.

The cost of disposal of the Demonstration Facility is an allowable cost only if proposed and included in the cost estimate for Demonstration/Operations.

The use, management, and disposition of all government-furnished property shall be governed by 10 CFR 600.130 thru 600.137 and 600.320 thru 600.325.

4. Small and Small Disadvantaged Business (OCT 2003)

The DOE Financial Assistance Regulation (10 CFR 600.144(b)) requires recipients to make positive efforts to utilize small businesses, minority-owned firms and women's business enterprises, whenever possible.

5. Determination of Responsibility (JAN 2001)

DOE will evaluate the potential Recipient's responsibility before award. Responsibility determinations are focused on the Recipient's capability to manage and account for the funds, property and other assets provided and to perform satisfactorily under the terms of the award. If a potential Recipient is determined to not be in compliance or cannot or will not comply with general applicable requirements (see 10 CFR Part 600, Appendix A), the Contracting Officer will find the Recipient not responsible and may either disapprove the application or use special restrictive conditions as a term of the award.

6. Evaluation Personnel (FEB 2003)

Applications will be evaluated in accordance with the criteria set forth in Section V of the Announcement. In conducting this evaluation, the Government may utilize assistance and advice from qualified personnel from other Federal agencies, DOE Contractors, universities and industry.

7. DOE Treatment of Application Information (MAR 2002)

DOE will obtain assurances, in advance, from all evaluators that proprietary and confidential information contained in an application shall be kept confidential and used only for evaluation purposes.

8. Application Clarification (JULY 1999)

DOE reserves the right to require some or all applications to be clarified or supplemented to the extent considered necessary either through additional written submissions or oral presentations.

9. Award Without Discussions (AUG 2000)

Notice is given that award may be made after few or no exchanges, discussions or negotiations. Therefore, all applicants are advised to submit their most favorable application to the Government.

10. Government Right to Reject or Negotiate (AUG 2000)

The Government reserves the right, without qualification, to reject any or all applications received in response to this Announcement and to select any application, in whole or in part, as a basis for negotiation and/or award.

11. Anticipated Selection Date (OCT 2003)

DOE anticipates that selection(s) will be announced by the end of calendar year 2004.

12. Notice of Award (OCT 2003)

Written notice to unsuccessful applicants and Cooperative Agreement award information will be promptly released in accordance with DOE regulations applicable to financial assistance awards.

13. Application Acceptance Period (OCT 2003)

All applications are required to remain valid for a period of 365 days after the deadline for receipt of applications under Section IV, Subsection D.2. "Application Due Date--IIPS."

14. Disposition of Applications (MAR 2002)

Applications will not be returned.

15. Presubmission Review and Clearances (AUG 1999)

Presubmission review under Executive Order 12372, "Intergovernmental Review of Federal Programs" is not required.

16. Simpson-Craig Amendment (MAY 2001)

Organizations that are described in Section 501(c)(4) of the Internal Revenue Code of 1986 and engage in lobbying activities after December 31, 1995, shall not be eligible for the receipt of Federal funds constituting an award, grant, or loan. Section 501(c)(4) of the Internal Revenue Code of 1986 covers:

"Civic leagues or organizations not organized for profit but operated exclusively for the promotion of social welfare, or local associations of employees, the membership of which is limited to the employees of a designated person or persons in a particular municipality, and the net earnings of which are devoted exclusively to charitable, educational or recreational purposes."

Lobbying activities are defined broadly to include, among other things, contacts on behalf of an organization with specified employees of the Executive Branch and Congress with regard to Federal legislative, regulatory and program administrative matters.

Applicants must submit the Simpson-Craig Amendment Representation found in the assurance submission requirements of this Announcement (See Section VIII, Attachment D).

17. Minority Economic Impact (MEI) Loans Not Available (JULY 1999)

Loans are not available under the DOE Minority Economic Impact (MEI) Loan Program, 10 CFR Part 800, to finance the cost of preparing a financial assistance application.

18. Unsuccessful Applications (MAR 2002)

Each unsuccessful applicant will be offered the opportunity for an explanation as to why the application was not selected.

19. Performance of Work in the United States (FEB 2001)

As a condition of award under this Announcement, applicants must agree that at least 75% of the direct labor cost for the project (including subcontractor labor) will be incurred in the United States unless the applicant can demonstrate to the satisfaction of the DOE that the United States economic interest will be better served through a greater percentage of the work performed outside the United States. For example, an applicant may provide evidence that expertise to develop a technology exists only outside the United States, but that ultimate commercialization of the technology will result in substantial benefits to the United States such as improved electricity reliability, increased employment, increased exports of U.S.-manufactured products, etc.

20. National Environmental Policy Act Compliance (MAR 2002)

The National Environmental Policy Act of 1969 (NEPA) establishes a national policy to ensure that consideration is given to environmental values and factors in Federal planning and decision making. DOE's policy is to comply fully with the letter and spirit of NEPA. To ensure that environmental factors are considered in the decision making process and to promote environmentally responsible decisions, DOE incorporates NEPA requirements early in the planning process for proposed actions. Consistent with Council on Environmental Quality (CEQ) NEPA regulations (40 CFR Parts 1500-1508) and DOE NEPA regulations (10 CFR Part 1021), an overall strategy for compliance with NEPA has been developed. This includes performing project-specific environmental reviews under 10 CFR 1021.216 of environmental issues pertinent to each proposed project before projects are selected, followed by site-specific environmental reviews under NEPA of each project after DOE selection.

No action taken by DOE with regard to any application prior to the completion of the site-specific analysis, including project selection or award, shall be a final decision for purposes of compliance with NEPA.

21. Pre-Selection Project-Specific Environmental Questionnaire (MAR 2002)

For applications that qualify for comprehensive evaluation, DOE will review under 10 CFR 1021.216, project-specific environmental information supplied by the applicant on the Environmental Questionnaire which is submitted as part of the Certifications and Assurances. The environmental information provided by the applicant is independently evaluated by DOE and documented in the form of an environmental critique, which may also include supplemental information developed by DOE. Subsequently, DOE prepares a publicly available environmental synopsis to document the consideration given to environmental factors and to record that the relevant environmental consequences of reasonable alternatives have been evaluated in the selection process.

22. Post-Selection Environmental Review (MAR 2002)

Soon after selection, which shall be contingent as specified in 10 CFR 1021.216(i), depending on the information necessary to satisfy NEPA, applicants may be requested to provide additional environmental information which is more detailed than that provided on the Environmental Questionnaire of this announcement. The guideline for preparing this information is provided at NETL's Web site, www.netl.doe.gov/business/solicit/2001pdf/41428/EIV_guide.pdf. This detailed site- and project-specific information may be used as the basis for site-specific NEPA documents prepared by DOE for each selected project. Such NEPA documents shall be prepared, considered, and published by DOE in full conformance with the requirements of the CEQ regulation and DOE NEPA regulations. DOE must complete its appropriate NEPA process before a go/no go decision and before DOE shares in the cost of detailed design or subsequent project activities (e.g., procurement, construction, demonstration) under the award.

23. Post-Award Environmental Monitoring (MAR 2002)

Each resulting award will specify the monitoring and reporting requirements necessary to ensure compliance with applicable environmental regulations, and permits obtained from Federal, state and local government agencies, and DOE NEPA requirements.

24. U. S. Competitiveness Provision (MAR 2002)

DOE anticipates any patent waiver granted under this Announcement will contain the U. S. Competitiveness Provision contained in the Model Cooperative Agreement in Section VIII of this Announcement.

25. Recovery of Government's Investment (MAR 2002)

Applicants are required to submit a Repayment Agreement for repayment of DOE's actual contribution to the Project. Applicants shall develop their repayment agreements in accordance with the guidelines set forth in the application preparation instructions. Applicant repayment plans are expected to be realistic, and to provide a reasonable plan for achieving a 100% repayment of the DOE actual contribution to the Project. Repayment may come from various revenue streams including, but not limited to, those from the demonstration project itself, royalties from sales and licensing of the demonstration technology in the United States and abroad, and/or any other source of funds the applicant chooses to propose. The certainty of the repayment is more important than the source of the repayment.

26. Site Documentation (MAR 2002)

Prior to award of a Cooperative Agreement, applicants who are not the owner of the host site will be required to provide to DOE a fully definitized Host Site Agreement.

27. Project Specific Development Activities (MAR 2002)

Project Specific Development Activities, as defined in Section II – H, may be requested and funded on a cost-shared basis. The maximum dollar value that may be authorized for Project Specific Development Activities is 10 percent of DOE's total funding contribution to the project.. For example, if DOE's funding contribution to the total estimated project cost is \$10 million, the maximum value for Project Specific Development Activities is \$1 million. DOE would share in the \$1 million cost at the cost-share ratio established in the cooperative agreement. Project Specific Development Activities are appropriate only where minor technical issues unique to the proposed demonstration require solution.

28. Post-Selection Information (MAR 2002)

Award of a Cooperative Agreement requires a different level of information from that needed for selection. Soon after notice of selection, applicants should expect that DOE may request the following information:

- an updated detailed Statement of Project Objectives,
- Environmental Information,
- an updated Funding Plan,
- a fully detailed cost estimate,
- additional financial information, including an Excel[™]-based model containing financial projections for the income statement, balance sheet, and cash flow statement for all phases of the project,
- an updated sources and application of funds statement covering all phases of the project,
- current financial statements for the applicant, funding sources, and critical vendors,
- information concerning intellectual property, particularly about technical data,
- firm site commitment and detailed site information, and
- audit data.

DOE shall use this information as the basis for negotiation of the Cooperative Agreement. Failure to provide this information in a timely manner (i.e., consistent with the schedule for negotiating and making awards) will seriously delay award of a Cooperative Agreement and can result in deselection.

SECTION IV – APPLICATION AND SUBMISSION INFORMATION

A. General

This Announcement includes all the information needed to complete an application. All applications shall be prepared in accordance with this section to provide a standard basis for evaluation and to ensure that each application will be uniform as to format and sequence.

Each application should clearly demonstrate the applicant's capability, knowledge, and experience in regard to the requirements described herein. Failure to respond or follow the instructions regarding the organization and content of the application may result in the application being deemed unacceptable.

Applicants should fully address the requirements of the Announcement and **not** rely on the presumed background knowledge of reviewers. DOE may reject an application that does not include all information and documentation required by the terms of the Announcement when the nature of the omission precludes review of the application.

During the review of a complete application, DOE may request the submission of additional information if the information is essential to evaluate the application.

B. Unnecessarily Elaborate Applications (FEB 2003)

Unnecessarily elaborate brochures or other presentations beyond those sufficient to present a complete and effective response to this Announcement are not desired. Elaborate art work, graphics and pictures will increase the document's file size. It is suggested that file sizes be less than 5 MB. However, this file size may not be appropriate in all situations. Because the nature of the application may necessitate larger files, the applicant may wish to use file compression software such as WinZip[™], which will reduce the time needed to upload and download an application.

C. Content and Form of Application Submission (OCT 2003)

1. DUNSsm Number

All applicants, except individuals who would personally receive an award under this Announcement apart from any business or non-profit organization they may operate, must include a Dun and Bradstreet (D&B) Data Universal Numbering System (DUNSsm) number in their application. For the purpose of this requirement, the applicant is the entity that meets the eligibility criteria and has the legal authority to apply for an award. For example, a consortium formed to apply for an award must obtain a DUNSsm number for that consortium. For assistance in obtaining a DUNSsm number at no cost to you, call the DUNSsm Number request line at 1-866-705-5711. Be prepared to provide the following information: 1) Organization name; 2) Address; 3) Local telephone number; 4) Name of the CEO/business owner; 5) Legal structure of the business (corporation, partnership, etc); 6) Year the organization started; 7) Primary line of business; 8) Total number of employees (full and part time). If you do not already have a DUNSsm number, you should obtain one as soon as you decide to submit an application.

2. Pre-application (OCT 2003)

Pre-applications are not required.

3. Application

Applicants must include the mandatory files set forth below in their E-Application (See Section IV.G, "Other Submission Requirements" for instructions on how to submit your E-Application).

To aid in evaluation, applications shall be clearly and concisely written and logically assembled. All pages of each part shall be appropriately numbered and identified with the name of the applicant, the date, and the Announcement number to the extent practicable.

Application files MUST be formatted in one of the following software applications:

Adobe Acrobat™ PDF 5.0
Word™ 2002
Excel™ 2002

Financial models should be submitted using the Excel™ 2002 spreadsheet and should include calculation formulas and assumptions.

The applicant is responsible for the integrity and structure of the electronic files. The DOE will not be responsible for reformatting, restructuring or converting any files submitted under this announcement.

The full version of Adobe Acrobat™ must be used in order to create PDF documents, complete the fillable PDF forms, save them, and/or electronically transmit them to DOE. Information regarding Adobe Acrobat™ software can be obtained from Adobe Systems, Inc. at <http://adobe.com>.

For consistency, the applicant is instructed to use the file names specified below. Filename extensions shall clearly indicate the software application used for preparation of the documents (i.e., "xxx.pdf" for Adobe Acrobat™, "xxx.doc" for Word™, and "xxx.xls" for Excel™ files).

MANDATORY FILES

FILENAMES

Application files are limited to a total of ten (10) files

DOE Application Cover Sheet (Section VIII, Attachment A),
Application for Federal Assistance (SF 424) (Section VIII,
Attachment C), acknowledgment of amendments, each technical,
cost, business, or other exception(s)

Application.---

Budget: Federal Assistance Budget Information, DOE F 4600.4
(Section VIII, Attachment E)

Budget.---

Budget Detail and Royalty Information

Budget Detail.---

Project Abstract (Section VIII, Attachment B)

Project Abstract.---

Project Narrative: Technical Discussion, Site Documentation,
Resumes, Letters of Commitment, Additional Pertinent
Publications (if any)

Project Narrative.---

Certifications and Assurances, NETL F540.1-4,
(Section VIII, Attachment D)

Certifications.---

Attachment 1 - Repayment Plan
Attachment 2 - Funding Plan

Repayment Plan.---
Funding Plan.---

Attachment 3 - Financial Business Plan
Attachment 4 - Financial Commitments
- Financial Statements
- Financial Management System

Business Plan.---
Financial.---

i. Application File

Application Cover Sheet (Attachment A of this Announcement) shall contain the following information:

Announcement Number;
Due Time and Date of Applications;
Name and Address of Applicant;
Point of Contact;
Telephone/FAX Number;
Congressional District
Title of Project; and
Notice of Restriction on Disclosure and Use of Data.

Application Forms - The application form (SF 424) is available on the NETL homepage at: <http://www.netl.doe.gov/business/faapiaf/main.html>. Instructions for completion of the form are contained with the form. Questions on completion of the forms should be addressed to the Contract Specialist. You must complete the required information, type the name of the individual authorized to sign the form in the signature block, and save the file with the designated name for that form.

Catalog of Federal Domestic Assistance Number (CFDA) (DEC 2000) - CFDA Number 81.089, Fossil Energy Research and Development applies. The applicant should place the CFDA Number in Block 10 of the SF 424, Application for Federal Assistance.

The applicant must furnish the names, titles, and telephone numbers of persons authorized to represent it in all matters, including negotiations after selection. If the applicant's remittance address is different from the address shown on the Application Cover Sheet, such address including zip code shall be included.

Acknowledgment of Amendments - The applicant shall specifically indicate an acknowledgment and receipt of the amendment(s) posted in the DOE's Industry Interactive Procurement System (IIPS) by signing the amendment and including it as instructed above.

Summary of Exceptions and Deviations - If any exceptions and deviations are taken, the applicant shall summarize each technical, cost, business, or other exception(s) taken elsewhere, and provide specific cross references to its full discussion. These exceptions/deviations shall be clearly labeled and included as identified above.

ii. Budget File

Federal Assistance Budget Information (DOE F 4600.4) - The applicant must provide detailed budget information on one or more Federal Assistance Budget Information form (DOE F 4600.4). Supporting cost data shall be submitted as indicated by the instructions on the budget form and/or the supporting cost detail requirement below. The applicant shall provide a detailed budget, identifying costs for each phase (Definition [if applicable], Design, Construction, and Demonstration) as well as for the total project. The proposed budget must include all costs (both DOE funded as well as non-

DOE funded costs, i.e., cost sharing). Narrative explanations of budget items should be provided to supplement the Cost Detail Requirements below.

All Applicants:

Failure to provide the detailed cost information as described in the instructions (Supporting Cost Detail Requirements) provided below **will result in an incomplete package**. A minimum private-sector cost share of 50% is required by this Announcement. The applicant shall stipulate in the application the source and amount of cost sharing and the value of third-party in-kind contributions proposed to meet the requirement.

iii. Budget Detail and Royalty Information

The applicant shall provide a budget and supporting documentation that will reflect the estimated costs to be incurred in support of the proposed effort to be conducted as described in the Technical Discussion.

COST DETAIL REQUIREMENTS

The following cost detail is required for the proposed cost elements. **Failure to provide the detailed cost information as described in the instructions will result in an incomplete application. A 50% minimum cost share is required by this Announcement, therefore, the applicant shall stipulate in the application the source and amount of cost sharing and the value of third party in-kind contributions proposed to meet the requirement.** Additionally, teaming members and subcontractors are also required to submit the below information with their budgets. A sample format, V3-GUIDE.XLS, is available on the NETL homepage site referenced above for providing this supporting documentation.

Personnel -- In support of the proposed personnel costs, provide a supplemental schedule that identifies the labor hours, labor rates, and cost by labor classification for each budget period. Also indicate the basis of the labor classification, number of hours, and labor rates. An example of the basis for the labor classification and number of hours could be past experience, engineering estimate, etc. An example of the basis for the labor rates could be actual rates for the individuals who will perform the work or an average labor rate for the labor classification or a departmental average rate.

Fringe Rate -- Provide the method used to calculate the proposed rate amount. If a fringe benefit rate has been negotiated with, or approved by, a Federal Government agency, provide a copy of the agreement. If no rate agreement exists, provide a detailed list of the fringe benefit expenses (e.g., payroll taxes, insurances, holiday and vacation pay, bonuses) and their associated costs. Identify the base for allocating these fringe benefit expenses.

Travel -- For each proposed trip, provide the purpose, number of travelers, travel origin and destination, number of days, and a breakdown of estimated costs for airfare, lodging, meals, car rental, and incidentals. The basis for the airfare, lodging, meals, car rental, and incidentals must be provided, such as past trips, current quotations, current version of the Federal Travel regulations, etc.

Equipment -- Provide an itemized list of each piece of equipment, its unit cost, and the basis for estimating the cost, for example, vendor quotes, catalog prices, prior invoices, etc.

Supplies -- Provide an itemized list of supplies that have an acquisition cost greater than \$5,000, identify the quantity of each item, its unit cost, and the basis for estimating the cost, for example, vendor quotes, catalog prices, prior invoices, etc.

Subcontractors -- Identify each planned subcontractor and its total proposed costs. Each subcontractor's cost application and supporting cost detail should be included as part of the applicant's cost application. In addition, the applicant shall provide the following information for each planned subcontract: a brief description of the work to be subcontracted; the number of quotes solicited and received; the cost or price analysis performed by the applicant; names and addresses of the subcontractors tentatively selected and the basis for their selection (i.e., low bidder, delivery schedule, or technical competence); type of contract and estimated cost and fee or profit; and affiliation with the applicant, if any.

Consultants -- Provide the hourly or daily rate along with the basis for the rate. Furnish resumes or similar information regarding qualifications or experience. Provide at least two invoices reflecting hourly or daily rates charged to customers other than the Government. A statement signed by the consultant certifying his or her availability and salary must be provided. If travel or incidental expenses are to be charged, give the basis for these costs.

Federally Funded Research and Development Center Contractors (FFRDCC) and M&O Contractors -- If your application includes work to be performed by a FFRDCC or M&O contractor, the following additional information is required:

Application and Field Work Proposal: The application must include a SF 424, Application for Federal Assistance, and budget page for the applicant's portion of the project and a Field Work Proposal (See DOE Order 412.1, Work Authorization System, which can be accessed from www.directives.doe.gov/directives/read.html) for the FFRDCC or M&O portion of the project.

The application must also describe:

- X the portion of the project that will be conducted by the applicant and the portion that will be conducted by the M&O contractor, and
- X the managerial arrangement between the applicant and the M&O contractor.

DOE will review the application to determine that it meets these criteria and reserves the right to reject any application that fails to do so.

Workscope: The application must provide a scope of work for the effort to be performed by the applicant and a separate scope of work for the effort to be performed by the M&O contractor.

Authorization from the FFRDC, M&O or Laboratory cognizant Contracting Officer. The applicant must submit a document from the Government Contracting Officer or authorized designee stating that the organization is authorized to participate in the proposed work effort.

Other Direct Costs -- Provide an itemized list with costs for any other item proposed as a direct cost and state the basis for each proposed item.

Indirect Costs -- If indirect rates have been negotiated with or approved by a Federal Government agency, please provide a copy of the latest rate agreement. If you do not have a current rate agreement, submit an indirect cost rate application which includes the major base and pool expense groupings by line item and dollar amount. In either case, provide a breakdown of the proposed indirect costs for each of your accounting periods included in the application. Identify the rate and allocation base for each indirect cost, such as Overhead, General and Administrative, Facilities Capital Cost of Money, etc.

Cost Sharing -- Identify the percentage level and source of cost sharing for the proposed project and for individual budget periods. Additionally, the impact of DOE's cost share to the viability of the project must be addressed, to include justification for the need for Federal Funds.

NOTE: The total project cost (i.e., sum of applicant and other participants plus DOE cost shares) must be reflected in each budget form.

A detailed estimate of the cash value including its basis and nature, (e.g., equipment, labor, facilities, cash, etc.), of all contributions to the project by each participant must be provided. Note that "cost-sharing" is not limited to cash investment. In-kind contributions (e.g., contribution of services or property; donated equipment, buildings, or land; donated supplies; or unrecovered indirect costs) incurred as part of the project may be considered as all or part of the cost share. The "cost-sharing" definition is contained in 10 CFR 600.30, 600.101, 600.123, 600.224, 600.313 and OMB Circular A-110.

Fee or profit will not be paid to the recipients of financial assistance awards. Fee or profit paid to any member of the proposing team having a substantial and direct interest in the commercialization of the demonstration technology is unallowable. Additionally, foregone fee or profit by the applicant shall not be considered cost sharing under any resulting award. Reimbursement of actual costs will only include those costs that are allowable and allocable to the project as determined by DOE, with reliance on the advice of DCAA, in accordance with the applicable cost principles prescribed in 10 CFR 600.127, 10 CFR 600.312 or 10 CFR 600.318.

Royalty Information:

- (a) **Cost or Charges for Royalties** -- When the response to this Announcement contains costs or charges for royalties totaling more than \$250, the following information shall be included in the response relating to each separate item of a royalty or license fee:
- (1) Name and address of licensor.
 - (2) Date of license agreement.
 - (3) Patent numbers, patent application serial numbers, or other basis on which the royalty is payable.
 - (4) Brief description, including any part or model numbers of each cooperative agreement item or component on which the royalty is payable.
 - (5) Percentage or dollar rate of royalty per unit.
 - (6) Unit price of cooperative agreement item.
 - (7) Number of units.
 - (8) Total dollar amount of royalties.
- (b) **Copies of Current Licenses** -- In addition, if specifically requested by the Contracting Officer before execution of the cooperative agreement, the applicant shall furnish a copy of the current license agreement and an identification of applicable claims of specific patents.

iv. Public Abstract

The Public Abstract shall include all information contained in the form found in Section VIII, Attachment B of this Announcement. This abstract may be released to the public by DOE in whole or in part at any time. It is, therefore, required that the Public Abstract shall not contain proprietary data or confidential business information. The applicant shall indicate a point of contact for coordination, preparation and distribution of press releases.

v. Project Narrative File

The Technical File consists of a discussion on Technology Merit and Technical Plan; Organization, Management, and Operating Plan; and Commercialization Plan and Economic and Financial Assumptions. All resumes, letters of commitment, and additional pertinent publications shall be placed in the Appendices.

The applicant shall include a technical discussion in the format specified below. This format relates to the technical evaluation criteria, Section V – C.2.i. Applicants are asked to follow the outline shown below. Additional headings may be included as desired.

In order to produce a comprehensive application for this Announcement, the applicant is required to address, at a minimum, the areas listed below. To help facilitate the review process and to ensure addressing all the technical review criteria, the applicant shall use the following format when preparing the technical application.

DOE COVER SHEET	<u>Page</u>
PUBLIC ABSTRACT.....	i
Table of Contents	ii
List of Tables	iii
List of Figures.....	iv
List of Acronyms	v
Definitions.....	vi
1. TECHNOLOGY MERIT AND TECHNICAL PLAN	#
a. Statement of Project Objectives.....	#
b. Tasks to be Performed by Budget Period.....	#
c. Site Documentation.....	#
2. ORGANIZATION, MANAGEMENT, AND OPERATING PLAN	#
3. COMMERCIALIZATION POTENTIAL AND ECONOMIC AND FINANCIAL ASSUMPTIONS.....	#
APPENDICES	
A. RESUMES	A1
B. LETTERS OF COMMITMENT.....	B1
C. HOST SITE AGREEMENT AND COMMITMENT LETTERS.....	C1
D. ADDITIONAL PERTINENT PUBLICATIONS (if any).....	D1

The Technical Discussion, excluding Appendices, shall not exceed seventy-five (75) pages. Pages in excess of the page limitation will not be considered for evaluation. All text shall be typed, single spaced, using 12 point font, 1 inch margins, and unreduced 8-1/2-inch by 11-inch pages. Illustrations shall be legible with all text in legible font. Pages shall be sequentially numbered. Except as

otherwise noted in the Announcement, the page guidelines previously set forth constitute a limitation on the total amount of material that may be submitted for evaluation. No material may be incorporated in any application by reference as a means to circumvent the page limitation.

Technology Merit and Technical Plan: The proposing team shall submit the following information:

- Scientific, engineering, and technical information and data that support the readiness of the proposed technology for demonstration at the scale proposed;
- A detailed description of the proposed concept and technology, including preliminary process flow diagrams, equipment descriptions, mass and energy balances around each major process unit and the total plant, and temperatures, pressures, and compositions of major streams, and the technical plan for achieving the goals proposed for the project;
- Information and data that demonstrate the technical and economic (as appropriate) merit and ability of the proposed technology to achieve the priority objectives of the Announcement and progress toward relevant performance targets of the Coal Power Program Roadmap;
- Information and data that illustrate the advancements by the proposed technology relative to existing or previously demonstrated technology;
- Discussion and evidence of the availability of the proposed site and alternatives;
- Descriptions of the proposed site and any alternatives, of the infrastructure available at each site for meeting the needs of the technology to be demonstrated, and of the environmental setting and nearby environmental conditions;
- Planned baseline testing, project testing, and performance monitoring plans to generate information for documenting achievements of the proposed project; and
- Discussion on the merit of the proposed project for demonstrating the commercial viability of the proposed technology.

Organization, Management, and Operating Plan: The proposing team shall submit the following information:

- The skills and resources available to, and provided by, the proposed team for implementing the project as proposed;
- Relevant prior or current corporate background and experience to support successful performance of the proposed project;
- Descriptions of knowledge, experience, adequacy, and degree of involvement of proposed key personnel, including resumes;
- Proposed organizational structure with respect to responsibilities and authorities among elements of the project team and letters of commitment from all proposed project organizations; and
- Detailed statement of project objectives, project schedule, project management system, milestones, and decision points.

Commercialization Potential and Economic and Financial Assumptions: The proposing team shall submit the following information:

- A Marketing Plan that identifies the approach to be used to achieve full commercialization of the proposed technology, including the following: assessments of technology economics, including a cost/benefit analysis; barriers to market entry that will be overcome by the proposed demonstration; barriers to broad commercialization that would remain following demonstration; and applicability or retrofittability of the proposed technology, including subsystems, components, or process modules, to existing and new coal-fired power generation markets, including types, numbers, and percentages of plants, geographic areas, and types of fuels usable;
- Supporting evidence that a successful technology demonstration meeting DOE's priority objectives would provide a viable pathway for commercial replication, including (a) letters of support from technology users, (b) identification of spin-off products, sub-systems, components, and modules that may result from the proposed project, and (c) a description of the experience and capabilities of team members with responsibilities for achieving broad deployment;
- Descriptions of expected revenues, cost, and profitability of the technology and/or project; and
- Listing and explanation of all market, financial, and operating assumptions. The assumptions and explanations must be consistent with and support the financial and repayment part of the application.

Appendices - The Appendices shall contain resumes, letters of commitment, host site commitment letters, and additional pertinent publications (if any).

vi. Certifications and Assurances

The applicant shall complete the required information in the NETL F540.1-4 attached to the Announcement. Type the name of the individual authorized to sign the form in the signature block, and save the file with the designated name.

vii. Attachment 1 – Repayment Plan

DOE expects repayment plans to be realistic and to provide a reasonable plan for achieving 100% repayment of DOE's actual contribution to the project. Repayment may come from various revenue streams including, but not limited to, those from the demonstration project itself, royalties from sales and licensing of the demonstration technology in the United States and abroad, and/or any other source of funds the applicant chooses to propose. The certainty of the repayment is more important than the source of the repayment. The applicant shall submit the following.

- Proposed repayment plan, including all sources and amounts of projected repayment for each year of the repayment period;
- Description of the relationship, if any, between the proposed repayment agreement and commercialization plans, including assumptions and schedules regarding market penetration;
- Sufficiently robust economic and business sections of the application, including realistic financial projections based on reasonable and clear assumptions, to justify the financial projections and repayment proposal;

- Where repayment is to come from future sales and licensing of technology, a complete explanation of the pricing methodology and assumptions related to revenues;
- If repayment is to come from future sale and licensing of technology, a discussion of repayment from gross revenues rather than net income from such sales and licensing;
- An economic analysis of the benefits of the project itself;
- Clear definition of the technology to be sold or licensed, and an explanation of the applicant's proposed method for ensuring that the DOE repayment obligation is met in the event of subsequent enhancements to the technology, use in derivative products, and/or bundling in combinations with other technologies or services; and
- A proposed Repayment Agreement, prepared in accordance with the instruction guidelines in Section VIII, Attachment G.

viii. Attachment 2 – Funding Plan

The applicant shall provide at least 50% cost share. At the time of application submission, the applicant must have a plan to obtain the funding for the entire non-Federal share of the total project cost. The Applicant shall provide sufficient evidence to demonstrate the applicant's financial capability to fund, or obtain funding, for the non-Federal share of the proposed project costs. Commitments to provide funds in accordance with the terms of this solicitation, and their application, shall be submitted in a letter signed by an officer of the corporation or other entity that is qualified to commit the applicant to the funding commitment and the proposed project. The relationship of the funds supplier to the applicant, the amount of funds to be provided, and the timing of the funding shall be specified.

The applicant must submit a funding plan that identifies all sources of project funds. The funding plan must demonstrate that these funds are sufficient to cover all non-Federal funding required for the duration of the project, including plans for funding any potential project cost increases. For funding that is to come from the applicant, a discussion of the degree of certainty that the funds required will be available must be provided. This discussion shall include a full description of any liabilities, limitations, conditions or other factors which could affect the availability of applicant's funding. The funding plan must demonstrate that all non-Federal funds will be committed at the time of award for the project or for the Project Definition Phase, if Project Definition activities are proposed. Section VIII, Attachment H provides funding plan information.

If external (i.e., not from the applicant or its parent organization) financing will be a source of project funds, the applicant shall discuss the terms and conditions of such financing. A representative with the authority to commit funds for each entity identified as a source of funding shall provide a signed statement, certification of private financing, letter of intent, or similar documentation of the amount and type of funding to be provided. If the application is based on funds from third party sources, such as banks or the capital markets, the timing and conditionality of any such funding shall be clearly described. The funding commitment letter shall describe how any increases in project costs will be covered.

This section must also include a schedule showing the detailed sources and uses of funds for the project, including the amount and timing for all funding to be provided by non-Federal sources. The project sources and uses of funds schedule should include sources and uses of funds by phase (e.g., project definition, design, etc.) and the projected schedule for each phase should be stated. The sources and uses of funds schedule should be in agreement with the project's total estimated costs and

schedule for expenditures. As a reminder, the total DOE funding requirement for the project is fixed at the initial amount (not the percentage) requested in the application, and will not be increased even if costs are revised upward after selection. Any application that does not demonstrate adequate funding capacity and a firm commitment to funding may be rejected.

If in-kind contributions are to be provided to the project, then the applicant must explain and defend their valuation.

ix. Attachment 3 – Financial Business Plan

The applicant must provide a financial business plan that is specific to this demonstration project. The financial plan must be based on the economic and business assumptions developed in the application and should demonstrate that the project has adequate funding and a reasonable and achievable plan to repay 100% of the DOE cost share. This business plan should address the financing aspects of the project and should include a discussion of management's decision to commit funds and resources to the project, the internal and external competition for these funds and resources within the applicant's organization, and the rationale for the decision to use internal or external financing for this project.

The Financial Business Plan should include:

- (1) **Project Parties.** A description of the main parties to the project, including background, ownership and experience, proposed financial contribution to project, expected financial benefit to each party of the project.
- (2) **Project Assumptions.** A description and explanation for each of the financial, economic, and operating assumptions for the project. The assumptions should be supported by the information provided in the Technical Application.
- (3) **Financial Projections.** The financial projections should commence with the initial project phase and extend to the final repayment of the DOE cost share. Projections should include a statement of revenues and expenses (income statement), balance sheet, cash flow statement, and a source and application of funds statement. The projections should be supported by the assumptions. The statements and schedules should be prepared using Excel[™] 2002 software and provided in electronic format.
- (4) A description of all contracts, agreements, permits, licenses, etc., that will need to be established or obtained for the project, and a description of any agreements to be entered into regarding the operation of the project and the responsibilities of the project parties.
- (5) Confirmation that the site for the project has been obtained, and a description of the site.
- (6) The Financial Business Plan should reference and agree with the detailed analysis of the proposed repayment agreement showing the sources and amount of projected repayment for each year of the repayment period. If repayment is based on revenues derived from commercial sales or licensing of the demonstrated technology, the analysis must be consistent with the applicant's projected market penetration for the technology.

x. Attachment 4 – Financial Commitments, Financial Statements, and Financial Management System

Financial Commitments

The applicant must discuss the priority placed by the team's management on financing the project. This should include a discussion of management's decision to: (1) allocate internal resources, (2) obtain recourse financing, or (3) obtain non-recourse project financing. DOE views that a project is more likely to be successful if there is a strong project team commitment, as evidenced by allocation of internal resources or financing with recourse to the organization(s). The degree of commitment to the project will be measured primarily by the level of financial risk assumed by project team members. The project team can also demonstrate its commitment by: (1) sharing in project costs above the Government's minimum requirements and (2) covering potential project cost increases.

As part of its financial commitment discussion, the applicant should include a commitment letter(s), signed by an individual with authority to commit such financial resources, from each organization committed to provide the non-Federal share of project funding.

Commitment Letters from Third Parties Contributing to Cost Sharing

If a third party, (i.e., a party other than the organization submitting the application) proposes to provide all or part of the required cost sharing, the applicant must include a letter from the third party stating that it is committed to providing a specific minimum dollar amount of cost sharing. The letter should also identify the proposed cost sharing (e.g., cash, services, and/or property) to be contributed. If property or services are proposed as part of the cost sharing, the applicant should provide support for the valuation of the property or services and explain how valuation was determined. If a property appraisal is used, the applicant should provide a copy and an explanation of whether the property values used are acquisition, book, or replacement costs. Letters must be signed by the person authorized to commit the expenditure of funds by the entity and be provided in a PDF format.

Financial Statements

The applicant must provide current financial statements for all business quarters reported on in the current fiscal year, along with audited financial statements for the most recent three fiscal years. Any non-Federal source of financing (e.g., team member, subcontractor or third party) that will commit to funding some portion of the applicant's share of the project costs must also provide audited financial statements as indicated above.

Financial Management System

In order to qualify for a financial assistance award, the applicant must demonstrate a financial management system that satisfies 10 CFR 600.121 and 10 CFR 600.311, Standards for Financial Management Systems, by describing how its system meets the seven criteria outlined in 10 CFR 600.121(b) and 10 CFR 600.311(a).

The major attribute of an acceptable financial management system is an accounting system that can accumulate, record, and report costs by project. Completion of the "Pre-Award Accounting System Survey" form contained in Section VIII, Attachment D of the Announcement will provide both the Government and the applicant with an indication whether the accounting system is adequate for an award.

D. Submission Date and Time

1. Pre-Application

Pre-Applications are not required.

2. **Application Due Date – IIPS (OCT 2003)**

ALL APPLICATIONS AND AMENDMENTS MUST HAVE AN IIPS TRANSMISSION TIME STAMP OF NOT LATER THAN 8:00 P.M. EASTERN DAYLIGHT SAVING TIME ON TUESDAY, JUNE 15, 2004. APPLICATIONS, INCLUDING ALL APPLICATION FILES, RECEIVED AFTER THE DEADLINE, AS DEMONSTRATED BY THE IIPS DATE/TIME STAMP, WILL NOT BE REVIEWED OR CONSIDERED FOR AWARD.

E. Intergovernmental Review

This Announcement is not subject to Executive Order 12372 – Intergovernmental Review of Federal Programs.

F. Funding Restrictions

Cost Principles. Cost must be allowable and allocable in accordance with the applicable cost principles referenced in 10 CFR Part 600.

Pre-award Costs. Recipients may charge to an award resulting from this Announcement pre-award costs that were incurred within the ninety (90) calendar day period immediately preceding the effective date of the award, if the costs are necessary for the conduct of the project activities and are otherwise allowable in accordance with the applicable cost principles and the terms and conditions of the award. Recipients must obtain the prior approval of the Contracting Officer for any pre-award costs that are for periods greater than this 90 day calendar period.

Pre-award costs are incurred at the applicant's risk. DOE is under no obligation to reimburse such costs if for any reason the applicant does not receive an award or if the award is made for a lesser amount than the applicant expected.

G. Other Submission Requirements

Electronic Submission. Applications must be submitted through the DOE Industry Interactive Procurement System (IIPS) at <http://e-center.doe.gov>. **ONLY APPLICATIONS SUBMITTED THROUGH IIPS WILL BE CONSIDERED FOR EVALUATION.** Applications submitted through the U. S. Postal Service, facsimile, telegraphically, e-mail, courier companies, or hand-delivered hard copies will be considered non-responsive and will not be considered or evaluated for funding.

Electronic Signature. Applications submitted through IIPS constitute submission of electronically signed applications. The name of the authorized organizational representative (i.e., the administrative official, who, on behalf of the applicant, is authorized to make certifications and assurances or to commit the applicant to the conduct of a project) must be typed in the signature block on the form to be accepted as an electronic signature. A scanned copy of the signed document is not required.

IIPS Registration. In order to submit an application, you must be authorized by the applicant (i.e., institution or business entity) to submit an application on its behalf and you must register in IIPS. Applicants are strongly encouraged to register as soon as possible prior to the application deadline. Once the application is submitted, only authorized personnel will have access to application information. You only have to register once to apply for any DOE award.

To register:

- Go to the IIPS website at <http://e-center.doe.gov>.
- Click on the "Register" button on the left.

- Click on the box that says, “Check this box for Acquisitions greater than Simplified Acquisitions threshold or financial assistance” and then click on the radio button next to the “Register only” option.
- Click on “Proceed to Form.”
- Read the “Security Alert” and click on “Yes” to proceed.
- Read the “Notice of Disclaimer” and click on “I Accept.”
- Complete the Registration Form.
- Click on “Submit Registration.” You will receive an acknowledgement confirming receipt of your registration.

Then you will receive an e-mail confirming successful registration. If you do not receive an e-mail confirmation within one business day, contact the IIPS Help Desk at 1-800-683-0751 and select option 1, or send an e-mail to IIPS_HelpDesk@e-center.doe.gov.

Note the user name on your confirmation and your password for future reference. You must use this user name and password for any applications submitted in IIPS.

Submission of Application

Applicants are advised to begin transmission at least 24 hours in advance of the deadline in order to permit time to resolve any transmission difficulties. Prepare all the required files in accordance with the instructions in this Announcement prior to starting the transmission process. To prevent experiencing a “**timed out**” status in the IIPS, have all transmittable files ready to send before accessing the DOE IIPS. Submit the entire application package in one IIPS session (i.e., do not logoff before all the files are submitted.)

Instructions found on how to submit an application or an application amendment and how to register, submit questions, and view questions and answers are located on the web site at <http://e-center.doe.gov>, under the “HELP” section.

If you have any problems accessing information or submitting your application, contact the Help Desk at 1-800-683-0751 and select option 1, or send an e-mail to HelpDesk@pr.doe.gov.

STEP 1 -- Prepare Application

Prepare all of the files in accordance with the instructions in this Announcement prior to starting the transmission process. You should submit the entire application package in one IIPS session (i.e., do not logoff before all the files are attached).

When you are ready to submit your application, go to <http://e-center.doe.gov> and complete the IIPS cover page. Enter the project title and the principal investigator/project director, if any, in the “Subject” block. Then attach each file in the corresponding block in accordance with the IIPS guidance.

STEP 2 - Locate Announcement and Create Application

- Enter the IIPS website at <http://e-center.doe.gov>.
- Click on “Login” button on the left.
- Click on the radio button that says, “Industry Interactive Procurement System.”
- Enter your user name (as shown on your registration e-mail confirmation) and password. (Note: These are case sensitive.)
- The “View Opportunities as Sorted by....” screen will appear. Click on one of the choices and locate the Announcement.

- Click on the Announcement number (DE-PS26-04NT42061) and the Financial Assistance Form will appear.
- Click on “Create Application” and complete the information on the Application Cover Page by entering the project title and the principal investigator/project director, if any, in the “Subject” blank. Click on the “Continue Button.”

STEP 3 --- Attach Files and Submit Application

- Click on “Attach Application” link.
- Attach each file in the corresponding block on the page and then click “Submit.”
- IIPS will provide an acknowledgement that your transmission was received.
- Click on the link on the acknowledgement to verify submission. It will take you to your submission.
- In order to verify successful transmission at a later date, click on the yellow folder beside the Announcement number. Your application should appear.

Questions or Problems with Transmission

View the “IIPS Frequently Asked Questions” by clicking on the “Help” button. You may also call 1-800-683-0751 and select option 1, or send an e-mail to IIPS_HelpDesk@e-center.doe.gov, for help with the IIPS system.

Revisions, Deletions, and Withdrawal of Applications (JAN 2003)

Remove Application or Application File(s) from IIPS

To delete or withdraw an application or an application file(s), send an e-mail to the IIPS Help Desk requesting the application or file(s), be removed. Be sure to identify your user name, the applicant's name, and the subject, as shown on the cover page of the application.

Submit Revised Application

Follow the steps in “Submit Application or Pre-application” to submit a revised application (i.e., cover page and all required files).

Submit Revised File

After the Help Desk has removed the requested file from your application:

- Locate the Announcement.
- Click on the yellow folder next to the Announcement number.
- Click on the cover page of your submission, click on the “Attach Application” link, and attach the revised file. In the event that two files, with identical names, are included in an application, the file with the latest transmission date/time stamp will be considered for review, if it is received prior to the deadline.

SECTION V – APPLICATION REVIEW INFORMATION

A. Introduction (MAY 2000)

This section contains the evaluation approach as well as the individual criteria to be used in the evaluation of applications.

B. General (JULY 1999)

DOE plans to select projects using a merit-based process that provides for a thorough, consistent, and independent examination of applications, based on pre-established criteria.

C. Criteria

1. Preliminary Review Criteria (OCT 2003)

Each application will be initially reviewed to establish its qualification for further evaluation. Applications must meet the following mandatory requirements to qualify for evaluation:

- At least 50% of the energy-equivalent output from the proposed project must be in the form of electricity.
- The proposed project must be conducted at a facility located in the United States.
- The proposed project must use at least 75% coal and/or refuse coal, as measured on a fuel input (Btu) basis.
- The proposed project must be designed for and operated with coal mined in the United States and/or with coal refuse sources derived from U.S. coals.
- The applicant must provide an application demonstrating a cost share of at least 50% of the total allowable project cost and of each budget period within the project.
- The applicant must identify the proposed site and any alternative sites.
- The applicant must clearly identify all members of the project team and their roles, and applications must include letters demonstrating firm commitments by team members to their roles in the proposed project.
- The applicant must submit a proposed “Repayment Agreement” consistent with Section III, Recovery of Government’s Investment.
- The application must be submitted by a responsible official of the applying organization authorized to contractually bind the organization to performance of the Cooperative Agreement in its entirety.
- The application must be consistent with the objectives of this Announcement as stated in Section I–C.
- The application must contain sufficient technical, management, financial, budget, commercialization, and repayment information to enable a comprehensive evaluation as described below.

Applicants that fail to meet one or more of these mandatory requirements will be rejected at the preliminary review stage. In the event that an application is so rejected, a notice will be sent to the applicant stating the reason(s) that the application will not be considered for an award under this Announcement. Applications passing the preliminary review shall be subject to a comprehensive evaluation in accordance with the evaluation criteria listed in Section C.2.

2. Merit Review Criteria

i. Technical Evaluation Criteria (OCT 2003)

A technical evaluation will determine the responsiveness of the application to the technical requirements of this Announcement and the merits of the application with regard to: (1) the potential success of the technology and technical plans in achieving the objectives of the Announcement, (2) the degree to which the organizational, management, and operational plans can lead to successful demonstration of the technology, and (3) the potential for future commercial applications. Applications will be evaluated for their quality, conciseness, and completeness. Applications submitted in response to this Announcement will be evaluated and numerically scored against the technical evaluation criteria listed below.

Criterion 1: Technology Merit and Technical Plan (50%)

- Soundness, adequacy, and significance of the scientific, engineering, and technical information and data provided to support readiness of the proposed technology for demonstration at the scale proposed
- Completeness of the proposed technology and technical plan to accomplish the goals proposed for the project
- Soundness, adequacy, and significance of the information and data provided to support the ability of the proposed technology to meet the priority objectives of this Announcement and to achieve progress toward the performance targets of the Coal Power Program Roadmap
- Degree of advancement relative to commercially available or previously demonstrated technology
- Strength of the commitment(s) for use and availability of the host site and any proposed alternate sites to support the proposed project
- Quality and adequacy of the proposed site for supporting performance of the proposed project, including ability to meet the objectives of the technology to be demonstrated, accessibility to infrastructure requirements, and compatibility with the conditions of the surrounding environment
- Quality of the baseline testing, project testing, and performance monitoring plans for generating the information needed to adequately document achievements of the proposed project
- Adequacy of the proposed project for demonstrating the commercial viability of the proposed technology

Criterion 2: Organization, Management, and Operating Plan (30%)

- Ability of the proposed team to successfully provide the skills and resources needed to implement the project as proposed
- Adequacy of corporate background and experience to support successful performance of the proposed project
- Knowledge, experience, adequacy, and degree of involvement of key personnel for the successful performance of the proposed project
- Clarity and logic of the proposed organizational structure with respect to responsibilities and authorities among elements of the project team
- Soundness and completeness of the statement of project objectives, project schedule, project management system, milestones, and decision points

Criterion 3: Commercialization Potential and Economic and Financial Assumptions (20%)

- Adequacy and completeness of the proposed Marketing Plan
- Potential for proposed technologies meeting DOE's priority objectives to achieve widespread commercial deployment and broad market impact
- Potential economic benefit from the demonstration project itself, and potential or expected revenues, costs, and profitability of the technology and/or project

ii. Repayment, Finance, and Budget Evaluation Criteria (OCT 2003)

Applications submitted in response to this Announcement will be evaluated and numerically scored against the Repayment, Finance, and Budget evaluation criteria listed below.

Criterion 1: Repayment Potential (20%)

- Certainty of full repayment of the Government's contribution
- Consistency of the proposed repayment plan/agreement with the commercialization plan, to the extent that repayment is based on technology commercialization
- Potential of the Repayment Agreement to provide accelerated recoupment of the Government's contribution
- Consistency of the proposed repayment plan/agreement with the project assumptions

Criterion 2: Funding and Financial Information (40%)

- Adequacy and completeness of the proposed funding plan and the financial business plan to fund the project
- Financial condition and capability of proposed funding sources to provide the non-Federal share of project costs
- Adequacy of the Applicant's financial management system

Criterion 3: Financial Commitment (20%)

- Priority placed by the project team's management on financing the project from internal resources or by recourse financing
- Additional risk assumed by the project team through a higher cost share
- Applicant's and other co-funder's willingness and ability to fund overruns

Criterion 4: Budget Information (20%)

- Reasonableness, allowability, and allocability of the proposed cost and the proposed cost share
- Completeness and adequacy of the supporting documentation for the cost estimate
- Applicant's understanding of the Project Objectives by ensuring that all work elements included in the Statement of Project Objectives (SOPO) have associated costs and that all cost elements in the proposed budget have corresponding work elements included in the SOPO

iii. Environmental Evaluation Criterion (OCT 2003)

The Environmental Questionnaire will be evaluated to: (1) determine adequacy and completeness of furnished data; and (2) assess the applicant's awareness of project-related requirements, including requirements for mitigating any project-related environmental risks and impacts. The Questionnaire will be used to assist DOE in partially fulfilling requirements for compliance with NEPA regulations at 10 CFR Part 1021.

3. Other Selection Factors (OCT 2003)

These factors, while not indicators of the applicant's merit, e.g., technical excellence, cost, applicant's ability, etc., may be essential to the process of selecting the application(s) that, individually or collectively, will best achieve the objectives of the CCPI program and DOE's priority objectives for CCPI Round 2. Such factors are often beyond the control of the applicant. Applicants should recognize that some very

good applications may not receive an award because they do not fit within a mix of projects and technologies that maximize the probability of achieving DOE's overall objectives. Therefore, the following Program Policy Factors may be used individually or collectively by the Source Selection Authority (SSA) following application of the evaluation criteria to determine which of the ranked applications shall receive DOE funding support.

- Diversity of technology approaches and methods in the CCPI Program
- Diversity of coals used in the CCPI Program
- Applicability of technologies to a wide variety of U.S. coals
- Geographic distribution of potential markets
- Presentation of unique environmental, economic, or efficiency benefits
- Achievement of a mix of projects and technologies that best demonstrates progress toward DOE's priority objectives for CCPI Round 2
- Achievement of a portfolio of projects that represents the best value to the Government, through use of Federal funds to support projects with Federal cost shares commensurate with the level of technological risk.

The above factors will be independently considered by the SSA in determining the optimum mix of applications that will be selected for support. These policy factors will provide the SSA with the capability of developing, from the competitive Announcement, a broad involvement of organizations and organizational ideas, which both enhance the overall technology research effort and upgrade the program content to meet the goals of the DOE.

D. Review and Selection Process

1. Merit Review (OCT 2003)

Applications that pass the Preliminary Review will be subjected to a Merit Review in accordance with the following procedure. Applications will be evaluated using pre-established weights to determine the relative merit of the applications considering the Technical Evaluation Criteria shown in C.2.i above. Applications will be evaluated using pre-established weights to determine the relative merit of the applications considering the Repayment, Finance, and Budget Evaluation Criteria shown in C.2.ii above. The Technical Evaluation Criteria have greater importance than the Repayment, Finance, and Budget Evaluation Criteria.

2. Selection (OCT 2003)

DOE anticipates negotiations leading to cooperative agreements with those applicants whose applications are determined to be in the best interest of DOE for achieving the CCPI objectives set forth in this Announcement. Selection of an application by DOE will result from a process of evaluating the merits of the applicant's complete application, in accordance with all of the evaluation factors set forth in this section, and applying the Other Selection Factors noted in Section V.C.3.

The selection process reflects DOE's desire to accept an application based on its potential for best achieving CCPI objectives rather than solely on evaluated technical merit or cost. Accordingly, DOE may select for award all applications, no applications, or any number or parts of applications based on DOE's decision as to which meritorious applications best achieve the CCPI objectives set forth in this Announcement.

Applicants should note that selection for negotiation will be made entirely on the basis of applications submitted. Applications should, therefore, address specifically the factors mentioned in the evaluation criteria and not depend on the expected background knowledge of reviewers.

3. Notice of Selection (OCT 2003)

DOE will notify applicants selected for negotiation of a cooperative agreement. This notice of selection is not an authorization to begin performance (See Section IV.F with respect to the allowability of pre-award costs.)

Organizations whose applications have not been selected will be advised as promptly as possible. This notice will explain why the application was not selected.

4. Discussions and Award (OCT 2003)

The Government may enter into discussions with a selected applicant for any reason deemed necessary, including but not limited to: (1) the budget is not appropriate or reasonable for the requirement; (2) only a portion of the application is selected for award; (3) the Government needs additional information to determine that the recipient is capable of complying with the requirements in 10 CFR 600; and/or (4) special terms and conditions are required. Failure to resolve the issues identified by the Government to its satisfaction will preclude award to the applicant.

E. Anticipated Announcement and Award Dates

DOE anticipates announcement of selections by the end of calendar year 2004. DOE anticipates negotiations leading to awards within 10 months following the selection announcement.

SECTION VI – AGENCY CONTACT(S)

Questions on the Announcement -- IIPS (OCT 2003)

Questions regarding the content of the Announcement should be submitted through the “Submit Question” feature of the DOE Industry Interactive Procurement System (IIPS) at <http://e-center.doe.gov>. Locate the Announcement on IIPS and then click on the “Submit Question” button at the top. Enter required information. You will receive an electronic notification that your question has been answered. DOE will try to respond to a question within 3 business days, unless a similar question and answer have already been posted on the website.

Responses to questions may be viewed through the “View Questions” feature, button at the top of the page. If no questions have been answered, a statement to that effect will appear at the top of the page. You should periodically check “View Questions” for new questions and answers.

Questions regarding how to submit questions or view responses can be e-mailed to the IIPS HELP Desk at helpdesk@pr.doe.gov or by calling 1-800-683-0751.

Questions regarding this Announcement should be directed to:

JoAnn C. Zysk, Contract Specialist
412-386-6600
zysk@netl.doe.gov

SECTION VII – OTHER INFORMATION

A. Modifications (OCT 2003)

Notice of any modification to this Announcement will be posted on the DOE Industry Interactive Procurement System (IIPS).

If you register in IIPS, you may join this Announcement mailing list to receive an e-mail when a modification or an Announcement message is posted. To view modifications and Announcement messages, locate the Announcement on IIPS and click on the yellow folder next to the Announcement number.

B. Government Right to Reject or Negotiate (OCT 2003)

DOE reserves the right, without qualification, to reject any or all applications received in response to this Announcement and to select any application, in whole or in part, as a basis for negotiation and/or award.

C. Commitment of Public Funds (OCT 2003)

The Contracting Officer is the only individual who can make awards or commit the Government to the expenditure of public funds. A commitment by other than the Contracting Officer, either explicit or implied, is invalid.

D. Proprietary Application Information (OCT 2003)

An application may include data, including trade secrets and/or privileged or confidential commercial or financial information that the applicant does not want disclosed to the public or used for any purpose other than evaluation of the application. (See 10 CFR 600.15). The use and disclosure of such data may be restricted, provided the applicant marks the cover sheet of the application with the following legend and specifies the pages of the application which are to be restricted:

NOTICE OF RESTRICTION ON DISCLOSURE AND USE OF DATA

The data contained in page(s) _____ of this application have been submitted in confidence and contain trade secrets or proprietary information, and such data shall be used or disclosed only for evaluation purposes, provided that if this applicant receives an award as a result of or in connection with the submission of this application, the DOE shall have the right to use or disclose the data herein to the extent provided in the award. This restriction does not limit the Government's right to use or disclose data obtained without restriction from any source, including the applicant.

To protect such data, each line or paragraph on the pages containing such data must be specifically identified and marked with a legend similar to the following:

“Use of disclosure of the data set forth above is subject to the restriction on the cover page of this application.”

E. Notice Regarding Eligibility of Organizations Described in Section 501(c)(4) of the Internal Revenue Code (OCT 2003) (Applicable to nonprofit organizations excluding institutions of higher education) (OCT 2003)

Applicant organizations that are described in Section 501(c)(4) of the Internal Revenue Code of 1986 and that have engaged in any lobbying activities after December 31, 1995 are not eligible for an award. As set forth in

Section 3 of the Lobbying Disclosure Act of 1995, as amended, (2. U.S.C. 1602), lobbying activities are defined broadly to include, among other things, contacts on behalf of an organization with specified employees of the Executive branch and congress with regard to Federal legislative, regulatory, and program administrative matters.

F. Evaluation by Non-Federal Reviewers (OCT 2003)

In conducting the merit review evaluation, the Government plans to use qualified non-Federal personnel (e.g., DOE management and operating contractors, university personnel, or other scientific/technical experts) as reviewers or advisors. The applicant, by submitting its application, consents to the use of non-Federal reviewers. Non-Federal reviewers will be required to sign a Conflict-of-Interest/Non-Disclosure Certificate prior to reviewing any application.

G. Intellectual Property Developed under this Program (OCT 2003)

Patent Rights. The government will have certain statutory rights in an invention that is conceived or first actually reduced to practice under a DOE award. 42 U.S.C. 5908 provides that title to such inventions vests in the United States, except where 35 U.S.C. 202 provides otherwise for nonprofit organizations or small business firms. However, the Secretary of Energy may waive all or any part of the rights of the United States subject to certain conditions. (See “Notice of Right to Request Patent Waiver” in paragraph H below.) The patent rights applicable to the various types of DOE financial assistance recipients are contained in 10 CFR 600.

Rights in Technical Data. Normally, the government has unlimited rights in technical data created under a DOE agreement. Delivery or third party licensing of proprietary software or data developed solely at private expense will not normally be required except as specifically negotiated in a particular agreement to satisfy DOE’s own needs or to ensure the commercialization of technology developed under a DOE agreement. The rights in data applicable to the various types of DOE financial assistance recipients are contained in 10 CFR Part 600.

- Special Protected Data Statutes. This program is covered by a special protected data statute. The provisions of the statute provide for the protection from public disclosure, for a period of up to five (5) years from the development of the information, data that would be trade secret, or commercial or financial information that is privileged or confidential, if the information had been obtained from a non-Federal party. Generally, the provision entitled, Rights in Data – Programs Covered Under Special Protected Data Statutes, (10 CFR 600 Appendix A to Subpart D), would apply to an award made under this Announcement. This provision will identify data or categories of data first produced in the performance of the award that will be made available to the public, notwithstanding the statutory authority to withhold data from public dissemination, and will also identify data that will be recognized by the parties as protected data.

Web Site: Applicants can access the DOE financial assistance patent and data rights provisions applicable to research, development, and demonstration (RD&D) awards at www.gc.doe.gov/gcmain.html. Click here for provisions.

H. Notice of Right to Request Patent Waiver (OCT 2003)

Applicants have the right to request a waiver of all or any part of the rights of the United States in inventions conceived or first actually reduced to practice in performance of the cooperative agreement that may be awarded as a result of this Announcement, in advance of or within 30 days after the effective date of the award. Even where such advance waiver is not requested or the request is denied, the recipient will have a continuing right under the cooperative agreement to request a waiver of the rights of the United States in identified

inventions, i.e., individual inventions conceived or first actually reduced to practice in performance of the award.

Domestic small businesses and domestic nonprofit organizations normally will receive the patent rights clause titled “Patent Rights (Small Business Firms and Nonprofit Organizations)” found at Appendix A to Subpart D to 10 CFR 600 which permits the recipient to retain title to such inventions, except under awards for management or operation of a Government-owned research and development facility or under awards involving exceptional circumstances or intelligence activities. Therefore, small businesses and nonprofit organizations normally need not request a waiver. See the patent rights clause in the model cooperative agreement in this Announcement. See DOE’s patent waiver regulations at 10 CFR Part 784.

I. Notice Regarding Eligible/Ineligible Activities (AUG 1999)

Eligible activities under this Announcement include those which describe and promote the understanding of scientific and technical aspects of specific energy technologies, but not those which encourage or support political activities such as the collection and dissemination of information related to potential, planned, or pending legislation.

SECTION VIII – ATTACHMENTS

ATTACHMENT A – DOE APPLICATION COVER SHEET

ATTACHMENT B – PUBLIC ABSTRACT FORM

ATTACHMENT C – APPLICATION FOR FEDERAL ASSISTANCE (SF 424)

ATTACHMENT D – FINANCIAL ASSISTANCE CERTIFICATIONS AND ASSURANCES

ATTACHMENT E – FEDERAL ASSISTANCE BUDGET INFORMATION (DOE F 4600.4)

ATTACHMENT F – MODEL COOPERATIVE AGREEMENT

ATTACHMENT G – MODEL REPAYMENT AGREEMENT

ATTACHMENT H – FUNDING PLAN

SECTION VIII - ATTACHMENTS

ATTACHMENT A

DOE APPLICATION COVER SHEET

(End of text for this page)

APPLICATION COVER SHEET

U. S. Department of Energy
Announcement No. DE-PS26-04NT42061
Due Date and Time:
CLEAN COAL POWER INITIATIVE

1. APPLICANT NAME(S):
2. APPLICANT'S ADDRESS:
3. CONGRESSIONAL DISTRICT:
4. POINT OF CONTACT:
5. TELEPHONE/FAX NUMBER:
6. TITLE OF PROJECT:
7. PROPRIETARY INFORMATION:

Does this submittal contain proprietary or confidential information?

NO YES (if yes, complete box below, as prescribed in Section III, Paragraph X. Treatment of Proprietary Information.)

NOTICE OF RESTRICTIONS ON DISCLOSURE AND USE OF DATA

The data contained on page(s) _____ of this application have been submitted in confidence and contain trade secrets and/or privileged or confidential commercial or financial information, and such data shall be used or disclosed only for evaluation purposes, provided that if a Cooperative Agreement is made as a result of or in connection with the submission of this application, the Government shall have the right to use or disclose the data herein to the extent provided in the Cooperative Agreement. This restriction does not limit the Government's right to use or disclose data that it obtains without restriction from any source, including the application.

4. NAME OF AUTHORIZED OFFICIAL:

SIGNATURE AND DATE:

SECTION VIII - ATTACHMENTS

ATTACHMENT B

PUBLIC ABSTRACT FORM

(End of text for this page)

PUBLIC ABSTRACT

The Clean Coal Power Initiative Program is one of the United States= largest energy initiatives. As such, it attracts considerable Congressional, media and public interest. To be responsive to these interests, the Department of Energy has prepared the following **Public Abstract** to be included as part of a applicant=s submission.

The **Public Abstract** will be made available to the public shortly after the deadline for receipt of Clean Coal Power Initiative applications. It will be used to answer inquiries from and prepare information for members of Congress, the news media, state and local organizations and members of the public. It will not be used as part of the evaluation process.

Although not required for the purposes of application evaluation and/or selection, the **Public Abstract** does provide a way to fulfill the Department=s responsibility to be responsive to public inquiries without compromising the proprietary or confidential aspects of an application. Each applicant, therefore, is encouraged to complete the following form as fully as possible.

Applicants are asked to complete the requested information on the form for inclusion with the application. If diagrams, flow sheets, or other material is necessary to explain the proposed Clean Coal Power Initiative project, this material can be included as an attachment to the **Public Abstract** form.

PUBLIC ABSTRACT (cont=d)

Anticipated Project Site(s):

Location (city, county, etc.)	State	Zipcode
Congressional District Location (city, county, etc.)	State	Zipcode
Congressional District Location (city, county, etc.)	State	Zipcode
Congressional District		

Type of coal to be used:

Primary Alternate (if any)

Size or scale of project:

Tons of coal/day input
And/or
_____ Megawatts, Barrels per day, etc.
Other (if necessary)

Duration of proposed project:

(From date of award) (Months)

PRIMARY CONTACT:

For additional information,
interested parties should contact:

	Name		
	Position		
() Telephone Number	Company		
_____	Address		
e-mail address	City	State	Zipcode

Alternative Contact:

	Name		
	Position		
() Telephone Number	Company		
_____	Address		
e-mail address	City	State	Zipcode

PUBLIC ABSTRACT (cont=d)

Brief description of project:

(750 words or less. Use continuation sheet if necessary)

SECTION VIII - ATTACHMENTS

ATTACHMENT C

APPLICATION FOR FEDERAL ASSISTANCE (SF 424)

(End of text for this page)

APPLICATION FOR FEDERAL ASSISTANCE

1. TYPE OF SUBMISSION:		2. DATE SUBMITTED	Applicant Identifier
Application <input type="checkbox"/> Construction <input type="checkbox"/> Non-construction		3. DATE RECEIVED BY STATE	State Application Identifier
Preapplication <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction		4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier

5. APPLICANT INFORMATION

Legal Name:	Organizational Unit:
Address (give city, county, state, and zip code):	Name and telephone number of the person to be contacted on matters involving this application (give area code) () -

6. EMPLOYER IDENTIFICATION NUMBER (EIN):

8. TYPE OF APPLICATION:

New Continuation Revision

If Revision, enter appropriate letter(s) in box(es):

A. Increase Award B. Decrease Award C. Increase Duration
 D. Decrease Duration Other (specify)

7. TYPE OF APPLICANT: (enter appropriate letter in box)

- | | |
|---------------------|--|
| A. State | H. Independent School Dist. |
| B. County | I. State Controlled Institution of Higher Learning |
| C. Municipal | J. Private University |
| D. Township | K. Indian Tribe |
| E. Interstate | L. Individual |
| F. Intermunicipal | M. Profit Organization |
| G. Special District | N. Other (Specify) |

9. NAME OF FEDERAL AGENCY:

10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER:

TITLE: **Fossil Energy Research and Development**

12. AREAS AFFECTED BY PROJECT (cities, countries, states, etc.)

11. DESCRIPTIVE TITLE OF APPLICANTS PROJECT:

13. PROPOSED PROJECT

Start Date	Ending Date
------------	-------------

14. CONGRESSIONAL DISTRICTS OF:

a. Applicant	b. Project
--------------	------------

15. ESTIMATED FUNDING:

a. Federal	\$.00
b. Applicant	\$.00
c. State	\$.00
d. Local	\$.00
e. Other	\$.00
f. Program Income	\$.00
g. TOTAL	\$.00

16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?

a. YES. THIS PREAPPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW

DATE _____

b. NO. PROGRAM IS NOT COVERED BY E.O. 12372

OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW

17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?

Yes If "Yes," attach an explanation No

18. TO THE BEST OF MY KNOWLEDGE AND BELIEF ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT. THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.

a. Typed Name of Authorized Representative	b. Title	c. Telephone Number () -
d. Signature of Authorized Representative		e. Date Signed

INSTRUCTIONS FOR THE SF 424

Public reporting burden for this collection of information is estimated to average 45 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0043), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

This is a standard form used by applicants as a required facesheet for preapplications and applications submitted for Federal assistance. It will be used by Federal agencies to obtain applicant certification that States which have established a review and comment procedure in response to Executive Order 12372 and have selected the program to be included in their process, have been given an opportunity to review the applicant's submission.

- | Item: | Entry: |
|---|--------|
| 1. Self-explanatory. | |
| 2. Date application submitted to Federal agency (or State if applicable) and applicant's control number (if applicable). | |
| 3. State use only (if applicable). | |
| 4. If this application is to continue or revise an existing award, enter present Federal Identifier number. If for a new project, leave blank. | |
| 5. Legal name of applicant, name of primary organizational unit which will undertake the assistance activity, complete address of the applicant, and name and telephone number of the person to contact on matters related to this application. | |
| 6. Enter Employer Identification Number (EIN) as assigned by the Internal Revenue Service. | |
| 7. Enter the appropriate letter in the space provided. | |
| 8. Check appropriate box and enter appropriate letter(s) in the space(s) provided. | |
| - "New" means a new assistance award. | |
| - "Continuation" means an extension for an additional funding/budget period for a project with a projected completion date. | |
| - "Revision" means any change in the Federal Government financial obligation or contingent liability from an existing obligation. | |
| 9. Name of Federal agency from which assistance is being requested with this application. | |
| 10. Use the Catalog of Federal Domestic Assistance number and the title of the program under which assistance is requested. | |
| 11. Enter a brief descriptive title of the project. If more than one program is involved, you should append an explanation on a separate sheet. If appropriate (e.g., construction or real | |

property projects), attach a map showing project location. For pre-applications, use a separate sheet to provide a summary description of this project.

- | Item: | Entry: |
|-------|--|
| 12. | List only the largest political entities affected (e.g., State, counties, cities). |
| 13. | Self-explanatory. |
| 14. | List the applicant's Congressional District and any District(s) affected by the program or project. |
| 15. | Amount requested or to be contributed during the first funding/budget period by each contributor. Value of in-kind contributions should be included on appropriate lines as applicable. If the action will result in a dollar change to an existing award, indicate <i>only</i> the amount of the change. For decreases, enclose the amounts in parentheses. If both basic and supplemental amounts are included, show breakdown on an attached sheet. For multiple program funding, use totals and show breakdown using same categories as item 15. |
| 16. | Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the State intergovernmental review process. |
| 17. | This question applies to the applicant organization, not the person who signs as the authorized representative. Categories of debt include delinquent audit disallowances, loans, and taxes. |
| 18. | To be signed by the authorized representative of the applicant. A copy of the governing body's authorization for you to sign this application as official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application.) |

SECTION VIII - ATTACHMENTS

ATTACHMENT D

FINANCIAL ASSISTANCE CERTIFICATIONS AND ASSURANCES

(End of text for this page)

U.S. DEPARTMENT OF ENERGY
NATIONAL ENERGY TECHNOLOGY LABORATORY
FINANCIAL ASSISTANCE CERTIFICATIONS AND ASSURANCES

Applicant: _____

Announcement No.: **DE-**_____

The following certifications and assurances must be completed and submitted with each application for financial assistance. The name of the person responsible for making the certifications and assurances must be typed in the signature block on the forms.

Standard Form 424B, Assurances – Non-Construction Programs

DOE F 1600.5, Assurance of Compliance Nondiscrimination in Federally Assisted Programs

Certifications Regarding Lobbying; Debarment, Suspension and Other Responsibility Matters; and Drug Free Workplace Requirements

Representation of Limited Rights Data and Restricted Computer Software

National Environmental Policy Act (NEPA) Environmental Questionnaire

The following documents must be submitted, if applicable.

N/A

- Pre-Award Accounting System Survey***
The Applicant and each subcontractor whose total proposed costs exceed \$100,000 shall complete the accounting system survey form.
- Energy Policy Act (EPAct) Representation***
If the Applicant is a “for-profit” organization whose program is listed as a “Covered” program under Title XX-XXIII of the Energy Policy Act of 1992, complete one of the following representations.

EPAct Representation for Awards of \$100,000 or More
EPAct Representation for Awards under \$100,000 (Simplified)
- Simpson-Craig Amendment Representation***
If the applicant is a 501(c) (4) Non- Profit Organization, a Simpson-Craig Amendment Representation must be completed.
- SF-LLL Disclosure of Lobbying Activities***
Complete the SF-LLL Disclosure of Lobbying Activities only if payment or agreement to make payment has been made to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal action.
- Non-Consent to the use of Outside Evaluators***
If the announcement indicates that the Government may utilize assistance and advice from qualified personnel from other Federal Agencies, DOE Contractors, universities and industry, the above named applicant consents, does not consent, to this the use of such evaluators.
- Exceptions and Deviation***
Identify and explain any exceptions or deviations taken or conditional assumptions made.

ASSURANCES - NON-CONSTRUCTION PROGRAMS

OMB Approval No. 0348-0040

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET, SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

Note: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant I certify that the applicant: (Insert Name of Proposer): _____

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award, and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the nineteen statutes or regulations specified in Appendix A of O.P.M.'s Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) The Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. 33601 et seq.), as amended, relating to non discrimination in the sale, rental, or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance Policies Act of 1970 (P.L. 91-646, which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply with the provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §§874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State Management Program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers systems.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. 2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4801 et seq.) which prohibits the use of lead based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act of 1984, or OMB Circular No. A-133, Audits of Institutions of Higher Learning and other Non-profit Institutions.
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations and policies governing this program.

Nondiscrimination in Federally Assisted Programs

OMB Burden Disclosure Statement

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, Records Management Division, HR-422 - GTN, Paperwork Reduction Project (1900-0400), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1900-0400), Washington, DC 20503.

(Hereinafter called the "Applicant")

HEREBY AGREES to comply with Title VI of the Civil Rights Act of 1964 (Pub. L.88-352), Section 16 of the Federal Energy Administration Act of 1974 (Pub.L.93-275), Section 401 of the Energy Reorganization Act of 1974 (Pub.L.93-438), Title IX of the Education Amendments of 1972, as amended (Pub.L.92-318, Pub.L.93-568, and Pub.L.94-482), Section 504 of the Rehabilitation Act of 1973 (Pub.L.93-112), the Age Discrimination Act of 1975 (Pub.L.94-135), Title VIII of the Civil Rights Act of 1968 (Pub.L.90-284), the Department of Energy Organization Act of 1977 (Pub.L.95-91), and the Energy Conservation and Production Act of 1976, as amended (Pub.L.94-385) and Title 10, Code of Federal Regulations, Part 1040. In accordance with the above laws and regulations issued pursuant thereto, the Applicant agrees to assure that no person in the United States shall, on the ground of race, color, national origin, sex, age, or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity in which the Applicant receives Federal assistance from the Department of Energy.

Applicability and Period of Obligation

In the case of any service, financial aid, covered employment, equipment, property, or structure provided, leased, or improved with Federal assistance extended to the Applicant by the Department of Energy, this assurance obligates the Applicant for the period during which Federal assistance is extended. In the case of any transfer of such service, financial aid, equipment, property, or structure, this assurance obligates the transferee for the period during which Federal assistance is extended. If any personal property is so provided, this assurance obligates the Applicant for the period during which it retains ownership or possession of the property. In all other cases, this assurance obligates the Applicant for the period during which the Federal assistance is extended to the Applicant by the Department of Energy.

Employment Practices

Where a primary objective of the Federal assistance is to provide employment or where the Applicant's employment practices affect the delivery of services in programs or activities resulting from Federal assistance extended by the Department, the Applicant agrees not to discriminate on the ground of race, color, national origin, sex, age, or disability, in its employment practices. Such employment practices may include, but are not limited to, recruitment advertising, hiring, layoff or termination, promotion, demotion, transfer, rates of pay, training and participation in upward mobility programs; or other forms of compensation and use of facilities.

Subrecipient Assurance

The Applicant shall require any individual, organization, or other entity with whom it subcontracts, subgrants, or subleases for the purpose of providing any service, financial aid, equipment, property, or structure to comply with laws cited above. To this end, the subrecipient shall be required to sign a written assurance form, however, the obligation or both recipient and subrecipient to ensure compliance is not relieved by the collection or submission of written assurance forms.

Data Collection and Access to Records

The Applicant agrees to compile and maintain information pertaining to programs or activities developed as a result of the Applicant's receipt of Federal assistance from the Department of Energy. Such information shall include, but is not limited to, the following: (1) the manner in which services are or will be provided and related data necessary for determining whether any persons are or will be denied such services on the basis of prohibited discrimination; (2) the population eligible to be served by race, color, national origin, sex, age, and disability; (3) data regarding covered employment including use or planned use of bilingual public contact employees serving beneficiaries of the program where necessary to permit effective participation by beneficiaries unable to speak or understand English; (4) the location of existing or proposed facilities connected with the program and related information adequate for determining whether the location has or will have the effect of unnecessarily denying access to any person on the basis of prohibited discrimination; (5) the present or proposed membership by race, color, national origin, sex, age, and disability, in any planning or advisory body which is an integral part of the program; and (6) any additional written data determined by the Department of Energy to be relevant to its obligation to assure compliance by recipients with laws cited in the first paragraph of this assurance.

The Applicant agrees to submit requested data to the Department of Energy regarding programs and activities developed by the Applicant from the use of Federal assistance funds extended by the Department of Energy, Facilities of the Applicant (including the physical plants, building, or other structures) and all records, books, accounts, and other sources of information pertinent to the Applicant's compliance with the civil rights laws shall be made available for inspection during normal business hours on request of an officer or employee of the Department of Energy specifically authorized to make such inspections. Instructions in this regard will be provided by the Director, Office of Civil Rights, U.S. Department of Energy.

This assurance is given in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts (excluding procurement contracts), property, discounts or other Federal assistance extended after the date hereto, to the Applicants by the Department of Energy, including installment payments on account after such data of application for Federal assistance which are approved before such date. The Applicant recognizes and agrees that such Federal assistance will be extended in reliance upon the representation and agreements made in this assurance and that the United States shall have the right to seek judicial enforcement of this assurance. This assurance is binding on the Applicant, the successors, transferees, and assignees, as well as the person(s) whose signature appears below and who are authorized to sign this assurance on behalf of the Applicant.

Applicant Certification

The Applicant certifies that it has complied, or that, within 90 days of the date of the grant, it will comply with all applicable requirements of 10 C.F.R. § 1040.5 (a copy will be furnished to the Applicant upon written request to DOE).

Designated Responsible Employee

Name and Title (Printed to Typed) () -
Telephone Number

Signature Date

Applicant's Name () -
Telephone Number

Address: Date

Authorized Official:
President, Chief Executive Officer
or Authorized Designee

Name and Title (Printed to Typed) () -
Telephone Number

Signature Date

***CERTIFICATIONS REGARDING LOBBYING;
DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS;
AND DRUG FREE WORKPLACE REQUIREMENTS***

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature of this form provides for compliance with certification requirements under 10 CFR Part 601 "New Restrictions on Lobbying," and 10 CFR Part 1036 "Government wide Debarment and Suspension (Nonprocurement) and Government wide Requirements for Drug-Free Workplace (Grants)." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Energy determines to award the covered transaction, grant, or cooperative agreement.

1. LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

2. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

3. DRUG-FREE WORKPLACE

This certification is required by the Drug-Free Workplace Act of 1988 (Pub.L. 100-690, Title V, Subtitle D) and is implemented through additions to the Debarment and Suspension regulations, published in the Federal Register on January 31, 1989, and May 25, 1990.

ALTERNATE I (GRANTEES OTHER THAN INDIVIDUALS)

- (1) The grantee certifies that it will or will continue to provide a drug-free workplace by:
 - (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
 - (b) Establishing an ongoing drug-free awareness program to inform employees about:
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
 - (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
 - (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will:
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace not later than five calendar days after such conviction;
 - (e) Notifying the agency, in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer or other designee on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;
 - (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted:
 - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State or local health, law enforcement, or other appropriate agency;
 - (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a),(b),(c),(d),(e), and (f).
- (2) The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance: (Street address, city, county, state, zip code)

Check if there are workplaces on file that are not identified here.

ALTERNATE II (GRANTEES WHO ARE INDIVIDUALS)

- (1) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant.
- (2) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to every grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

4. SIGNATURE

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above certifications.

Announcement Number: **DE-** _____ - _____

Name of Applicant: _____

Printed Name and Title of
Authorized Representative: _____

SIGNATURE

DATE

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)
ENVIRONMENTAL QUESTIONNAIRE**

I. BACKGROUND

The Department of Energy's (DOE) National Environmental Policy Act (NEPA) Implementing Procedures ([10 CFR 1021](#)) require careful consideration of the potential environmental consequences of all proposed actions during the early planning stages. DOE must determine at the earliest possible time whether such actions require either an Environmental Assessment or an Environmental Impact Statement, or whether they qualify for Categorical Exclusion. To comply with these requirements, an Environmental Questionnaire must be completed for each proposed action to provide DOE with the information necessary to determine the appropriate level of NEPA review.

II. INSTRUCTIONS

Separate copies of this Environmental Questionnaire should be completed by the principal offeror and each proposed subcontractor. In addition, if the proposed project includes activities at different locations, an independent questionnaire should be prepared for each location. Supporting information can be provided as attachments.

In completing this questionnaire, the proposer is requested to provide specific quantities regarding air emissions, wastewater discharges, solid wastes, etc., to facilitate the necessary review. In addition, the proposer should identify the exact location of the project and specifically describe the activities that would occur at that location.

Questions regarding the type of information requested or the approach to preparing responses should be referred to Lloyd Lorenzi, U.S. Department of Energy, National Energy Technology Laboratory, by phone (412) 386-6159, fax (412) 386-4604, or E-mail (lorenzi@netl.doe.gov).

III. QUESTIONNAIRE

A. PROJECT SUMMARY

1. Announcement Number: **DE-** _____
2. Proposer & all Proposed Subcontractors: _____

3. Principal Investigator: _____
Telephone Number: () - _____
4. Project Title: _____

5. Duration: _____

6. Location (city/township, county, state): _____

7. Indicate the type or scale of project:

a. <input type="checkbox"/> Computer Modeling	b. <input type="checkbox"/> Library/Literature Search
c. <input type="checkbox"/> Paper Study	d. <input type="checkbox"/> Workshop/Conference
e. <input type="checkbox"/> Laboratory (Batch) Research	f. <input type="checkbox"/> Bench-scale Research
g. <input type="checkbox"/> Pilot- or Proof-of-Concept-Scale Research	h. <input type="checkbox"/> Pilot Plant Construction/Operation
i. <input type="checkbox"/> Full-Scale Demonstration	j. <input type="checkbox"/> Other (please describe): _____

8. Indicate the size of the proposed project and the primary material processed (e.g., 200 tph of coal).

_____ tph (of _____)	_____ MM Btu/hr
_____ scfm (of _____)	_____ MW <input type="checkbox"/> electric <input type="checkbox"/> thermal
_____ acfm (of _____)	_____ Other: _____

9a. Summarize the proposed work. List all activities or tasks planned at the location covered by this Environmental Questionnaire.

9b. Characterize the work site at this location (check all that apply).

Existing Building (Indoors) Developed Site Undeveloped Site

10. List all other locations where work would be performed. (**Note: Submit a separate Environmental Questionnaire for each location.**)

11. Describe the objectives of the proposed project.

12. Identify the planned number of tests, the frequency of testing (e.g., tests per week), and the duration of tests by type (e.g., laboratory tests, pilot unit runs, etc.).

13. Identify all materials that would be used and produced by the project (materials can be grouped by category) and estimate their total quantities over the entire duration of the proposed project.

Materials Used (total quantity)		Materials Produced (total quantity)	
<input type="checkbox"/>	coal (_____)	<input type="checkbox"/>	wastewater (_____)
<input type="checkbox"/>	natural gas (_____)	<input type="checkbox"/>	air emissions (_____)
<input type="checkbox"/>	oil (_____)	<input type="checkbox"/>	solid waste (_____)
<input type="checkbox"/>	electricity (_____)	<input type="checkbox"/>	hazardous waste (_____)
<input type="checkbox"/>	water (_____)	<input type="checkbox"/>	salable by-list and note
<input type="checkbox"/>	air (_____)		_____
<input type="checkbox"/>	organic solvents (_____)	<input type="checkbox"/>	others – list and note quantity:
<input type="checkbox"/>	others – list and note quantity:		_____
	_____	<input type="checkbox"/>	None
<input type="checkbox"/>	None		

B. PROPOSED PROJECT AND ITS ALTERNATIVES

1. List all alternative approaches considered to achieve the objectives described in A.11 and discuss the anticipated environmental effects of each. (Place the selected approach at the top of the list.)

2. Identify the environmental consequences of not implementing this project (e.g., emission increase).

C. PROJECT LOCATION

1. Provide a brief description of the project location (physical location, surrounding area, adjacent structures).

CERTIFICATION BY PROPOSER

I hereby certify that the information provided herein is current, accurate, and complete as of the date shown immediately below.

DATE: _____ / _____ / _____
 month day year

SIGNATURE: _____

TYPED NAME: _____

TITLE: _____

ORGANIZATION: _____

**REPRESENTATION OF LIMITED RIGHTS DATA AND
RESTRICTED COMPUTER SOFTWARE (MAY 1999) (FAR 52.227-15)**

(Note: "Contract" means any grant or cooperative agreement instrument)

- (a) This announcement sets forth the work to be performed if a contract award results and the Government's known delivery requirements for data (as defined in FAR 27.401). Any resulting contract may also provide the Government the option to order additional data under the Additional Data Requirements clause at 52.227-16 of the FAR, if included in the contract. Any data delivered under the resulting contract will be subject to the Rights in Data--General clause at 52.227-14 that is to be included in this contract. Under the latter clause, a Contractor may withhold from delivery data that qualify as limited rights data or restricted computer software, and deliver form, fit, and function data in lieu thereof. The latter clause also may be used with its Alternates II and/or III to obtain delivery of limited rights data or restricted computer software, marked with limited rights or restricted rights notices, as appropriate. In addition, use of Alternate V with this latter clause provides the Government the right to inspect such data at the Contractor's facility.
- (b) As an aid in determining the Government's need to include Alternate II or Alternate III in the clause at 52.227-14, Rights in Data--General, the offeror shall complete paragraph (c) of this provision to either state that none of the data qualify as limited rights data or restricted computer software, or identify, to the extent feasible, which of the data qualifies as limited rights data or restricted computer software. Any identification of limited rights data or restricted computer software in the offeror's response is not determinative of the status of such data should a contract be awarded to the offeror.
- (c) The offeror has reviewed the requirements for the delivery of data or software and states [offeror check appropriate block] --
- None of the data proposed for fulfilling such requirements qualifies as limited rights data or restricted computer software.
- Data proposed for fulfilling such requirements qualify as limited rights data or restricted computer software and are identified as follows:
-

Note: "Limited rights data" and "Restricted computer software" are defined in the contract clause entitled "Rights in Data--General."

PRE-AWARD ACCOUNTING SYSTEM SURVEY

In order to qualify for a financial assistance award, the Applicant must demonstrate a financial management system that satisfies [10 CFR 600.121](#), Standards for Financial Management Systems or [10 CFR 600.220](#), Standards for Financial Management Systems, State and Local Governments).

This accounting system review is designed to determine the adequacy and suitability of an Applicant's accounting system and practices for accumulating costs under the type of Government instrument to be awarded. The form should be completed by an individual familiar with the capabilities of the organization's accounting system.

Does the Accounting System provide for:	<u>YES</u>	<u>NO</u>
1. Proper segregation of direct costs from indirect costs?	<input type="checkbox"/>	<input type="checkbox"/>
2. Identification and accumulation of direct costs by contract? Under a job order cost system, subsidiary cost records for each individual contract are generally available?	<input type="checkbox"/>	<input type="checkbox"/>
3. A logical and consistent method for the allocation of indirect costs to intermediate and final cost objectives?	<input type="checkbox"/>	<input type="checkbox"/>
4. Accumulation of costs under general ledger control?	<input type="checkbox"/>	<input type="checkbox"/>
5. A timekeeping system that identifies employees' labor by intermediate or final cost objectives?	<input type="checkbox"/>	<input type="checkbox"/>
6. A labor distribution system that charges direct and indirect labor to the appropriate cost objectives?	<input type="checkbox"/>	<input type="checkbox"/>
7. Interim (at least monthly) determination of costs charged to a contract through routine posting of books of account?	<input type="checkbox"/>	<input type="checkbox"/>
8. Exclusion from costs charged to Government contracts of amounts which are not allowable pursuant to FAR Part 31, Contract Cost Principles and Procedures, or other contract provisions?	<input type="checkbox"/>	<input type="checkbox"/>
9. Identification of costs by contract line item if required by the proposed contract?	<input type="checkbox"/>	<input type="checkbox"/>

I certify that the responses to the above questions accurately represent the policies, procedures, and capabilities of my organization's accounting system.

Name: _____

Title: _____

Company: _____

EPACT REPRESENTATION FOR AWARDS OF \$100,000 OR MORE

Section 2306 of the Energy Policy Act of 1992, Pub. L. 102-486 establishes eligibility requirements for companies to participate in certain financial assistance programs covered under Titles XX through XXIII of the EPAct. For this purpose, "company" means any business entity other than an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 [26 U.S.C. Section 501(c)(3)].

In order for the Department of Energy (DOE) to make an award to a company under a covered program, DOE must determine that the company's participation will be in the economic interest of the United States and, if the company is not a United States-owned company, that the parent company is incorporated in a foreign country that: affords national treatment to United States-owned companies with regard to access to Government-supported joint ventures in energy research and development; affords national treatment to United States-owned companies with regard to general investment opportunities; and affords protection to intellectual property rights owned by United States-owned companies. To assist DOE in making these determinations, the applicant must answer the following questions and make the representation provided therein. In the event the information submitted is inadequate for DOE to make a determination, DOE will request such additional information as may be required.

Company Ownership Information:

(Include this information for each participant in a joint venture.)

1. Company Name: _____

2. Project Title: _____

3. Is your company a United States-owned company? Yes No

(U.S.-owned company means (1) a company that has majority ownership by individuals who are citizens of the United States, or (2) a company organized under the laws of a State that either has no parent company or has a parent company organized under the laws of a State.)

4. Identify the city and state and year in which your company is incorporated or organized.

City: _____ State: _____ Year: _____

5. Is a majority of your company's stock owned or controlled by U.S. Citizens? Yes No

6. Does your company have a parent company? Yes No

7. If yes, identify the country in which the parent company is incorporated or organized.

Country: _____

Economic Interest Information:

1. Will this project result in investments in the U.S. in research and development? Yes No

If the answer is yes, what percentage of the total estimated cost of the project will be expended in the U.S.? (Contractor and supplier costs are to be included in total estimated costs.) Also, express in terms of dollars. : _____% ----\$ _____

2. Will this project result in investments in U.S. in manufacturing? Yes No

If the answer is yes, what percentage of the total estimated cost of the project including contractor and supplier costs will be expended in U.S. manufacturing? Also, express in terms of dollars. _____% ---- \$ _____

3. Will this project contribute to U.S. employment? Yes No

If the answer is yes, briefly describe how.

4. Does the applicant agree that it will promote the manufacture within the U.S. of products resulting from any resultant technology and competitively procure parts and materials? Yes No

Briefly describe plans, if any, for any manufacturing of products arising from the program supported research and development, including the location where such manufacturing is expected to occur.

If your answer is no, please explain.

What other benefits to the U.S. will result from this project?

EPACT REPRESENTATION FOR AWARDS UNDER \$100,000

Check one block and complete as applicable.

_____ (Hereinafter called the "Applicant") represents that it is a United States-owned company. (A company that has majority ownership by individuals who are citizens of the United States or a company organized under the laws of a State that either has no parent company or has a parent company organized under the laws of a State.)

_____ (Hereinafter called the "Applicant") represents that it or its parent company is incorporated or organized in the following country:

The applicant hereby agrees to comply with Section 2306 of the Energy Policy Act (Pub. L. 102-486). In accordance with the above law, the applicant represents that its participation in this financial assistance program would be in the economic interest of the United States based upon its investments in the United States in research, development, and manufacturing, and its contributions to employment in the United States. The applicant agrees with respect to any technology arising from this financial assistance to promote the manufacture of products within the United States and to procure parts and materials from competitive suppliers.

To the best of its current knowledge and belief, the applicant represents that the information provided is current, accurate, and complete and will advise DOE of any changes prior to award.

Applicant Representative: _____

Title: _____

Signature: _____

Date: _____

SIMPSON-CRAIG AMENDMENT REPRESENTATION

Applicant organizations which are described in section 501(c)(4) of the Internal Revenue Code of 1986 and engage in lobbying activities after December 31, 1995 shall not be eligible for the receipt of Federal funds constituting an award, grant, or loan.

Section 501(c)(4) of the Internal Revenue Code of 1986 covers:

Civic leagues or organizations not organized for profit but operated exclusively for the promotion of social welfare, or local associations of employees, the membership of which is limited to the employees of a designated person or persons in a particular municipality, and the net earnings of which are devoted exclusively to charitable, educational, or recreational purposes.

As set forth in section 3 of the Lobbying Disclosure Act of 1995, as amended, (2 U.S.C. 1602), lobbying activities are defined broadly to include, among other things, contacts on behalf of an organization with specified employees of the Executive Branch and Congress with regard to Federal legislative, regulatory, and program administrative matters.

When submitting an application, 501(c)(4) applicants shall include this representation in their application:

SIMPSON-CRAIG AMENDMENT REPRESENTATION

Check the appropriate block:

The applicant represents that it is an organization described in section 501(c)(4) of the Internal Revenue Code of 1986 which, after December 31, 1995, has has not engaged in any lobbying activities as defined in the Lobbying Disclosure Act of 1995.

Applicant: _____

Title: _____

Signature: _____

Date: _____

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure)

1. Type of Federal Action: ___ a. contract ___ b. grant ___ c. cooperative agreement ___ d. loan ___ e. loan guarantee ___ f. loan insurance	2. Status of Federal Action: ___ a. bid/offer/application ___ b. initial award ___ c. post-award	3. Report Type: ___ a. initial filing ___ b. material change For material change only: year ___ quarter ___ date of last report ___
4. Name and Address of Reporting Entity: ___ Prime ___ Subawardee Tier ____, if known: Congressional District, if known:	5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime: Congressional District, if known:	
6. Federal Department/Agency:	7. Federal Program Name/Description: CFDA Number, if applicable: _____.	
8. Federal Action Number, if known:	Award Amount, if known: \$	
10. a. Name and Address of Lobbying Registrant <i>(if individual, last name, first name, MI):</i>	b. Individuals Performing Services <i>(including address if different from No. 10a)(last name, first name, MI):</i>	
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Signature: _____ Print Name: _____ Title: _____ Telephone No.: () _____ - _____ Date: _____.	
Federal Use Only	Authorized for Local Reproduction Standard Form - LLL (Rev. 7-97)	

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitations for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Included prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.

(b) Enter the full names of the individual(s) performing services, and include full address if different from 10(a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form; print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503

EXCEPTIONS AND DEVIATIONS

The applicant shall identify and explain any exceptions or deviations taken or conditional assumptions made and provide specific cross references to its full discussion. Any exceptions taken must contain sufficient amplification and justification to permit evaluation. The benefit to the Government shall be explained for each exception taken. Such exceptions will not, of themselves, automatically cause an application to be termed unacceptable. A large number of exceptions, or one or more significant exceptions not providing benefit to the Government, however, may result in rejection of your application(s) as unacceptable.

SECTION VIII - ATTACHMENTS

ATTACHMENT E

FEDERAL ASSISTANCE BUDGET INFORMATION (DOE F 4600.4)

(End of text for this page)

U.S. DEPARTMENT OF ENERGY
Federal Assistance Budget Information

OMB Burden Disclosure Statement

Public reporting burden for this collection of information is estimated to average 1.87 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management, AD-241.2 - GTN, Paperwork Reduction Project (1910-0400), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1910-0400), Washington, DC 20503.

1. Program/Project Identification No.	2. Program/Project Title
3. Name and Address	4. Program/Project Start Date
	5. Completion Date

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal	Non-Federal	Federal	Non-Federal	Total
1. Project Definition						
2. Design						
3. Construction						
4. Demonstration						
5. TOTALS		\$	\$	\$	\$	\$

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	(1) Project Definition	(2) Design	(3) Construction	(4) Demonstration	
a. Personnel	\$	\$	\$	\$	\$
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges					
j. Indirect Charges					
k. TOTALS	\$	\$	\$	\$	\$
7. Program Income	\$	\$	\$	\$	\$

FEDERAL ASSISTANCE BUDGET INFORMATION

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 the 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 assistance 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 assistance 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 that will remain unobligated at the end of the funding period only if the award instructions provide for this. Otherwise, leave these columns blank. Enter in Columns (e) and (f) the amount of

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.
--

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 awards and changes to existing awards, 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.

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

Item 6i - Show the totals of Lines 6a to 6h in each column.

Item 6j - Show the amount of indirect cost.

Item 6k - Enter the total of amounts on Lines 6i and 6j. For all applications for new and continuation awards, 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 awards and changes

to awards, 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.

Item 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 award.

SECTION VIII - ATTACHMENTS

ATTACHMENT F

MODEL COOPERATIVE AGREEMENT

(End of text for this page)

U.S. DEPARTMENT OF ENERGY
NOTICE OF FINANCIAL ASSISTANCE AWARD
(See Instructions on Reverse)

Under the authority of Public Law 95-91 DOE Organization Act, and P.L. 95-224 Federal Grant and Cooperative Agreement Act as amended by P.L. 97-258

and subject to legislation, regulations and policies applicable to (cite legislative program title): _____

1. PROJECT TITLE	2. INSTRUMENT TYPE <input type="checkbox"/> GRANT <input type="checkbox"/> COOPERATIVE AGREEMENT	
3. RECIPIENT (Name, address, zip code, area code and telephone no.)	4. INSTRUMENT NO.	5. AMENDMENT NO.
	6. BUDGET PERIOD FROM: THRU:	7. PROJECT PERIOD FROM: THRU:
8. RECIPIENT PROJECT DIRECTOR (Name and telephone no.)	10. TYPE OF AWARD <input type="checkbox"/> NEW <input type="checkbox"/> CONTINUATION <input type="checkbox"/> RENEWAL <input type="checkbox"/> REVISION <input type="checkbox"/> SUPPLEMENT	
9. RECIPIENT BUSINESS OFFICER (Name and telephone no.)	12. ADMINISTERED FOR DOE BY (Name, address, zip code, telephone no.)	
11. DOE PROJECT OFFICER (Name, address, zip code, telephone no.)		

13. RECIPIENT TYPE

<input type="checkbox"/> STATE GOV'T	<input type="checkbox"/> INDIAN TRIBAL GOV'T	<input type="checkbox"/> HOSPITAL	<input type="checkbox"/> FOR PROFIT ORGANIZATION	<input type="checkbox"/> INDIVIDUAL
<input type="checkbox"/> LOCAL GOV'T	<input type="checkbox"/> INSTITUTION OF HIGHER EDUCATION	<input type="checkbox"/> OTHER NONPROFIT ORGANIZATION	<input type="checkbox"/> C <input type="checkbox"/> P <input type="checkbox"/> SP	<input type="checkbox"/> OTHER (Specify)

14. ACCOUNTING AND APPROPRIATIONS DATA:				15. EMPLOYER I.D. NUMBER
a. Appropriation Symbol	b. B&R Number	c. FT/AFP/OC	d. CFA Number	

16. BUDGET AND FUNDING INFORMATION			
a. CURRENT BUDGET PERIOD INFORMATION		b. CUMULATIVE DOE OBLIGATIONS	
(1) DOE Funds Obligated This Action \$ _____	(1) This Budget Period \$ _____	[Total of lines a.(1) and a.(3)]	
(2) DOE Funds Authorized for Carry Over \$ _____	(2) Prior Budget Periods \$ _____		
(3) DOE Funds Previously Obligated in this Budget Period \$ _____	(3) Project Period to Date \$ _____	[Total of lines b.(1) and b.(2)]	
(4) DOE Share of Total Approved Budget \$ _____			
(5) Recipient Share of Total Approved Budget \$ _____			
(6) Total Approved Budget \$ _____			

17. TOTAL ESTIMATED COST OF PROJECT \$ _____
(This is the current estimated cost of the project. It is not a promise to award nor an authorization to expend funds in this amount.)

18. AWARD AGREEMENT TERMS AND CONDITIONS
This award/agreement consists of this form plus the following:

a. Special terms and conditions.

b. Applicable program regulations (specify) _____ (Date) _____.

c. DOE Assistance Regulations, 10 CFR Part-600, as amended.

d. Application/proposal dated _____, as submitted with changes as negotiated.

19. REMARKS

20. EVIDENCE OF RECIPIENT ACCEPTANCE	21. AWARDED BY
_____ (Signature of Authorized Recipient Official) (Date)	_____ (Signature) (Date)
_____ (Name)	_____ (Name)
_____ (Title)	Contracting Officer (Title)

SECTION II -- SPECIAL TERMS AND CONDITIONS

2.1 Prevailing Regulations (MAY 2002)

As indicated on the face page, Block 18c, this award is subject to the DOE Assistance Regulations of Title 10, Code of Federal Regulations, Part 600. This set of regulations may be found in most major libraries or on the World Wide Web at: http://www.access.gpo.gov/nara/cfr/waisidx_00/10cfr600_00.html.

2.2 Order of Precedence (AUG 2001)

In the event of any inconsistency among the provisions of this agreement, the inconsistency shall be resolved by giving precedence as follows: (a) applicable public laws; (b) 10 CFR Part 600; (c) the special terms and conditions; and (d) other documents, exhibits and attachments.

2.3 Definitions (MAR 2002)

A@Cooperative Agreement@ means this agreement between the United States Department of Energy (DOE) and the Recipient, DOE Instrument number _____, and any subsequent amendments.

A@Recipient@ means [INSERT NAME OF ORGANIZATION SIGNING THE COOPERATIVE AGREEMENT] and its successors and assigns.

A@Repayment Agreement@ means the agreement made by _____ in DOE Instrument Number _____ on _____, 200_, to repay the DOE share of costs paid under this Cooperative Agreement.

A@United States@ means the United States of America and its 50 States, the District of Columbia, the Commonwealth of Puerto Rico, and any possession or trust territory of the United States.

2.4 Substantial Involvement Between DOE and the Recipient (MAR 2002)

a. Recipient Role

The Recipient shall be responsible for all aspects of project performance as set forth in the Statement of Project Objectives. All services, personnel, facilities, equipment, materials, and supplies shall be furnished by the Recipient, unless otherwise specified under this Cooperative Agreement. The Recipient Project Director shall serve as its authorized representative for the technical elements of all work to be performed under this Cooperative Agreement. The Recipient Business Officer shall serve as its authorized representative for administrative elements dealing with the Cooperative Agreement.

b. DOE Role

DOE shall monitor the Recipient=s progress in performing the project and shall have a substantial role in project decision making.

The DOE Contracting Officer is the only Government Representative authorized to accept the reports and other deliverables the Recipient is required to provide under this Cooperative Agreement. The DOE Project Officer (same as Contracting Officer=s Representative) shall have the authority to comment on those technical reports, plans, and other technical information the Recipient is required to submit to DOE for review and comment.

The DOE Project Officer shall have the authority to issue written technical advice which suggests redirecting the project work (e.g., by changing the emphasis among different tasks), or pursuing specific lines of inquiry likely to assist in accomplishing the Statement of Project Objectives. The DOE Project Officer is not authorized to issue, and the Recipient must not follow, any technical advice which constitutes work which is not within the scope of the Statement of Project Objectives; which in any manner causes an increase or decrease in the total estimated cost or in the time required for performance of the project; which has the effect of changing any of the terms or conditions of the Cooperative Agreement; or which interferes with the Recipient=s right to perform the project in accordance with the terms and conditions of this Cooperative Agreement.

c. No Government Obligation to Third Parties

In connection with the performance of the project, the Government shall have no obligation or responsibility to any contractor, subcontractor or other person who is not a party to this Cooperative Agreement. The foregoing limitation shall apply notwithstanding the Contracting Officer's prior approval of or consent to any contract awarded by the Recipient. The Recipient shall be responsible, without recourse to DOE, except for amounts DOE is otherwise obligated to pay pursuant to the provisions of this Cooperative Agreement for the resolution and satisfaction of all preaward protests, contract administration issues, and contract disputes arising out of contracts awarded by the Recipient for acquisitions related to the Project.

2.5 Budget Periods and Estimated Project Costs (OCT 2003)

(A) Budget Periods

The project period of this Cooperative Agreement is divided into project budget periods, separated by decision points, for funding purposes. The Participant's cost share must be at least at least 50% for the total project, and 50% for each budget period. The expected duration of Budget Periods will be established during negotiations.

Phases

The project is divided into major categories of work (e.g., design, construction, demonstration, etc.) called phases for project management planning and control.

(B) Total Estimated Project Costs

DOE and the Participant shall share in allowable direct and indirect project costs in the percentages up to the amounts shown below:

TOTAL ESTIMATED PROJECT COST: \$

Budget Period #1

Design Phase

DOE Share: \$ _____ %
Participant Share: \$ _____ %

Budget Period #2

Construction Phase

DOE Share: \$ _____ %
Participant Share: \$ _____ %

Budget Period #3

Demonstration/Operation Phase

DOE Share: \$ _____ %
Participant Share: \$ _____ %

Total

DOE Share: \$ _____ %
Participant Share: \$ _____ %

(C) Budget Revisions

The Recipient may rebudget funds within a total approved budget, subject to the prior approval requirements of 10 CFR 600.125. The Participant shall obtain prior written approval of the DOE Contracting Officer of any budget revision which would result in the need for additional DOE funding.

(D) Additional Funds

The Participant shall immediately notify the Contracting Officer in writing whenever it becomes apparent that the costs of completing that portion of the Project to be performed during a Budget Period exceeds the Total Approved Budget. Such written notice shall, at a minimum, set forth (1) a detailed explanation of the magnitude and factors causing the cost overrun; (2) a proposed Budget revision detailing the amount of additional funds needed to complete the Project and (3) the amount of additional DOE funds, if any, requested by the Participant.

2.6 Funding (SEPT 2000)

DOE has currently obligated \$[INSERT FUNDING AMOUNT] and anticipates, subject to the availability of additional funds, obligating the DOE balance of \$[INSERT REMAINING AMOUNT TO BE FUNDED]. The Recipient shall not be obligated to continue performance of this project beyond the amount set forth in Block 16(b)(3) of the DOE F 4600.1 and the DOE is under no commitment to provide additional funding to the Recipient beyond this amount.

2.7 Cost Overruns (OCT 2003)

The Government is under no obligation to share any cost overruns (i.e., costs incurred during the Demonstration Project that are more than those estimated at the date of award). DOE does not plan to set-aside funds for overruns. However, if appropriated funds are available in the future for supporting overruns, the Government's share of overruns will not exceed the Government's percentage cost share for the overall project and then only up to 25 percent of the original Government contribution as specified in the initial Cooperative Agreement.

2.8 Project Specific Development Activities (MAR 2002)

Project Specific Development Activities, as defined in Section II – H, may be requested and funded on a cost-shared basis. The maximum dollar value that may be authorized for Project Specific Development Activities is 10 percent of DOE's total funding contribution to the project. For example, if DOE's funding contribution to the total estimated project cost is \$10 million, the maximum value for Project Specific Development Activities is \$1 million. DOE would share in the \$1 million cost at the cost-share ratio established in the cooperative agreement. Project Specific Development Activities are appropriate only where minor technical issues unique to the proposed demonstration require solution.

2.9 Allowable Pre-award Costs (MAR 1999)

The Recipient is entitled to reimbursement of pre-award costs in the amount not to exceed [TBD] of DOE obligations. These costs are limited to work associated with performance of [TBD], incurred during the period starting on [TBD] through the effective start date of this award (Block 7, DOE F 4600.1).

2.10 Cost Sharing (MAR 2002)

The Recipient shall share at least 50% of the total project costs and at least 50% during each budget period of the project. Cost sharing ratios may vary between budget periods but not within a budget period. In order to be recognized as allowable cost sharing, a cost must be otherwise allowable in accordance with the applicable Federal cost principles and DOE Regulations (10CFR600.123) governing cost sharing. **Cost sharing may be in various forms or combinations, which includes but is not limited to cash outlays and in-kind contributions.** All allowable project costs, whether in-cash or in-kind, shall be shared by DOE when such costs are incurred by

applying the share ratios set forth in the Cooperative Agreement. The value of in-kind contributions not requiring cash outlays (i.e., existing assets) shall be pro-rated over the life of the project, beginning when the in-kind contribution is initially required for performance of the Cooperative Agreement.

Provided below is a non-exclusive list of costs that are unallowable as project costs and cost sharing:

- X Costs incurred in negotiating a Cooperative Agreement with DOE are not allowable as direct charges to the project.
- X Allowable costs under past, present, or future Federal Government contracts, grants or Cooperative Agreements may not be charged against this Cooperative Agreement. Likewise, the Recipient may not charge costs allowable under this project, including any portion of its cost share to the Federal Government under any other contracts, grants, or Cooperative Agreements.
- X The day-to-day operating costs of the demonstration site will not be recognized as an allowable cost for cost sharing purposes. Only the operating costs directly associated with the proposed work effort (i.e., incremental costs distinct from the daily operational costs) may be recognized as allowable costs for cost-sharing purposes if adequately supported and properly documented.
- X DOE will not share in the acquisition costs of any fuel other than coal, under this Clean Coal Power Initiative, unless prior written approval is obtained from the DOE Contracting Officer.
- X Previously expended research or development costs are unallowable.
- X DOE shall not accept valuation for property sold, transferred, exchanged, or manipulated in any way to acquire a new basis for depreciation purposes or to establish a fair use value in circumstances that would amount to a transaction for the purpose of the Cooperative Agreement.
- X Interest on borrowings (however represented) and other financial costs such as bond discounts, cost of financing and refinancing capital (net worth plus long-term liabilities), are unallowable project costs. This includes interest on funds borrowed for construction.
- X DOE will not share in both the direct cost and depreciation on the same item. Depreciation is not allowable for cost sharing on any item charged to the project as a direct cost. For example, DOE will cost share the direct cost on equipment or facilities purchased or constructed for the project; but, will not also cost share the depreciation.
- X The value of patents and data contributed to the project is unallowable.
- X Facilities capital cost of money shall be an unallowable cost on all real property or equipment acquired by or on behalf of the Recipient in connection with the performance of the project.
- X Forgone fees, forgone profits, or forgone revenues as well as replacement power costs are not allowable costs.
- X Fee or profit paid to any member of the proposing team having a substantial and direct interest in the commercialization of the demonstration technology is unallowable. Competitive subcontracts placed with the prior written consent of the Contracting Officer and subcontracts for routine supplies and services are not covered by this prohibition.
- X Business losses are unallowable.

2.11 Continuation Application (AUG 2001)

Funding for a succeeding budget period within the approved project period shall be contingent on DOE approval of a continuation application submitted no later than 60 days prior to the end of the current budget period. The continuation application shall be submitted on the SF 424. Technical and budgetary information supporting the continuation application shall be provided in accordance with 10 CFR 600.26. Forms for submission of continuation applications can be found at <http://www.netl.doe.gov/business/index.html>.

2.12 Method of Payment - Reimbursement (JUN 2001)

Payment to the Recipient shall be accomplished by reimbursement utilizing the Automated Clearing House (ACH), in accordance with 10 CFR 600.122(e).

The Recipient shall request reimbursements using the Standard Form SF 270, Request for Advance or Reimbursement, and shall complete Blocks 1-11 and 13. The Recipient shall submit the Form SF 270 in an original and two (2) copies no more frequently than monthly. This request will contain backup data supporting the request for payment. Electronic versions of the SF 270 can be found on the NETL website at: <http://www.netl.doe.gov/business/faapiaf/paaforms.html>.

The original is to be submitted to:

U. S. Department of Energy
Oak Ridge Financial Services
P. O. Box 4787
200 Administration Road
Oak Ridge, TN 37831

The two copies are to be submitted to:

U. S. Department of Energy
National Energy Technology Laboratory
Commercial Payments Center
P. O. Box 10940, MS 921-107
Pittsburgh, PA 15236-0940
OR

U. S. Department of Energy
National Energy Technology Laboratory
Attn: Accounts Payable
P. O. Box 880
Morgantown, WV 26507-0880]

STATUS OF PAYMENTS

The Oak Ridge Financial Service Center (ORFSC) has a system via Internet, in which Recipients can request information about payments by invoice, by award number, and/or by paid date. The system is called Vendor Inquiry Payment Electronic Reporting System (VIPERS) and is available to Recipients at the following website: <http://finweb.oro.doe.gov/vipers.htm>. Recipients must have a federal tax identification number (TIN) and then obtain a personal identification number (PIN) to access the system.

2.13 Method of Payment - Advance (APR 2001)

Payment to the Recipient will be made in advance by using the Department of Treasury Automated Standard Application for Payments System (ASAP), in accordance with 10 CFR 600.122(b).

The Recipient will request advances using the ASAP payment system and will request cash only as needed for immediate disbursements, will report cash disbursements in a timely manner, and will impose the same standards of timing and amount, including reporting requirements, on secondary recipients.

If DOE subsequently determines that the recipient's financial management system does not meet the required standards of 10 CFR 600.121, or the recipient has not maintained or demonstrated the willingness and ability to maintain written procedures that minimize the time elapsing between the transfer of funds and disbursement by the recipient, advance payments may be changed to payments by reimbursement.

The Recipient is required to maintain advances of federal funds in interest bearing accounts. Any interest income earned by the Recipient on federal funds must be remitted at least quarterly to the cognizant DOE office. However, up to \$250 of the interest earned per year may be retained by the Recipient to cover administrative expenses.

Funds advanced to the Recipient must be kept to a minimum amount necessary to meet the Recipient's cash flow needs. Cash needs shall be determined by the Recipient's cash outlay requirements and shall not be based on costs incurred. If funds are erroneously drawn in excess of the Recipient's immediate disbursement needs, the excess funds should be promptly refunded and reissued when needed. The only exception to this is when excess funds will be disbursed by the Recipient within seven calendar days or when the excess funds are less than \$10,000 and will be disbursed within thirty (30) calendar days.

2.14 Notice of Invoice Processing by Support Contractor (DEC 1999)

A support service contractor performs the function of processing of all invoices submitted to the National Energy Technology Laboratory, against its awards. Therefore, this contractor has access to your business confidential cost/rate information. A special provision in this contractor's award requires the confidential treatment by all contractor employees of any and all business confidential information of other contractors and financial assistance recipients to which they have access.

2.15 Acknowledgment of Federal Funding (NOV 1998)

When issuing statements, press releases, requests for proposals, bid solicitations, and other documents describing this project, the Recipient shall clearly state (1) the percentage of the total cost of the project which will be financed with Federal money, and (2) the dollar amount of Federal funds for the project.

2.16 Property Management and Disposition (SEPT 2002)

Title to all real property, equipment and supplies (excluding Government-furnished property) acquired by or on behalf of the Participant in connection with performance of the Project shall vest upon acquisition in the Participant. The Participant shall make such property available for use in the Project. During the period of the Cooperative Agreement, the Participant may, with the DOE Contracting Officer's prior approval, encumber its title to or dispose of such property. Should said property be sold or Participant receive financial benefit from the property disposition, the Participant shall share the financial benefit with the DOE in the same share ratio as the total project cost sharing.

The cost of disposal of the Demonstration Facility is an allowable cost only if proposed and included in the cost estimate for Demonstration/Operations.

The use, management, and disposition of all government-furnished property shall be governed by 10 CFR 600.130 thru 600.137.

2.17 Real Property - None (JAN 1999)

No real property may be acquired under this award.

2.18 Federally Owned Property (Government-Furnished) - None (JAN 1999)

It is not anticipated that any Government-furnished property will be provided under this award.

2.19 Key Personnel (APR 2002)

Recipient personnel considered to be essential and key to the work being performed hereunder are specified below.

<u>NAME</u>	<u>TITLE</u>	<u>TELEPHONE</u>
[TBD]	[TBD]	[TBD]

The personnel specified in this clause are considered to be essential to the project. Before removing or replacing any key personnel, the Recipient shall notify the Contracting Officer reasonably in advance and shall submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on the project. No key personnel may be substituted without the Contracting Officer's approval. Such approval shall be obtained in advance of the substitution, except that the Contracting Officer may ratify a substitution which, because of exigent circumstances, was made before the Recipient could request and/or obtain the Contracting Officer's approval.

2.20 Project Site and Access (MAR 2002)

The project shall be performed principally at the following site(s): [identify location/address of project site]. At the request of the DOE Contracting Officer or the COR, the Participant shall provide Government officials and interested members of the public as determined by DOE with access to the project site(s) to observe project operations at reasonable times and with reasonable limitations on the numbers of people during each visit.

2.21 Paperwork Reduction (SEPT 2002)

The award is subject to the requirements of the Paperwork Reduction Act of 1980 as implemented by the Office of Management and Budget rules, "Controlling Paperwork Burdens on the Public," published at 5 CFR 1320.

The Recipient shall submit any proposed sponsored information collection to the person identified on the DOE F 4600.1 (Award Face Page, Block 12). The proposal shall be submitted at least 120 days prior to the intended date of information collection. DOE will seek the requisite approval from the Office of Management and Budget (OMB) and will promptly notify the Recipient of the disposition of the request.

2.22 Nondiscrimination (MAR 2002)

This award is subject to the provisions of 10 CFR 1040, "Nondiscrimination in Federally Assisted Programs."

2.23 Public Access to Information (APR 2002)

The Freedom of Information Act, as amended, and the DOE implementing regulations (10 CFR 1004) require DOE to release certain documents and records regarding awards to any person who provides a written request. The intended use of the information will not be a criterion for release.

2.24 National Security (NOV 1998)

It is not expected that activities under the award will generate or otherwise involve classified information (i.e., Restricted Data, Formerly Restricted Data, National Security Information).

However, if in the opinion of the Recipient or DOE such involvement becomes expected prior to the closeout of the award, the Recipient or DOE shall notify the other in writing immediately. If the Recipient believes any information developed or acquired may be classifiable, the Recipient shall not provide the potentially classifiable information to anyone, including the DOE officials with whom the Recipient normally communicates, except the Director of Classification, and shall protect such information as if it were classified until notified by DOE that a determination has been made that it does not require such handling. Correspondence which includes the specific information in question shall be sent by registered mail to U.S. Department of Energy, Attn.: Executive Assistant for Defense Programs, DP-4, 4A-019/FORS, 1000 Independence Avenue, Washington, D.C. 20585. If the information is

determined to be classified, the Recipient may wish to discontinue the project, in which case the Recipient and DOE shall terminate the award by mutual agreement. If the award is to be terminated, all materials deemed by DOE to be classified shall be forwarded to DOE, in a manner specified by DOE, for proper disposition. If the Recipient and DOE wish to continue the award, even though classified information is involved, the Recipient shall be required to obtain both personnel and facility security clearances through the Office of Safeguards and Security for Headquarters= awards obtained through DOE field organizations. Costs associated with handling and protecting any such classified information shall be negotiated at the time the determination to proceed is made.

2.25 Compliance With Buy American Act (JAN 2003)

In accepting this award, the Recipient agrees to comply with sections 2 through 4 of the Act of March 3, 1933 (41 U.S.C. 10a-10c, popularly known as the Buy American Act). The Recipient should review the provisions of the Act to ensure that expenditures made under this award are in accordance with it.

2.26 Notice Regarding the Purchase of American-Made Equipment and Products -- Sense of Congress (JAN 2003)

It is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available under this award should be American-made.

2.27 Lobbying Restriction (Interior Act, 2002) (JAN 2002)

The awardee agrees that none of the funds obligated on this award shall be made available for any activity or the publication or distribution of literature that in any way tends to promote public support or opposition to any legislative proposal on which Congressional action is not complete. This restriction is in addition to those prescribed elsewhere in statute and regulation.

A copy of the DOE Lobbying Brochure which provides a summary of the statutory and regulatory restrictions regarding lobbying activities for Federal contractors can be found at <http://professionals.pr.doe.gov/ma5/MA-5Web.nsf/Procurement/Lobbying+Brochure?OpenDocument>.

2.28 Notice Regarding Unallowable Costs and Lobbying Activities (NOV 1998)

Recipients of financial assistance are cautioned to carefully review the allowable cost and other provisions applicable to expenditures under their particular award instruments. If financial assistance funds are spent for purposes or in amounts inconsistent with the allowable cost or any other provisions governing expenditures in an award instrument, the government may pursue a number of remedies against the Recipient, including in appropriate circumstances, recovery of such funds, termination of the award, suspension or debarment of the Recipient from future awards, and criminal prosecution for false statements.

Particular care should be taken by the Recipient to comply with the provisions prohibiting the expenditure of funds for lobbying and related activities. Financial assistance awards may be used to describe and promote the understanding of scientific and technical aspects of specific energy technologies, but not to encourage or support political activities such as the collection and dissemination of information related to potential, planned or pending legislation.

2.29 Reporting (NOV 1998)

Failure to comply with the reporting requirements contained in this award will be considered a material noncompliance with the terms of the award. Noncompliance may result in a withholding of future payments, suspension or termination of the current award, and withholding of future awards. A willful failure to perform, or a history of unsatisfactory performance on this and/or other financial assistance awards, may also result in a debarment action to preclude future awards by Federal agencies.

2.30 Environmental, Safety & Health (OCT 2003)

The recipient must comply with applicable Federal, State, and local environmental, safety and health laws and regulations for work performed under this award.

2.31 Permits and Licenses (AUG 1999)

Within sixty (60) days of award, the Recipient shall submit to the DOE Contracting Officer's Representative (COR) a list of Environmental, Safety, and Health approvals that, in the Recipient's opinion, shall be required to complete the work under this award. The list shall include the topic of the approval being sought, the approving authority, and the expected submittal/approval schedule. The COR shall be notified as specific items are added or removed from the list and processed through their approval cycles.

The Recipient agrees to include this clause in first-tier subcontracts and agrees to enforce the terms of this clause.

2.32 National Environmental Policy Act (NEPA) -- Prior Approvals (JUN 2001)

The National Environmental Policy Act of 1969 (NEPA) requires that all Federal agencies consider the impacts of their projects on the human environment. As part of the DOE's NEPA requirements, the Recipient shall be required to supply to the DOE certain environmental information. DOE funds may only be expended by the Recipient on [INSERT ACTIVITIES THAT CAN BE PERFORMED UNTIL THE NEPA DOCUMENT IS SIGNED, e.g., preliminary designs or drawings] activities, or in a manner consistent with 40 CFR 1506.1, until DOE notifies the Recipient that all NEPA requirements have been satisfied. In the event that the Recipient expends its own or third party funds on activities not authorized by this provision, such expenditures are entirely at the Recipient's risk that DOE's NEPA analysis will support such activities.

2.33 Hazardous Wastes Manifests and Labels (MAR 2003)

The Recipient shall not identify, on wastes manifests or container labels or otherwise, the DOE or the NETL as the owner or generator of hazardous wastes without written permission, signed by either the NETL Director or both the NETL Contracting Officer and the NETL ES&H Division Director, unless expressly and specifically permitted by the award.

2.34 Insurance (MAR 2002)

In addition to any insurance which is required under paragraph (A) and which may be required under paragraph (B) of this article, the Participant shall acquire and thereafter maintain workmen's compensation, employer's liability, comprehensive general liability (bodily injury), and comprehensive automobile liability (bodily injury and property damage) insurance, and such other insurance coverage as the Participant normally carries for similar projects. With the approval of the DOE Contracting Officer, the Participant may maintain a self-insurance program for any of the coverages specified in this Article; provided that, with respect to workmen's compensation, the Participant is qualified under applicable statutory and regulatory authority. All insurance required pursuant to the provisions of this Article shall be in such form, in such amounts, for such periods of time, and provided by such insurance carriers as the DOE Contracting Officer may approve.

(A) Hazards (Property Damage)

The Participant will provide hazard insurance (theft, fire, windstorm, water damage, etc.) covering the materials, equipment, and structures acquired or constructed under this Cooperative Agreement. Proceeds from such insurance may be used to replace the damaged or destroyed property. If the Participant decides not to replace or repair the property, the insurance proceeds will be paid to DOE in the same ratio as the cost share formula applicable to the budget period of the Cooperative Agreement when the equipment or property was purchased.

(B) Flood Insurance

If funds under this Cooperative Agreement are used to acquire or construct property or equipment for use in an identified flood plain area in the United States having special flood, special flood-related erosion, or special mudslide (i.e., mud-flow) hazards, the Participant shall obtain flood insurance as required by the Flood Disaster

Protection Act of 1973 (42 U.S.C. 4002, 4012a, 4105), as amended. Proceeds from such insurance may be used to replace the damaged or destroyed property. If the Participant decides not to replace or repair the property, the insurance proceeds will be paid to DOE in the same ratio as the cost share formula applicable to the budget period of the Cooperative Agreement when the equipment or property was purchased.

(C) Indemnity

The Recipient shall indemnify the Government and its officers, agents, or employees for any and all liability, including litigation expenses and attorneys' fees, arising from suits, actions, or claims of any character for death, bodily injury, or loss of or damage to property or to the environment, resulting from the fault or negligence of the Recipient in performing the project under this Cooperative Agreement.

2.35 Limitation of DOE Liability (MAR 2002)

Awards under this part are subject to the requirement that the maximum DOE obligation to the recipient is the amount shown in the Notice of Financial Assistance Award as the amount of DOE funds obligated. DOE shall not be obligated to make any additional, supplemental, continuation, renewal or other awards for the same or any other purpose.

2.36 Bonding for Construction (MAR 2002)

The Participant shall require any construction contractor or subcontractor to obtain performance and payment bonds for any construction project in accordance with practices approved by the Contracting Officer.

2.37 Termination (MAR 2002)

The Cooperative Agreement may be terminated in accordance with 10 CFR 600.161.

2.38 Records Retention, Access, and Disclosure (MAR 2002)

(A) Period of Retention

The Participant shall retain all financial and performance records, supporting documents, statistical records, and other records of the Participant which are required to be retained by the terms of this Cooperative Agreement, and any other records the Participant reasonably considers to be pertinent to this Cooperative Agreement. The period of required retention shall be from the date each such record is created or received by the Participant until three years after one of the following dates, whichever is latest: the expiration date of this Cooperative Agreement; the date the Participant's final expenditure report is submitted to DOE; or if this Cooperative Agreement is terminated in its entirety, the effective date of the termination. If any claim, litigation, negotiation, investigation, audit, or other action involving the records starts before the expiration of the three-year retention period, the Participant shall retain the records until such action is completed and all related issues are resolved, or until the end of the three-year retention period, whichever is later.

(B) Authorized Copies

Copies made by microfilm, photocopying, or similar methods may be substituted for original records. Records originally created by computer may be retained on an electronic medium, provided such medium is "read only" or is protected in such a manner that the electronic record can be authenticated as an original record.

(C) Access to Records

Subject to any legitimate claims of Attorney/Client Privilege as determined by a court of competent jurisdiction, DOE and the Comptroller General of the United States, or any of their authorized representatives, shall have the right of access to any books, documents, papers, or other records (including those on electronic media) which are pertinent to this Cooperative Agreement. The purpose of such access is limited to the making of audits,

examinations, excerpts, and transcripts. The right of access described in this paragraph shall last as long as the Participant retains records which are pertinent to this Cooperative Agreement.

(D) Restrictions on Public Disclosure

The Federal Freedom of Information Act 5 USC ' 552 does not apply to records the Participant is required to retain by the terms of this Cooperative Agreement to the extent that the records are not also in the possession of the Government. Unless otherwise required by law or a court of competent jurisdiction, the Participant shall not be required to disclose such records to the public.

2.39 Severability (MAR 2002)

If a court of competent jurisdiction or the DOE Financial Assistance Appeals Board determines that any part of this Cooperative Agreement is invalid, void, unenforceable, or inconsistent with any applicable Federal statute or regulation, such part shall be deemed to have been amended or deleted to conform to such determination.

2.40 Performance of Work in the United States (MAR 2002)

As a condition of award under this announcement, the Recipient agrees that at least 75% of the direct labor cost for the project (including subcontractor labor) will be incurred in the United States unless the Recipient can demonstrate to the satisfaction of DOE that the United States economic interest will be better served through a greater percentage of the work performed outside the United States. For example, a recipient may provide evidence that expertise to develop a technology exists only outside the United States, but that ultimate commercialization of the technology will result in substantial benefits to the United States such as improved electricity reliability, increased employment, increased exports of U.S.-manufactured products, etc.

2.41 Subcontracts and Other Agreements (MAR 2002)

Subcontracts or agreements will not contain provisions that are inconsistent with the Cooperative Agreement and Repayment Agreement nor would adversely affect the ability of the Recipient to perform its obligations under this Cooperative Agreement and Repayment Agreement. The following named contracts, subcontracts, licenses, and agreements require prior review and approval by the Contracting Officer prior to execution:

Name of Subcontractor
Name of Subcontractor

The request or approval documentation shall consist of an analysis of the reasonableness of the costs inclusive of the rationale for selection of the supplier, and the procurement, scope, terms, and conditions consistent with the Recipient=s standard procurement practices. Best efforts will be made to approve or comment on submitted documents within ten (10) business days of receipt and such approval will not be unreasonably withheld.

2.42 Recipient Press Releases (APR 1998)

The DOE policy and procedure on planned press releases requires that all Recipient press releases be reviewed and approved by DOE prior to issuance. Therefore, the Recipient shall, at least ten (10) calendar days prior to the planned issue date, submit a draft copy to the Contracting Officer of any planned press releases related to work performed under this award. The Contracting Officer will then obtain necessary reviews and clearances and provide the Recipient with the results of such reviews prior to the planned issue date.

SECTION III -- INTELLECTUAL PROPERTY PROVISIONS

3.1 Intellectual Property Provisions (JAN 1999)

The patent and technical data clauses included in this section apply to this award. As used in these applicable clauses, the term "Patent Counsel" refers to the following point of contact:

Intellectual Property Law Division
U.S. Department of Energy
Chicago Operations Office
9800 South Cass Avenue
Argonne, IL 60439

In any of the FAR and DEAR clauses contained in this section, use of the term AContract@ means AAward@ and AContractor@ means ARecipient.@"

The Recipient shall include intellectual property clauses in any cooperative agreement awarded in accordance with requirements of the clauses in this section and of 10 CFR Part 600.27.

3.2 Publication of Results/Acknowledgment Statement (JAN 1999)

Publication of the results of the award is encouraged subject to any applicable restrictions in 10 CFR 600.27 (Patent and Data Provisions). Publications, as well as reports prepared under this award, shall contain the following acknowledgment statement:

"This (describe material) was prepared with the support of the U.S. Department of Energy, under Award No. DE-[**TBD**]. However, any opinions, findings, conclusions, or recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the DOE."

3.3 Confidential Business Information (FEB 2003)

Data represented to the Department as being confidential business information, and which does not include ATechnical Data@ as that term is defined in the "Rights in Data-Programs Covered Under Special Data Statutes" clause of this agreement, shall be submitted as an attachment to the required reports and will be withheld from disclosure outside the U. S. Government to the extent permitted by law. Such attachment and each page therein shall be stamped with the following legend and no other:

CONFIDENTIAL BUSINESS INFORMATION

The Recipient considers the data furnished herein to contain confidential business information which is to be withheld from disclosure outside the U. S. Government to the extent permitted by law.

3.4 Patent and Data Provisions (DEC 2003)

The cooperative agreement will include the following patent and data provisions in accordance with 10 C.F.R. 600.325:

- 48 CFR (FAR) 52.227-1 -- Authorization and Consent (JUL 1995), Alt. I (APR 1984)
- 48 CFR (FAR) 52.227-2 -- Notice and Assistance Regarding Patent and Copyright Infringement (AUG 1996)
- 48 CFR (FAR) 52.227-3 -- Patent Indemnity (APR 1984)

10 CFR Part 600.325 Appendix A to Subpart D, Patent Rights (Small Business Firms and Nonprofit Organizations (OCT 2003), OR

10 CFR Part 600.325 Appendix A to Subpart D, Patent Rights (Large Business Firms) – No Waiver (OCT 2003)

10 CFR Part 600.325 Appendix A to Subpart D, Rights in Data – Programs Covered Under Special Data Statutes, with Alternates I and II (OCT 2003)

48 CFR (FAR) 52.227-23 -- Rights to Proposal/Application Data (JUN 1987)

DOE intends to include in the clauses “Patent Rights (Large Business Firms) – No Waiver” and “Rights in Data – Programs Covered Under Special Data Statutes” additional provisions requiring nonexclusive licensing of background patents and background data to the Government and responsible third parties when necessary to ensure commercialization of the technology being demonstrated under the cooperative agreement. In addition, the following provisions will be included:

3.5 Availability of contract and other data. (DEC 2003)

(a) The Participant will, for the entire period of Participant's participation in the project at the Facility (including operation of the Facility) and for three years thereafter, whether or not under a Government Cooperative Agreement, keep and maintain all technical data, including limited rights data and data obtained from subcontractors and licensors, necessary to construct and/or operate the Facility, and all data including business and financial data necessary to evaluate the technical and economic operation of the Facility. During the entire period of construction and/or operation of the Facility, regardless of whether the Government participates past Design, the Participant shall permit the Government and its representative the right to inspect at the Facility any data kept and maintained pursuant to this paragraph. The Participant shall, after termination of the Government's participation in the project at the facility, periodically deliver reports to the Government on the construction and operation of the facility, which reports shall not include limited rights data.

(b) If the Participant withdraws from this Cooperative Agreement or defaults after Design or Construction, the Government shall have the right to have all data kept and maintained pursuant to Paragraph (a) above, delivered to the Government or otherwise disposed of as the Contracting Officer shall direct upon such termination. Any limited rights data delivered pursuant to this paragraph shall be marked as provided in Paragraph (h)(2) of the Rights in Data – Programs Covered Under Special Data Statutes clause with the addition to the legend thereof after (a)(5) as follows: (6) Use by Government or others on its behalf to the extent necessary to enable the Government to complete Construction and/or Operations. Any Protected Data delivered pursuant to this paragraph shall be marked as provided in Paragraph (g)(1) of the Rights in Data – Programs Covered Under Special Data Statutes clause with the addition after (g)(2)(b) of the following: “(c) Use by the Government or others on its behalf, to the extent necessary to enable the Government to complete Construction and/or Operations.”

(c) The Participant agrees to and does hereby grant to the Government or others acting on its behalf, an irrevocable nonexclusive paid-up license in and to any limited rights data of the Participant which are incorporated or embodied in the design or construction or utilized in the operation of the Facility: (1) to practice, or to have practiced, by or for the Government at the Facility, and (2) to transfer such license with the transfer of that Facility. Further, the Participant agrees to obtain an equivalent license from its contractors, subcontractors, and licensors, if any. The license granted pursuant to this subparagraph shall be for the limited purpose of completion, repair or operation of the demonstration facility.

NOTE: *The following clause shall not apply to domestic small business firms or nonprofit organizations. However, such entities are expected to use their best efforts to commercialize the technology being demonstrated under any resulting cooperative agreement.*

3.6 Commercialization of Technology. (DEC 2003)

(a) In addition to or in assistance of any rights acquired by the Government in _____ Technology from the Participant under paragraph (k) of the Patent Rights (Large Business Firms) – No Waiver and paragraph (l) of the Rights in Data-Programs Covered Under Special Data Statutes, the Participant agrees to negotiate in good faith with a responsible applicant and to conclude an agreement with such applicant to provide a commercial-size facility incorporating _____ Technology in the United States equal to or a scaled-up or modified version of the _____

facility which is a subject of this Cooperative Agreement. The Agreement shall, as appropriate to the circumstances, include provisions for licensing patented and unpatented _____ Technology including background patents, waived subject inventions, limited rights data, know-how and copyrighted works including improvements or enhancements of any of the foregoing as well as provisions for technical assistance and training.

(b) The services and/or licenses specified in paragraph (a) of this clause shall be made available to responsible applicants to construct or have constructed, operate or have operated a facility incorporating _____ Technology in the United States under reasonable terms and conditions taking into consideration accepted licensing standards or norms in the relevant U.S. industry as well as accepted levels of return on investment for such activities and/or services.

(c) In the event that the Participant and the applicant cannot reach agreement after one year from the start of diligent and responsible negotiations between them, the applicant shall have the right of a third party beneficiary to maintain an action in a court of competent jurisdiction to force licensing on reasonable terms and conditions. Any assignment of the invention must be made subject to these requirements.

(d) The provisions of paragraphs (a), (b), and (c) of this clause shall not apply as long as the Participant or its licensees are supplying U.S. market needs at reasonable prices for _____ systems.

(e) The Participant agrees to obtain sufficient rights to meet its commitments to commercialize and/or license _____ Technology.

(f) The Participant agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell _____ technology in the United States unless such person agrees that any embodiment of _____ technology will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by DOE upon a showing by the Participant or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

(g) For the purposes of this section, technology is ... (Define the equipment to be provided with the sale of the technology or necessary to achieve the performance under the license of the technology; this may include equipment in addition to that which is included in the Demonstration Project).

3.7 Protected Data (DEC 2003)

The following is a listing of the types of data expected to be generated under this Cooperative Agreement which would qualify as Protected Data. This listing of data, which are asserted by the Recipient to be Protected Data, does not constitute an admission by the Government that the data does in fact qualify for this designation.

[RECIPIENT TO IDENTIFY DATA TO BE GENERATED THAT IS EXPECTED TO QUALIFY AS PROTECTED DATA.]

If a patent is issued by the United States Patent and Trademark Office (U. S. PTO) or the patent office of any foreign country based on any information asserted to be Protected Data, the Government will no longer treat any data contained in such issued patent as Protected Data. In addition, if any information asserted to be limited rights data results in or becomes a Subject Invention, as that term is defined in paragraph (a) of the patent rights clause included in this cooperative agreement and further, if the Government obtains title to that Subject Invention pursuant to the patent rights clause in this cooperative agreement, the Government will no longer treat such data as Protected Data.

3.8 Limited Rights Data and Restricted Computer Software (DEC 2003)

A. The limited rights data subject to the provisions of, Rights in Data – Programs Covered Under Special Data Statutes, paragraph (h) are listed below. This list of data, which are asserted by the Recipient to be limited rights data, does not constitute an admission by the Government that the data is in fact limited rights data.

[RECIPIENT TO IDENTIFY/CERTIFY SPECIFIC DATA ASSERTED TO BE PROPRIETARY.]

- B. The restricted computer software subject to the provisions of, Rights in Data – Programs Covered Under Special Data Statutes, paragraph (h) are listed below. This list of software programs, which are asserted by the Recipient to be restricted computer software, does not constitute an admission by the Government that the software is in fact restricted computer software.

[RECIPIENT TO IDENTIFY/CERTIFY SPECIFIC SOFTWARE ASSERTED TO BE PROPRIETARY.]

- C. If a patent is issued by the United States Patent and Trademark Office (U. S. PTO) or the patent office of any foreign country based on any information asserted to be Limited Rights Data or Restricted Computer Software, the Government will no longer treat any data contained in such issued patent as Limited Rights Data or Restricted Computer Software. In addition, if any information asserted to be limited rights data or restricted computer software results in or becomes a Subject Invention, as that term is defined in paragraph (a) of the patent rights clause included in this cooperative agreement, and further, if the Government obtains title to that Subject Invention pursuant to the patent rights clause in this cooperative agreement, the Government will no longer treat such data or software as Limited Rights Data or Restricted Computer Software.

SECTION IV -- LIST OF ATTACHMENTS

Attachment A -- Statement of Project Objectives

Attachment B -- Federal Assistance Reporting Checklist

Attachment C -- Budget Page(s)

Attachment [TBD] -- Recipient-Acquired Property

Attachment [TBD] -- Federally Owned Property -- Government Furnished

ATTACHMENT A -- STATEMENT OF PROJECT OBJECTIVES

[Insert the Statement of Project Objectives here. The format should be similar to the following.]

- A. Objectives

- B. Scope of Project

- C. Tasks to Be Performed by Budget Period

- D. Deliverables

The Recipient shall provide reports in accordance with the enclosed Federal Assistance Reporting Checklist and the instructions accompanying the Checklist. In addition to the reports identified on the Reporting Checklist, the Recipient shall provide the following:

[TBD]

FEDERAL ASSISTANCE REPORTING CHECKLIST

1. AWARDEE:	2. IDENTIFICATION NUMBER:
--------------------	----------------------------------

3. REPORT SUBMISSION ADDRESS: *The requested quantity of all required report deliverables shall be submitted to the following address:*
 NETL AAD DOCUMENT CONTROL BLDG. 921
 U.S. DEPARTMENT OF ENERGY
 NATIONAL ENERGY TECHNOLOGY LABORATORY
 P.O. BOX 10940
 PITTSBURGH, PA 15236-0940

4. PLANNING AND REPORTING REQUIREMENTS:	FORM NO.	FREQ.	NUMBER OF COPIES
A. PROGRAM/PROJECT MANAGEMENT			
<input type="checkbox"/> Federal Assistance Program/Project Status Report	DOE F 4600.6	Q	3
<input type="checkbox"/> Financial Status Report	SF-269 or SF-269A	Q, FG	3
<input type="checkbox"/> Federal Cash Transaction Report	SF-272		
B. TECHNICAL (*One paper copy and one PDF electronic file copy)			
<input type="checkbox"/> Technical Progress Report	None	Q	2*
<input type="checkbox"/> Topical Report	None	A	2*
<input type="checkbox"/> Final Report	None	FG	2*
C. ENVIRONMENTAL			
<input type="checkbox"/> Hazardous Substance Plan	None	O	3
<input type="checkbox"/> Hazardous Waste Report	None	FC	3
<input type="checkbox"/> Environmental Compliance Plan	None	A	3
<input type="checkbox"/> Environmental Monitoring Plan	None	A	3
<input type="checkbox"/> Environmental Status Report	None	A	3
D. PROPERTY			
<input type="checkbox"/> Annual Report of Property in the Custody of Contractors	F 580.1-8		
<input type="checkbox"/> High Risk Property Report	F 580.1-25		
<input type="checkbox"/> Report of Termination or Completion Inventory	NETL F 580.1-9 and SF-120	FC	2
E. EXCEPTION			
<input type="checkbox"/> Conference Record	None		
<input type="checkbox"/> Hot Line Report	None	A	2
<input type="checkbox"/> Journal Articles/Conference Papers and Proceedings	None	A	3
<input type="checkbox"/> Software	None	A	2
<input type="checkbox"/> Other <u>Bi-weekly E-mail Status Updates and Communication Plans</u>			

5. FREQUENCY CODES AND DUE DATES:
 A - As required; see attached text for applicability.
 C - Change/revision, within 15 calendar days after event.
 FG - Final; within ninety (90) calendar days after the project period ends.
 FC - Final - End of Effort.
 M - Monthly; within twenty-five (25) calendar days after end of the report period.
 O - Once after award; within thirty (30) calendar days after award.
 Q - Quarterly; within thirty (30) calendar days after end of the calendar quarter or portion thereof.
 S - Semiannually; within thirty (30) calendar days after end of project year and project half-year.
 YF - Yearly; 90 calendar days after the end of project year.
 YP - Yearly Property - due 15 days after period ending 9/30.

6. SPECIAL INSTRUCTIONS:
 The forms identified in the checklist are available at <http://www.netl.doe.gov/business/faapiaf/paaforms.html>. Alternate formats are acceptable provided the contents remain consistent with the form.

GENERAL INSTRUCTIONS FOR THE PREPARATION AND SUBMISSION OF REPORTS (MAY 1999)

The Recipient shall prepare and submit (postage prepaid) the plans and reports indicated on the AFederal Assistance Reporting Checklist@ to the addressee identified on the checklist. The level of detail the Recipient provides in the plans and reports shall be commensurate with the scope and complexity of the effort and shall be as delineated in the guidelines and instructions contained herein. The prime Recipient shall be responsible for acquiring data from any contractors or subrecipients to ensure that data submitted are compatible with the data elements which prime Recipients are required to submit to DOE.

1. FEDERAL ASSISTANCE PROGRAM/PROJECT STATUS REPORT

This report is a concise narrative describing the current status of the effort. The report allows Recipients to communicate developments, achievements, changes and problems. The award Recipient enters a brief narrative discussion of the following topics: approach changes; performance variances, accomplishments, or problems; open times; and status assessment and forecast. Each of these topics is addressed, as appropriate, for a given reporting period and the report is submitted periodically, as required, during the life of the project.

The Baseline Plan presents discrete, measurable units of the proposed work. The plan will provide a specific outline of what the Participant intends to do, how it is intended to be accomplished, and the time and cost involved. This plan will be developed and submitted to serve as the standard against which status and progress can be measured during the performance period.

This Baseline Plan is a report which is used to present projected 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 basis. The activity data required are a delineation of the project's major milestones.

The Status Report shall provide the performance information required to determine program effectiveness and the information which DOE requires to maintain accountability for public funds. The report must show actual costs, schedule progress, and total project status to date. When the status report is compared with the Baseline Plan, accomplishments can be noted, problems become apparent, and corrective action can be taken.

The Status Report is a report on which the Participant provides summary cumulative cost and activity data for each reporting period relative to the Baseline Plan.

The information should be displayed so that the baseline for the project is clear and the status of the project relative to the baseline is clear. The report may consist of more than one page as necessary.

2. FINANCIAL STATUS REPORT (STANDARD FORM 269 OR 269A) (FEB 2002)

This report is used for the Recipient to provide 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. Provision is made to identify the Federal and non-Federal share of project outlays for each identified activity.

3. REPORT OF FEDERAL CASH TRANSACTIONS (STANDARD FORM 272) (MAY 1999)

This report is used by DOE to monitor cash advanced to Recipients and to obtain disbursement information. The content of the report is prescribed in 10 CFR 600.152 for Institutions of Higher Education, Hospitals, Other Non-Profit Organizations and Commercial Organizations or 10 CFR 600.241 for States and Local Governments.

4. TECHNICAL/TOPICAL REPORTS (JAN 2003)

CAUTION: In order to assure that the technical report deliverables under this award are submitted in a publicly releasable form, the following guidance shall be followed.

Technical reports SHALL NOT include Limited Rights Data, Restricted Computer Software, or Protected Data. Limited Rights Data, Restricted Computer Software, and/or Protected Data shall be submitted in a separate appendix to the technical report. This appendix SHALL NOT be submitted in an electronic format but rather submitted in ONE ORIGINAL HARD COPY SENT DIRECTLY TO THE CONTRACTING OFFICER= REPRESENTATIVE. The appendix shall not be referenced in, and not incorporated into, the technical report deliverable under the cooperative agreement. In accordance with the Rights in Data-Programs Covered Under Special Data Statutes clause, the appendix must be appropriately marked and identified. Any such appendix containing Protected Data shall be suitable for release after the agreed upon period of protection from public disclosure has expired. A good quality paper copy plus an electronic version of the sanitized technical report shall be submitted in accordance with the Federal Assistance Reporting Checklist.

Technical Progress Report (Annual, Quarterly, And Semi-Annual)

The technical progress 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 Technical Progress Report should include sufficient detail to allow the work to be reproduced by others. Results and reduced data shall be presented together with a discussion of the relevance of the findings. When experimental systems and/or procedures are being utilized for the first time, they shall be described in detail. This description shall contain detailed information on equipment and procedures utilized, as well as providing a rationale for their use. All data reduction and transformation methods shall be fully documented. For every fourth calendar quarter for quarterly reports or every second half year for semi-annual reports, the report should be expanded to provide for detailed information on the results of the past year, problems encountered, significant accomplishments, listing of publications, presentations, and approaches to be taken the following year.

Informational items in technical progress reports shall include:

Experimental Apparatus - A comprehensive description, including dimensioned drawings or sketches, of the apparatus and associated diagnostic measurement equipment employed to perform the experimental research.

Experimental and Operating Data B All experimental data acquired during the course of research including detailed characterization of the sample materials subjected to experimentation.

Data Reduction - A complete description of the methods employed to transform raw measured data into a form usable for interpretation along with any assumptions or restrictions inherent in the method and the resultant reduced data.

Hypothesis and Conclusions - Logic for drawing conclusions or developing hypotheses shall be clearly stated along with applicable assumptions or restrictions.

Topical Report

These reports usually provide a comprehensive statement of the technical results of the work performed for a specific task or subtask of the Statement of Project Objectives, or detail significant new scientific or technical advances. If required, DOE shall review and approve the report outline prior to submission of the report.

Two Topical Reports (as a minimum) are required. The two required reports are the Preliminary Public Design Report and the Final Public Design Report. The purpose of the Public Design Reports is to consolidate for public use all available nonproprietary design information on the project. The Preliminary Public Design Report is based on the preliminary design information and is due at the end of preliminary design. The Final Public Design Report

is based on detailed design information and is due after completion of the Design Phase of the project, 60 days prior to completion of the Construction Phase of the project. The Final Public Design Report should contain sufficient background information to provide an overview of the project and pertinent cost data. Since the scope of the reports is limited to nonproprietary information, their content will not be sufficient to provide a complete tool in designing a replicate plant. However, these reports will serve as a reference for the design considerations involved in a commercial-scale facility.

The reports should include an overview description of the technology and a summary of the mass and energy balances for the process. They should also define the overall process performance requirements and describe the evaluations and operating philosophies upon which those performance requirements are based. A summary cost estimate of capital and operating costs and, if possible, an analysis of how costs could be improved for future commercial projects should also be included.

The following deliverables are also to be included as components of the Preliminary Public Design Report addressing the preliminary design:

Process Flow Diagrams

The Participant shall provide a complete set of nonproprietary Process Flow Diagrams with all updates and modifications.

Stream Data

The Participant shall provide a complete set of all nonproprietary stream data. This would include both the expected values and ranges of flows, stream properties, and constituents at various operating conditions.

Equipment List

The Equipment List consists of a summary of the major equipment for the plant. Equipment is to be sorted by Flow Diagram, equipment type, and equipment number. General description data are to be provided for each equipment item, including, but not limited to, the number required for operation, size or capacity, major nonproprietary operating and design parameters, and manufacturer and/or vendor.

The Final Public Design Report shall include the final versions of the Preliminary Public Design Report plus the following:

Drawings

The Participant shall include a complete set of Equipment Plot and Elevation Drawings, and Process and Instrumentation Diagrams, which describe the plant configuration at the end of the demonstration period.

Plant Capital Cost Data

The Participant shall include the data and documentation for all projected costs associated with the construction of the plant, with a breakdown which would permit this information to be used for projecting future plant construction costs.

Plant Operating Cost Data

The participant shall include the data and documentation for all projected costs associated with the operation of the plant under conditions that represent reliable plant performance.

Final Technical Report (AUG 2000)

The Final Report shall document and summarize all work performed during the award period in a comprehensive manner. This report shall not merely be a compilation of information contained in quarterly or other technical reports, but shall present that information in an integrated fashion, and shall be augmented with findings and conclusions drawn from the technology demonstration as a whole.

5. GUIDELINES FOR ORGANIZATION OF TECHNICAL REPORTS

The following sections should be included (as appropriate) in technical reports in the sequence shown. Any section denoted by an asterisk is required in all technical reports. However, if a section with an asterisk is not appropriate for the project (i.e., if a demonstration project) the Recipient shall place ANOT APPLICABLE@ after the section title.

TITLE PAGE* - The Title Page of the report itself must contain the following information in the following sequence:

- Report Title
- Type of Report (Quarterly, Semi-Annual, Annual, Topical, Final)
- Reporting Period Start Date
- Reporting Period End Date
- Principal Author(s)
- Date Report was Issued (Month [spelled out] and Year [4 digits])
- DOE Award Number (e.g., DE-FG26-99NT12345) and if appropriate, task number
- Name and Address of Submitting Organization (This section should also contain the name and address of significant subcontractors or subrecipients who participated in the production of the report.)

DISCLAIMER* -- The Disclaimer must follow the title page, and must contain the following paragraph:

AThis report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government 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, trademark, 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.@

ABSTRACT* - should be a brief, concise summary of the report.

TABLE OF CONTENTS*

LIST(S) OF GRAPHICAL MATERIALS

INTRODUCTION

EXECUTIVE SUMMARY - this should be a well organized summary that highlights the important accomplishments of the research during the reporting period. It should be no less than one page and no more than two pages in length, and should be single spaced. This summary must be more comprehensive than the traditional Aabstract.@

EXPERIMENTAL* - this should describe, or reference all experimental methods being used for the research. It should also provide detail about materials and equipment being used. Standard methods can be referenced to the appropriate literature, where details can be obtained. Equipment should be described only if it is not standard, or if information is not available through the literature or other reference publications.

RESULTS AND DISCUSSION* - It is extremely important that this section includes enough relevant data, especially statistical data, to allow the project manager to justify the conclusions. With the relevant data, explain

how the data was interpreted and how it relates to the original purpose of the research. Be concise in the discussion on how this research effort solved or contributed to solving the original problem.

CONCLUSION* - The conclusion should not simply reiterate what was already included in the AResults and Discussion@ section. It should, however, summarize what has already been presented, and include any logical implications of how the successes are relevant to technology development in the future. This is extremely important, since Arelevancy@ continues to be a criteria of the program.

REFERENCES*

BIBLIOGRAPHY

LIST OF ACRONYMS AND ABBREVIATIONS

APPENDICES (IF NECESSARY)

Company Names and Logos -- Except as indicated above, company names, logos, or similar material should not be incorporated into reports.

Copyrighted Material -- Copyrighted material should not be submitted as part of a report unless written authorization to use such material is received from the copyright owner and is submitted to DOE with the report.

Measurement Units - All reports to be delivered under this instrument shall use the SI Metric System of Units as the primary units of measure. When reporting units in all reports, primary SI units shall be followed by their U. S. Customary Equivalents in parentheses (). Note: SI is an abbreviation for ALe Systeme International d=Unites.@

The recipient shall insert the text of this clause, including this paragraph, in all subcontracts under this award.

6. ELECTRONIC MEDIA STANDARD FOR PREPARATION OF TECHNICAL REPORTS (DEC 1999)

FILE FORMAT

Production of high-quality, electronic documents is dependent on the quality of the input that is provided. Thus, the Recipient shall submit one good quality paper copy using either permanent or alkaline paper plus an electronic version of each technical report.

Electronic reports shall be submitted in the Adobe Acrobat Portable Document Format (PDF). Electronic reports submitted in a format other than Adobe will be returned and the report considered delinquent.

Each report shall be an integrated file that contains all text, tables, diagrams, photographs, schematics, graphs, and charts.

SUBMISSION FORMAT

The electronic file(s) shall be submitted via diskette or CD-ROM. Diskettes or CD-ROMs must be labeled as follows:

DOE Award Number
Type/Frequency of Report(s)
Reporting Period (if applicable)
Name of submitting organization
Name, phone number and fax number of preparer

Diskettes -- Diskettes must be 3.5" double-sided, high-density (1.4 M Byte capacity). If file compression software is used to transmit a PDF file spanning more than one diskette, PKZIP from PKWare, Inc., is the required compression software. State the number of diskettes in the set (e.g., 1/3).

CD-ROM -- The electronic file(s) may be submitted on an ISO9660-format CD-ROM.

FILE NAMING

In naming the electronic file, the Recipient shall use a standard eight-character naming convention for the main file name, and the three character extension applicable to the software use, e.g., .pdf for Adobe.

For the main file name, the first five characters are the last five digits from the award number; e.g., for Award Number DE-FG26-97NT12345, the first five characters are 12345.

The next character represents the technical report and will always be designated as AR.@

The remaining two characters indicate the chronological number of the report. For example, Quarterly Technical Progress Reports for a 5-year award are numbered R01 through R20. Thus, the main file name for the sixth Quarterly Technical Progress Report under Award No. DE-FG26-99NT12345 would be 12345R06.PDF.

7. ENVIRONMENTAL (MAR 2003)

In response, in part, to the requirements of the National Environmental Policy Act of 1969 (NEPA) and other related environmental statutes, the National Energy Technology Laboratory (NETL) requires the submission of various documents that assess the environmental aspects and projected impacts of all of its proposed actions. These documents may include the following: (1) Hazardous Substance Plan, (2) Hazardous Waste Report, (3) Environmental Compliance Plan, (4) Environmental Monitoring Plan, (5) Environmental Status Reports, and (6) ISO 14001 forms (if applicable).

The environmental information provided in these documents will enable NETL to fulfill its responsibilities under NEPA (additional information about the requirements of the National Environmental Policy Act can be found in the DOE NEPA Compliance Guide and 10 CFR 1021) and to monitor the Recipient's compliance with other environmental regulations. The implementation of any task associated with a proposed action will be dependent upon DOE submitting and acquiring approval of necessary NEPA documentation. Therefore, to minimize the risk of project delays, it is imperative that these reports be submitted in a timely manner.

The information contained herein specifies the basic environmental requirements for this procurement action, but it is not to be interpreted as containing all necessary information for any given project. Likewise, certain aspects of the requirements may not be applicable. Accordingly, the level of information provided should be sufficient for DOE to assess the environmental implications of the proposed action.

8. HAZARDOUS SUBSTANCE PLAN (MAY 1999)

The Recipient shall submit a Hazardous Substance Plan not later than thirty (30) days after initial award. The Plan shall specifically identify each Hazardous Substance (as defined under 40 CFR 261, Subpart D, entitled "Lists of Hazardous Wastes") anticipated to be purchased, utilized or generated in the performance of this award. For each such Hazardous Substance identified, the Plan shall specifically provide the following information:

- Description of Substance/Chemical
- EPA Hazardous Waste Number
- EPA Hazard Code
- Anticipated Quantity to be purchased, utilized or generated
- Anticipated Hazardous Waste Transporter
- Anticipated Hazardous Waste Disposal Facility Contractor and Location (City/Municipality,State)

Anticipated Treatment Method

9. HAZARDOUS WASTE REPORT (MAY 1999)

The Recipient shall submit a Hazardous Waste Report at the completion of award performance. The Report shall specifically identify each Hazardous Waste (as defined under 40 CFR 261, Subpart D, entitled "Lists of Hazardous Wastes") actually utilized, or generated in the performance of this award. For each such Hazardous Waste identified, the Report shall specifically provide the following information:

Description of Substance/Chemical
EPA Hazardous Waste Number
EPA Hazard Code
Actual Quantity Disposed
Actual Hazardous Waste Transporter
Actual Hazardous Waste Disposal Facility Contractor and Location (City/Municipality, State)
Actual Disposal Date
Actual Treatment Method

The Hazardous Waste Report is intended as a final reconciliation of anticipated versus actual Hazardous Substances purchased, utilized, or generated in the performance of this award.

10. ENVIRONMENTAL COMPLIANCE PLAN (DEC 1999)

The Environmental Compliance Plan (ECP) should outline an approach to implementing an environmental monitoring and reporting strategy. This strategy should include plans for submitting a Quality Assurance/Quality Control Plan and Pollution Prevention Plan (if an ECP is required, the format of the QA/QC Plan and Pollution Prevention Plan will be determined in conjunction with the NETL environmental staff), conducting environmental monitoring of the proposed action, and submitting Environmental Status Reports. The ECP should also address any concerns and/or deviations associated with the reporting and monitoring documents.

SUGGESTED FORMAT FOR ENVIRONMENTAL COMPLIANCE PLAN (ECP):

- I. SUMMARY OF PROPOSED PROJECT
- II. FEDERAL REGULATORY COMPLIANCE (Discuss how each of the following will be complied with, if applicable.)
 - A. National Historic Preservation Act
 - B. Endangered Species Act
 - C. Fish and Wildlife Coordination Act
 - D. Floodplain/Wetlands Regulations
 - E. Coastal Zone Management Act
 - F. Farmland Protection Policy Act
 - G. American Indian Religious Freedom Act
 - H. Wild and Scenic Rivers Act
 - I. Resource Conservation & Recovery Act
 - J. Comprehensive Environmental Response, Compensation and Liability Act
 - K. Clean Air Act
 - L. Clean Water Act
 - M. Pollution Prevention Act
- III. STATE AND LOCAL REGULATORY COMPLIANCE (Discuss plans for compliance with any state and local regulations.)

11. ENVIRONMENTAL MONITORING PLAN (MAY 1999)

If DOE's analysis of the potential environmental impacts of the proposed action identifies a need for environmental monitoring, the Recipient will also submit a draft Environmental Monitoring Plan (EMP). After consultation with DOE, the draft EMP will be revised, as necessary, and a final EMP will be prepared. The EMP may be revised as the project dictates.

The EMP should evaluate air, land, and water resources, and waste production, using three specific types of monitoring:

- A. Compliance Monitoring,
- B. Unregulated Pollutant Monitoring, and, if necessary,
- C. NEPA-related Monitoring.

Compliance monitoring, i.e., environmental and health monitoring required by Federal, State, and local regulatory agencies, should detail the location, frequency, duration, and substances being monitored. All necessary applications, permits, and licenses should be identified.

Unregulated pollutants, both the amount and type of each, should be monitored. This includes those pollutants (a) not currently regulated by State or Federal laws but for which new regulations are expected in the near future; (b) which may cause environmental or health concerns based on hazardous/toxic compound lists; and (c) which are expected in discharge streams based on test data or process chemistry.

Finally, NEPA-related monitoring should be implemented as necessary. It should identify and/or confirm the impacts of the substances produced and performance of the specific technologies as predicted in the NEPA document. It should also include reporting on any mitigation action identified in the Finding of No Significant Impact or Record of Decision as a condition of approval of the proposed action (reported annually).

12. ENVIRONMENTAL STATUS REPORT (MAY 1999)

After approval of the comprehensive EMP, and as deemed necessary by the DOE Project Manager, information from environmental monitoring should be submitted in the form of Environmental Status Reports (ESRs). The necessity of these reports will depend on the size and nature of the project.

The data reported in the ESRs will ensure that project impacts (a) do not violate applicable environmental regulations and (b) are not detrimental to human health or the environment. The information will also provide a database that can be utilized to mitigate environmental problems associated with commercializing any proposed technologies.

SUGGESTED FORMAT FOR ENVIRONMENTAL STATUS REPORTS

I. SUMMARY OF MONITORING PERFORMED (Compliance and Supplemental Monitoring)

A. MONITORING PARAMETERS

- 1. Location
- 2. Phase of Project (e.g., preconstruction, operational, etc.)
- 3. Source to be Monitored (e.g., stack emissions)
- 4. Method of Monitoring

B. DATA ANALYSIS

- 1. Identification/characterization of emissions, effluents, etc. and their concentration

2. Identification of problem areas/non-compliance
3. Suggestions for modifications/changes to the system
4. Recommendations to revise Monitoring Plan

II. PERMIT COMPLIANCE STATUS

- A. Attach copies of compliance reports, analyses, correspondence between the Recipient and the appropriate regulatory agencies.
- B. Attach copies of all manifests, shipping documents, etc., pertaining to the disposal of wastes generated from the project.

13. **PROPERTY REPORTS (DEC 1999)**

The NETL Property Handbook entitled "Management of Government Property in the Possession of Contractors," contains forms, instructions, and suggested formats for submission of property reports. This handbook can be found at <http://www.netl.doe.gov/business/index.html>.

14. **REPORT OF TERMINATION OR COMPLETION INVENTORY (NETL F 580.1-9 AND SF-120) (SEPT 2000)**

This report submitted on the NETL F 580.1-9 is due immediately upon completion or termination of the award. The SF-120 is also required if there is Government-furnished property involved. The Recipient is required to perform and cause each subcontractor to perform a physical inventory, adequate for disposal purposes, of all Government property applicable to the award.

15. **HOT LINE REPORT (MAR 2002)**

The "Hot Line Report@ may be used to report a major breakthrough in research, development, or design; an event causing a significant schedule slippage or cost growth; an environmental, safety and health violation; achievement of or failure to achieve an important technical objective; or any requirement for quickly documented direction or redirection. The report shall be submitted by the most rapid means available, usually electronic, and should confirm telephone conversations with DOE representatives. Identification as a Hot Line Report@ serves notice at each link in the delivery chain that expedition in handling is required. Unless otherwise agreed by the parties involved, DOE is expected to take action and respond in a similarly timely manner. The report should include:

1. Recipient's name and address;
2. Award title and number;
3. Date;
4. Brief statement of problem or event;
5. Anticipated impacts; and
6. Corrective action taken or recommended.

Hot Line Reports shall document the incidents listed below:

1. Any single fatality or injuries requiring hospitalization are to be immediately reported.
2. Any significant environmental permit violation is to be reported as soon as possible, but within 24 hours of the discovery of the incident.
3. Other incidents that require notification or activation of emergency response organizations or that have the potential for high visibility in the media are to be reported as quickly as possible, but within 24 hours following discovery.

4. Any failure resulting in damage to Government-owned equipment in excess of \$50,000 is to be reported as quickly as possible, but within 24 hours of the discovery of the failure.
5. Any unplanned event which is anticipated to cause a schedule slippage or cost increase significant to the project is to be reported within 24 hours.
6. Any verbal or written Notice of Violation of any Environmental, Safety, and Health statutes arising from the performance of this award is to be immediately reported.
7. Any accidental spill or release which is in violation of any Environmental, Safety, and Health statutes arising from the performance of this award is to be immediately reported, but within 24 hours of the discovery of the accident.
8. Any incident which causes a significant process or hazard control system failure, or is indicative of one which may lead to any of the above defined incidents, is to be reported as soon as possible, but within 5 days of discovery.

The requirement to submit Hot Line Reports for the incidents identified in 1, 2, 3, 6, or 7 is for the sole purpose of enabling DOE officials to respond to questions relating to such events from the media and other public.

When an incident is reported, the Recipient shall conduct an investigation of its cause and make an assessment of the adequacy of resultant action. A written report is required no later than ten (10) calendar days following the incident and shall include an analysis of the pertinent facts regarding the cause, and a schedule of the remedial events and time periods necessary to correct the action.

When an event results in the need to issue a written or verbal statement to the local media, the statement is to be cleared first, if possible, and coordinated with NETL Public Affairs Office, the Contracting Officer Representative (COR) and the Contracting Officer.

16. JOURNAL ARTICLES, CONFERENCE PAPERS AND PROCEEDINGS GENERATED BY LARGE BUSINESSES FOR DOE REVIEW (SEPT 2000)

The Recipient shall submit to DOE for review and approval all documents generated by the Recipient, or any subcontractor, which communicate the results of scientific or technical work supported by DOE under this award, whether or not specifically identified in the award, prior to submission for publication, announcement, or presentation. Such documents include journal articles, conference papers and proceedings, etc.

The Recipient shall simultaneously submit a draft version of the document to the DOE COR and the DOE Patent Counsel Office prior to the publication, presentation, or announcement. The DOE COR and DOE Patent Counsel shall review the draft version of the document and notify the Recipient of approval or recommended changes. The approved final version shall be submitted to the NETL AAD Document Control Coordinator.

The following information shall be provided for conference papers and proceedings, etc.

- Name of conference
- Location of conference (city, state, and country)
- Date of conference (month/day/year)
- Conference sponsor

17. JOURNAL ARTICLES, CONFERENCE PAPERS AND PROCEEDINGS GENERATED BY A SMALL BUSINESS OR NONPROFIT ORGANIZATION FOR DOE REVIEW (SEPT 2000)

The Recipient shall submit to DOE for review and approval all documents generated by the Recipient, or any subcontractor, which communicate the results of scientific or technical work supported by DOE under this award, whether or not specifically identified in the award, prior to submission for publication, announcement, or presentation. Such documents include journal articles, conference papers and proceedings, etc.

The Recipient shall submit a draft version of the document to the DOE COR prior to the publication, presentation, or announcement. The DOE COR shall review the draft version of the document and notify the Recipient of approval or recommended changes. The final version shall be submitted to the NETL AAD Document Control Coordinator.

The following information shall be provided for conference papers and proceedings, etc.

- Name of conference
- Location of conference (city, state, and country)
- Date of conference (month/day/year)
- Conference sponsor

18. JOURNAL ARTICLES, CONFERENCE PAPERS AND PROCEEDINGS GENERATED BY A UNIVERSITY FOR DOE REVIEW (SEPT 2000)

The Recipient shall submit to DOE for review and comment all documents generated by the Recipient, or any subcontractor, which communicate the results of scientific or technical work supported by DOE under this award, whether or not specifically identified in the award, prior to submission for publication, announcement, or presentation. Such documents include journal articles, conference papers and proceedings, etc.

The Recipient shall submit a draft version of the document to the DOE COR prior to the publication, presentation, or announcement. The DOE COR shall review the draft version of the document and notify the Recipient of recommended changes. The final version shall be submitted to the NETL AAD Document Control Coordinator.

The following information shall be provided for conference papers and proceedings, etc.

- Name of conference
- Location of conference (city, state, and country)
- Date of conference (month/day/year)
- Conference sponsor

19. SOFTWARE (MAR 2002)

Major pieces of computer software developed largely as a result of the performance of this effort shall be delivered to the Government shortly after development or at the completion of the effort, as appropriate. The software shall be delivered together with sufficient documentation concerning its development and use to permit future use by others, and to provide a firm basis for allowing modifications to be made in any subsequent development efforts. Unless otherwise specified, software shall be written in a standard computer language such as Fortran 77, operate on the VAS VMS version 5.1 operating system or an IBM PC-compatible personal computer running MS/Windows, and should not incorporate or be dependent on the use of proprietary software, except for standard off-the-shelf software.

20. COMMUNICATION PLANS (MAR 2002)

Knowledge dissemination is an integral part of the Federally funded RD&D process. Effective dissemination requires planned, active, and coordinated participation of governmental entities and funded research organizations.

To ensure the effective dissemination of knowledge gained during this RD&D project, the recipient will consult with NETL's Public Affairs staff to identify communication goals, objectives, and strategies. The recipient will make an initial contact for consultation within 30 days of the award date. The recipient will make subsequent contacts whenever progress on the project warrants external communication, but no less than once a quarter.

Actions and products designed to disseminate nonproprietary project-related knowledge will be coordinated with NETL's Public Affairs staff. Examples of such actions and products include, but are not limited to:

- Press releases
- Articles in newspapers, newsletters, and magazines
- Papers in peer-reviewed journals
- Radio, television, and newspaper interviews
- Presentation of research results at conferences, workshops, and seminars
- Publication of results on webpages
- Information for government officials

21. POST-COMPLETION REVIEW (MAR 2002)

Within two (2) years after completion of the demonstration project, the Recipient agrees to participate with DOE in a post-completion project review meeting. The time and location of the meeting will be established by agreement of the Parties. The purpose of the meeting is to review the success of the project as well as any problems that may have arisen since project completion.

Attachment C -- Budget Pages

[Insert the files from K:\common\addata\form\4600_4.wpd (Federal Assistance Budget Information).]

Attachment D -- Instructions for Completion of Invoices

(a) Voucher Form (SF 270)

In requesting reimbursement, recipient shall use Standard Form 270 (Request for Advance or Reimbursement), and a Statement of Cost providing detailed backup to support the requested Federal Share. Electronic versions of the SF270 and the NETL F4220.50 can be found on the NETL web site at <http://www.netl.doe.gov/business/index.html>. The Statement of Cost shall be supported by the information contained in Paragraph (c) below. Acceptable substitutes for the forms (which provide the same necessary information) may be used.

All invoices shall include the following information:

- (1) Name and address of recipient/vendor
- (2) Invoice date
- (3) Award number or other authorization for delivery of property or service
- (4) Description, price and quantity of property and services actually delivered or rendered
- (5) Shipping and payment terms
- (6) Name (where practicable), title, phone number and complete mailing address of responsible official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment)
- (7) Name (where practicable), title, phone number and complete mailing address of the person to be notified in the event of a defective invoice.
- (8) Other substantiating documentation or information as required by the award.

(b) Statement of Cost

The SF 270 shall be completed so as to make due allowances for the Recipient's cost accounting system. The costs claimed shall be only those recorded costs (including cost sharing) which are authorized for billing by the payment provisions of this award. Any cost sharing or in-kind contributions incurred by the Recipient and/or third party during the billing period must be included in the invoice and adequately supported. Indirect rates claimed shall be billed in accordance with the DHHS rate agreement. The Certification (block 11) must be signed by a responsible official of the Recipient.

(c) Supporting Documentation

Direct costs (e.g., labor, equipment, travel, supplies, etc.) claimed for reimbursement on the Statement of Cost must be adequately supported. The level of detail provided must clearly indicate where the funds were expended. For example, support for labor costs must include the labor category (e.g., program manager, senior engineer, technician, etc.) the hourly rate, and the labor cost per category; equipment costs must be supported by a list of the equipment purchased, along with the item's cost; supporting data for travel must include the destination of the trip, number and labor category of travelers, transportation costs, per diem costs, and purpose of the trip; and supplies should be categorized by the nature of the items (e.g., office, lab, computer, etc.) and the dollar amount per category.

Indirect rates used for billings must be clearly indicated, as well as their basis of application. When the cognizant Administrative Contracting Officer (ACO) or auditor approves a change in the billing rates, include a copy of the approval.

(d) Billing Period

Vouchers shall be submitted no more frequently than monthly (unless prior written consent of the Contracting Officer for more frequent billing is obtained). The period of performance covered by vouchers should be the same as covered by any required monthly technical progress reports and/or monthly cost reports.

(e) Payment Method

In accordance with Mandatory Information for Electronic Funds Transfer Payment, payment under this award will be made utilizing the Automated Clearing House (ACH) network. The payment system is specifically referred to as "Vendor Express."

(f) Defective Invoices

Invoices that are determined to be defective, and therefore not suitable for payment, shall be returned to the Recipient as soon as practicable, specifying the reason(s) why the invoice is not proper.

(g) Status of Payments

The Oak Ridge Financial Service Center (ORFSC) has a system via Internet, in which contractors can request information about payments by invoice, by contract number, and/or by paid date. The system is called Vendor Inquiry Payment Electronic Reporting System (VIPERS) and is available to recipients at the following web site: <http://finweb.oro.doe/vipers.htm>. Recipients must have a federal tax identification number (TIN) and then obtain a personal identification number (PIN) to access the system.

Attachment [TBD] -- Federally Owned Property -- Government Furnished

Attachment [TBD] -- Repayment Agreement

SECTION VIII - ATTACHMENTS

ATTACHMENT G

MODEL REPAYMENT AGREEMENT

(End of text for this page)

ATTACHMENT G

REPAYMENT AGREEMENT PREPARATION INSTRUCTIONS

Applicants are required to submit a Repayment Agreement for repayment of an amount up to (i.e., not to exceed) DOE=s actual contribution to the Project. Applicants shall develop their repayment agreement in accordance with the following guidelines:

- (1) Applicants may propose a repayment schedule based on market introduction and market penetration.
- (2) The repayment agreement proposed by the applicant may be based on the format set forth in the Model Repayment Agreement, or a format of the applicant=s choosing. If an applicant uses its own format, the provisions of the Model Repayment Agreement must be included in the Applicant=s format. Additional provisions may be proposed provided they do not conflict with the Model Repayment provisions.
- (3) Applicant=s must complete the sections marked **Applicant Defined** in the Model Repayment Agreement.
- (4) The Repayment Period must begin no earlier than the start of, and no later than the end of, the Demonstration Phase. The Repayment Agreement shall expire 20 years after the date the Repayment Period begins or on the date of full repayment, whichever occurs first. Repayment Agreements that can provide full repayment in less than 20 years will receive additional credit under the announcement evaluation criteria.
- (5) The basis for repayment (Article IV) must be completely defined by the Applicant. Repayment may come from various revenue streams including, but not limited to, those from the demonstration project itself, royalties from sales and licensing of the demonstration technology in the United States and abroad, and/or any other source of funds the applicant chooses to propose.
- (6) DOE will not accept equity positions in a venture as a source of repayment.
- (7) The Obligor (the organization responsible for repayment) and the Cooperative Agreement Recipient may be the same organization. Alternatively, the Obligor may be a party that has an interest in the demonstration project or the technology that is demonstrated.
- (8) The terms and conditions of the Repayment Agreement shall be based on the Model Repayment Agreement. Since each project application has different financial, operational, and legal characteristics, however, the final Repayment Agreement for each Award may differ from this Model Agreement and will be based on the specific elements of that Application. The final Repayment Agreement will be negotiated between the Applicant and DOE, and shall include the terms set forth herein and other terms and conditions as shall be mutually agreed, but which must be satisfactory to DOE. The Repayment Agreement will reflect the fact that an important element in the Award determination is the expectation of both DOE and the Applicant that the Award will be fully repaid. For the protection of both DOE and the Applicant, the final Repayment Agreement may contain additional conditions, including representations and warranties of the Recipient, financial and other covenants, information reporting requirements, limitations on indebtedness and liens by the project, prepayment restrictions on other borrowed funds, collateral security, events of default, indemnity, absence of material adverse change, delivery of additional documents, instruments, and approvals (such covenants, conditions, documents, instruments, approvals, agreements, and contracts, collectively with any other project agreements, the "Financing Arrangements"). The Financing Arrangements must be satisfactory in form and substance to DOE, in the sole judgment of DOE.

MODEL REPAYMENT AGREEMENT

In consideration of the United States Department of Energy (DOE) support for a clean coal technology demonstration project under DOE's Clean Coal Power Initiative, for which (Applicant Defined), (defined herein as the AObligor@), acknowledges it will receive substantial benefit, Obligor hereby agrees to repay the Department of Energy in accordance with the terms and conditions set forth below.

ARTICLE I. GENERAL OBJECTIVE

The purpose of this Repayment Agreement is to set forth the terms and conditions under which Obligor shall repay to DOE an amount up to, but not to exceed, the DOE share paid under Cooperative Agreement No. DE-NT05-___.

ARTICLE II. DEFINITIONS

ACooperative Agreement@ means the financial assistance award made by the United States Department of Energy (DOE) to (Applicant Defined), Instrument Number _____ on _____, 200_ and subsequent amendments.

ACooperative Agreement Recipient@ means the organization that received the award of the Cooperative Agreement.

ADOE Share@ means the portion of the total project costs paid by DOE under the Cooperative Agreement.

AObligor@ means the organization that is responsible for repayment under this Repayment Agreement. Obligor includes the organization's successors and assigns.

ARepayment Period@ means the period of time during which the Obligor is required to make payments under this Repayment Agreement.

ATotal Project Costs@ means the total amount of allowable direct and indirect costs incurred and paid, in part, by DOE under the Cooperative Agreement.

ARTICLE III. TERM OF THIS REPAYMENT AGREEMENT

The Repayment Period shall begin on the date (Applicant Defined). However, if the Cooperative Agreement Recipient withdraws or terminates its participation under the Cooperative Agreement, or the project is terminated in accordance with Paragraph 2.35 (Termination) of the Cooperative Agreement or terminated due to DOE=s disapproval of a continuation application in accordance with Paragraph 2.9 (Continuation Application) of the Cooperative Agreement, this Repayment Period shall begin on the date the Cooperative Agreement is terminated. This Repayment Agreement shall expire 20 years after the date the Repayment Period begins or on the date the entire DOE share has been repaid, whichever occurs first. This Repayment Agreement may be terminated upon a determination by the Secretary of Energy or designee that repayment places the Obligor at a competitive disadvantage in domestic or international markets.

ARTICLE IV. BASIS FOR REPAYMENT

(Applicant Defined)

ARTICLE V. SCHEDULE OF REPAYMENTS

Payments to DOE shall be due within 60 days after each one-year period following the effective date of this Repayment Agreement.

ARTICLE VI. REPORTING AND RECORD RETENTION REQUIREMENTS

(A) Annual Report to DOE

Within 60 days after the end of each one-year period, the Obligor shall submit a written report to DOE which, for the one-year period just elapsed, provides the applicable data described below:

- (1) The total dollar amount of repayment accruing to DOE;
- (2) A description of each transactions from which the repayment obligation accrued.
- (3) The total amount paid to DOE for all years, and the amount of the DOE share remaining to be paid

in succeeding years under this Repayment Agreement.

(B) Commercialization Report

For () years after completion of the demonstration project, the Recipient shall submit a Commercialization Report describing the Recipient=s (and team members=) progress and success in commercializing the technology used during the project as well as technology derived from that used during the project. The purpose of the

Commercialization Report is to assist DOE to determine the benefits obtained from Government support of technology development. The Commercialization Report is independent from the Annual Report required by the Repayment Agreement and is not limited to the sale or licensing of Ademonstration technology@ as that term is defined in this Repayment Agreement. The Commercialization Report shall include a discussion of the Recipient=s and its team members= efforts to commercialize the technology. The Commercialization Report shall also include descriptions and locations (or proposed locations) of all significant technology, embodies in the demonstration project or derived from technology embodied in the demonstration project, that was sold or licensed during the preceding year (whether or not such transaction were subject to repayment under the terms of the Repayment Agreement). The Commercialization Report shall also include a discussion of any impediments to the commercialization of the technology. The Commercialization Report shall be due on December 31 of each year.

(C) Period of Retention

With respect to each annual report to DOE, the Obligor shall retain, for the period of time prescribed in this paragraph, all related financial records, supporting documents, statistical records, and any other records the Obligor reasonably considers to be pertinent to this Repayment Agreement. The period of required retention shall be from the date each such record is created or received by the Obligor until three years after one of the following dates, whichever is earlier: the date the related annual report is received by DOE; or the date this Repayment Agreement expires, or the final payment to DOE is received. If any claim, litigation, negotiation, investigation, audit, or other action involving the records starts before the expiration of the three-year retention period, the Obligor shall retain the records until such action is completed and all related issues are resolved, or until the end of the three-year retention period, whichever is later. The Obligor shall not be required to retain any records which have been transmitted to DOE by the Obligor.

(D) Authorized Copies

Copies made by microfilm, photocopying, or similar methods may be substituted for original records. Records originally created by computer may be retained on an electronic medium, provided such medium is Aread only@ or is protected in such a manner that the electronic record can be authenticated as an original records

(E) Access to Records

DOE and the Comptroller General of the United States, or any of their authorized representatives, shall have the right of access to any books, documents, papers, or other records (including those on electronic media) which are pertinent to this Repayment Agreement. The purpose of such access is limited to the making of audits,

examinations, excerpts, and transcripts. The right of access described in this paragraph shall last as long as the Obligor retains records which are pertinent to this Repayment Agreement.

(F) Restrictions on Public Disclosure

The Federal Freedom of Information Act (5 U.S.C. Section 552) does not apply to records the Obligor is required to retain by the terms of this Repayment Agreement. Unless otherwise required by law or a court of competent jurisdiction, the Obligor shall not be required to disclose such records to the public.

(G) Flow Down of Records, Retention, and Access Requirements

Obligor shall include clauses substantially similar to the records retention and access requirements set forth in sections (B) and (D) of this Article in all agreements when necessary to fulfill the Obligor obligations under this Repayment Agreement.

ARTICLE VII. DEFAULT

If the Obligor fails to make payment within the time specified in Article V or submit the annual report within the time specified in Article VI, Recipient shall be in default of this Repayment Agreement. If Obligor fails to cure the default within 30 days after receipt of notice of the default from DOE, notwithstanding any provision of the Cooperative Agreement or Repayment Agreement to the contrary, the total unpaid amount of the DOE share shall be immediately payable to DOE.

ARTICLE VIII. DISPUTES

Disputes arising under this Repayment Agreement shall be subject to the procedures set forth in 10 CFR 600.22 Disputes and Appeals.

UNITED STATES DEPARTMENT OF ENERGY

Signature: _____
Name:
Title: Contracting Officer

Date

OBLIGOR (Company Name)

Signature: _____
Name:
Title:

Date

SECTION VIII - ATTACHMENTS

ATTACHMENT H

FUNDING PLAN ATTACHMENTS

NOTE: The attached forms are provided as a convenience to the applicant to show the required information. The applicant may, however, provide an Excel spreadsheet with the required information.

(End of text for this page)

Attachment H

Summary Funding Plan and Summary Funding Plan by Phase

The forms should be used to provide the summary and detailed information for financing the entire project. All financing required to cover costs to be incurred should be designated by phase and budget periods. The cost share dollars and percentages shown should be the same as in the SF 424.

The following should be used for the ROLE OF CONTRIBUTOR:

- A = Applicant
- S = Sponsor - Include industry-funded research organizations and state/ local governments.
- PR = Partner
- SC = Subcontractor - Include any team member who will be a subcontractor.
- O = Other Team Members - Include team members who will not be subcontractors such as equipment vendors, host utilities, etc. The proposer should describe the role of each contractor in this category.

The following should be used for CASH TYPE:

- C = Cash equity from internally generated funds.
- A = Additional cash equity to be obtained (i.e. sale of stocks or bonds).
- D = Debt - The proposer should identify source (bank, insurance company, vendor, etc.), type of debt (non-recourse or recourse), and proposer's assumptions regarding interest rate and annual debt service for each source of anticipated debt financing.
- G = Grant from industry-funded research organizations and state/local governments.
- P = Program revenues shown in the demonstration phase must meet criteria and be fully supported in pro forma financial statements.
- O = Other. The proposer should describe any cash types(s) in this category.

SUMMARY FUNDING PLAN

APPLICANT:

PAGE ___ OF ___

PROJECT TITLE:

DATE: _____

DOLLARS	Definition (optional)	Design	Construction	Demonstration	Total Project
Cash Contributions	\$	\$	\$	\$	\$
In-kind Contributions					
Total Non-DOE Cost Share	\$	\$	\$	\$	\$
U.S. DOE					
TOTAL	\$	\$	\$	\$	\$
PERCENTAGE	Definition (optional)	Design	Construction	Demonstration	Total Project
Cash Contributions	%	%	%	%	%
In-Kind Contributions	%	%	%	%	%
Total Non-DOE Cost Share	%	%	%	%	%
U.S. DOE	%	%	%	%	%
TOTAL	%	%	%	%	100%

**SUMMARY FUNDING PLAN BY PHASE
(Sources of Funds)**

PROPOSER:

PAGE__ OF__

PROJECT TITLE:

DATE:_____

IDENTIFY THE BUDGET PERIOD								
Name of Contributor	Role	C/I *	Cash Type	Definition (optional)	Design	Construction	Demonstration	Total Est. Costs
				\$	\$	\$	\$	\$
TOTAL NON-DOE SHARE				\$	\$	\$	\$	\$
U.S. DOE								
GRAND TOTAL				\$	\$	\$	\$	\$

*C/I – Identify each contribution as cash (C) or in-kind (I).