

awards for exceptional applications in FY 2003 to meet the needs of the program, contingent upon the availability of appropriated funds. The maximum support that can be requested under this notice is \$100,000 per year for three years.

Multiple-year funding of grant awards is expected, with funding provided on an annual basis subject to the availability of funds, progress of the research, and programmatic needs. The typical duration of these grants is three years, and they will not normally be renewed after the project period has been completed. It is anticipated that at the end of the grant period, grantees will submit new grant applications to continue their research to DOE or other Federal funding agencies. We expect that the awards will be announced and the projects will begin in early summer 2003.

Merit Review

Applications will be subjected to scientific merit review (peer review) and will be evaluated against the following evaluation criteria, which are listed in descending order of importance as codified at 10 CFR 605.10(d):

- (1) Scientific and/or Technical Merit of the Project;
- (2) Appropriateness of the Proposed Method or Approach;
- (3) Competency of Applicant's Personnel and Adequacy of Proposed Resources;
- (4) Reasonableness and Appropriateness of the Proposed Budget.

The evaluation of applications under item 1, Scientific and Technical Merit, will pay attention to the responsiveness of the proposed research to the challenges of the MICS base research programs in Applied Mathematics, Collaboratory Research, Computer Science, and Network Research.

It is expected that the application will include involvement of graduate and/or undergraduate students in the proposed work.

Applicants are encouraged to collaborate with DOE National Laboratory researchers. The collaborations may include one, or more, extended visits to the laboratory by the applicant each year. Such an arrangement, if proposed, must be clearly explained in the grant application. Furthermore, a letter of support from the DOE National Laboratory collaborator(s) should be included with the application. A list of the DOE National Laboratories can be found at: http://www.sc.doe.gov/sub/lab_map/index.htm.

Grantees under the Early Career Principal Investigator Program may apply for access to high-performance computing and network resources at several National Laboratories. Such resources include, but are not limited to, the National Energy Research Scientific Computing (NERSC) Center: <http://www.sc.doe.gov/ascr/mics/nersc/index.html>; the Advanced Computing Research Testbeds <http://www.sc.doe.gov/ascr/mics/acrt/index.html>; the Energy Sciences Network <http://www.sc.doe.gov/ascr/mics/esnet/index.html>; and the High-Performance Networking Research effort at the Oak Ridge National Laboratory; <http://www.csm.ornl.gov/net>.

The evaluation under item 2, Appropriateness of the Proposed Method or Approach, will consider the quality of the proposed plan, if any, for interacting with a DOE National Laboratory.

Please note that external peer reviewers are selected with regard to both their scientific expertise in the subject area of the grant application and the absence of conflict-of-interest issues. Non-federal reviewers will often be used, and submission of an application constitutes agreement that this is acceptable to the investigator and the submitting institution.

Submission Information

Each grant application submitted should clearly indicate on which of the four following components of the MICS research portfolio the application is focused: Applied Mathematical Sciences Research, Collaboratory Research, Computer Science Research, or High-Performance Networks Research.

The Project Description should be 20 pages or less, exclusive of the bibliography and other attachments. It must contain an abstract or project summary on a separate page with the name of the applicant, mailing address, phone, FAX and E-mail listed, and a short curriculum vita for the applicant.

To provide a consistent format for the submission, review, and solicitation of grant applications under this notice, the preparation and submission of grant applications must follow the guidelines given in the Application Guide for the Office of Science Financial Assistance Program, 10 CFR part 605. Access to SC's Financial Assistance Application Guide is possible via the World Wide Web at: <http://www.science.doe.gov/production/grants/grants.html>. DOE is under no obligation to pay for any costs associated with the preparation or submission of applications if an award is not made.

(The Catalog of Federal Domestic Assistance number for this program is 81.049, and the solicitation control number is ERFAP 10 CFR part 605.)

Issued in Washington, DC on December 2, 2002.

John Rodney Clark,

Associate Director of Science for Resource Management.

[FR Doc. 02-30917 Filed 12-5-02; 8:45 am]

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DEPARTMENT OF ENERGY

National Energy Technology Laboratory; Notice of Availability of a Financial Assistance Solicitation

AGENCY: Department of Energy (DOE), National Energy Technology Laboratory (NETL).

ACTION: Notice of Availability of a Financial Assistance Solicitation.

SUMMARY: Notice is hereby given of the intent to issue Financial Assistance Solicitation No. DE-PS26-03NT41719 entitled "Innovative Water Management Technologies and Concepts for Coal-Fired Electric Utility Boilers" to solicit applications for cost-shared research projects directed at innovative water management technologies and concepts for coal-fired electric utility boilers. Specifically, the solicitation will provide for the development of cost-effective solutions to emerging regulations and restrictions on water use and impacts on water quality associated with the generation of electricity by coal-fired power plants. Applications will be solicited in four (4) technical areas of interest: (1) *Non-Traditional Sources of Process and Cooling Water*; (2) *Innovative Cooling Technology*; (3) *Advanced Cooling Water Intake Technology*; and (4) *Advanced Pollutant Measurement and Treatment Technology*. Applications are being sought for applied research at the bench-scale to field-scale level for time periods of one (1) to three (3) years.

The solicitation supports the overall goal of the Department of Energy/Office of Fossil Energy's Innovations for Existing Plants (IEP) Program to develop advanced technology and knowledge products that enhance the environmental performance of the existing fleet of coal-fired power plants. The solicitation is part of the path forward of the Energy-Water Management component of the IEP roadmap (<http://www.netl.doe.gov/coalpower/environment>). The goal of this research is to reduce water consumption per kWh of electricity produced by 25% by 2010, and reduce

impacts of electricity production on water quality.

DATES: The solicitation will be available on the "Industry Interactive Procurement System" (IIPS) webpage located at <http://e-center.doe.gov> on or about December 13, 2002. Applicants can obtain access to the solicitation from the address above or through DOE/NETL's Web site at <http://www.netl.doe.gov/business>.

FOR FURTHER INFORMATION CONTACT: Donna J. Jaskolka, MS 921-107, U.S. Department of Energy, National Energy Technology Laboratory, P.O. Box 10940, Pittsburgh, PA 15236-0940, E-mail Address: jaskolka@netl.doe.gov, Telephone Number: (412) 386-6016.

SUPPLEMENTARY INFORMATION: Electric utility boilers are the second largest user of water in the United States, ranking only slightly behind irrigation in terms of total annual water use (USGS, Circular 1200, 1998). The majority of the water used by power plants is for cooling. The steam cycle requires a large amount of water to condense the low-pressure steam from the turbine. Recent regulations proposed under section 316(b) (<http://www.epa.gov/waterscience/316b/>) of the Clean Water Act (<http://www.epa.gov/region5/water/cwa.htm>) to protect against the impingement and entrainment of aquatic organisms in cooling systems could restrict the amount of water that power plants can withdraw for cooling and/or require the installation of new intake structure technology. Retrofitting from once-through cooling systems to recirculating cooling towers can negatively impact plant efficiency due to increased turbine back pressure. Power plant operations can also be disrupted due to the colonization of Zebra mussels and other types of bio-fouling on cooling water intake grates and screens.

Water quality issues will also continue to receive attention in terms of coal power systems. Coal utilization byproducts (CUBs) such as scrubber solids and fly ash must be managed properly in order that all current and future surface and groundwater regulations are met. Concerns about the fate of mercury, arsenic, and other trace metals in CUB leachates could negatively impact the commercial use and disposal of these materials. More stringent control of air emissions under the Clean Air Act could result in cross-media transfer of pollutants from air to water. For example, pending mercury regulations could bring about the need for additional monitoring, processing, and treatment of scrubber liquors and other aqueous streams associated with

air pollution control equipment. In addition, coal pile runoff and other plant-wide discharges may come under further scrutiny in response to future Clean Water Act and Safe Drinking Water Act requirements.

DOE-NETL held a workshop in July 2002 with key stakeholders from industry, government agencies, regional and state regulators, research organizations, and academia to obtain input on the need for a private-partner research effort to address these emerging issues. A summary of the workshop proceedings can be found at <http://www.netl.doe.gov/coalpower/environment>. The workshop participants identified a number of near-, mid-, and long-term research opportunities directed at reducing the impact of coal power generation on water availability and quality. In response, DOE-NETL is issuing a solicitation focused on four areas of interest related to coal-based electric utilities and water. Details concerning the solicitation are described below. This solicitation will serve to help ensure the continued availability of low-cost electricity from coal while meeting growing demands for clean water.

The objective of this solicitation is to solicit applications for cost-shared research projects directed at innovative water management technologies and concepts for coal-fired electric utility boilers. Specifically, the solicitation will provide for the development of cost-effective solutions to emerging regulations and restrictions on water use and impacts on water quality associated with the generation of electricity by coal-fired power plants. All applicants should clearly describe how the technology, if successfully developed and applied, would impact the cost of operating a coal-fired power plant in terms of impacts on COE (cost of electricity) relative to existing technology. The applicant should also provide a projection of the market penetration of the proposed technology or concept in terms of both existing and new coal-fired electric utility boilers. Applications will be solicited to address four technical topic areas:

(1) Non-Traditional Sources of Process and Cooling Water

Applications are being sought to evaluate and develop cost-effective approaches to using non-traditional (*i.e.*, not from freshwater or saline surface water supply) sources of water for cooling and other power plant needs. Examples include surface and underground mine pool water, coal-bed methane produced water, and industrial and/or municipal wastewater. The

technical, cost and permitting issues associated with collecting, treating, transporting, storing, and discharging/dispersing of these non-traditional waters should be considered.

(2) Innovative Cooling Technology

Applications are being sought to improve both wet and dry recirculating cooling tower systems. Innovative methods of plume abatement are desired to reduce water loss and minimize visual impacts from cooling towers. Improvements in the energy penalty associated with wet and dry cooling versus once-through cooling are also sought. Research to reduce the higher capital and operating costs associated with dry cooling versus wet cooling and the development of hybrid wet-dry systems that optimize the advantages of wet and dry cooling towers is also sought.

(3) Advanced Cooling Water Intake Technology

Future regulations to protect aquatic organisms under Section 316(b) of the Clean Water Act may impact the operation of cooling water intake structures on new and existing power plants. Applications are sought to meet performance standards for intake structures that would be required by section 316(b) regulation. Specifically, advanced intake structure technologies such as intake screen systems, passive intake systems, diversion or avoidance systems, and fish handling systems are sought. Innovative methods to control bio-fouling of intake structures, which will be more of a problem with the lower intake water velocities required to reduce fish impingement are also sought.

(4) Advanced Pollutant Measurement and Treatment Technology

Future controls on the emission of mercury and possibly other hazardous air pollutants (*e.g.* selenium, arsenic) have raised concerns about the ultimate fate of these contaminants once they are removed from the flue gas. Preventing these air pollutants from being transferred to surface or ground waters will be critical. Applications are sought for advanced technologies to detect, measure, and remove mercury, arsenic, selenium and other pollutants from the aqueous streams of coal-based power plants such as blowdown water, wet scrubber effluents, and ash pond waters. Advanced technologies are also sought for removal of chemicals used in treatment of cooling water.

It is anticipated that there will be five to seven (5-7) Financial Assistance (Cooperative Agreement) awards with

performance periods ranging from 12 to 36 months. The total estimated award value for all projects selected under this solicitation is approximately \$4.8 million; this amount includes the mandatory minimum recipient cost share of 20%.

Eligibility for participation in the Program Solicitation is considered to be full and open. All interested parties may apply, except as noted herein. Applications submitted by or on behalf of (1) Another Federal agency, (2) a Federally Funded Research and Development Center sponsored by another Federal agency; or (3) a Department of Energy (DOE) Management Operating (M&O) Contractor will not be eligible for award under this solicitation. However, an application that includes performance of a portion of the work by a DOE M&O contractor will be evaluated and may be considered for award subject to the provisions to be set forth in Program Solicitation DE-PS26-03NT41719

(Note: The limit on participation by an M&O contractor for an individual project under this solicitation cannot exceed 25% of the total project cost.)

Once released, the solicitation will be available for downloading from the IIPS webpage (<http://e-center.doe.gov>). At this Internet site you will also be able to register with IIPS, enabling you to submit an application. If you need technical assistance in registering or for any other IIPS function, call the IIPS Help Desk at (800) 683-0751 or E-mail the Help Desk personnel at IIPS_HelpDesk@e-center.doe.gov. The solicitation will only be made available in IIPS, no hard (paper) copies of the solicitation and related documents will be made available.

Prospective applicants who would like to be notified as soon as the solicitation is available should subscribe to the Business Alert Mailing List at <http://www.netl.doe.gov/business>. Once you subscribe, you will receive an announcement by E-mail that the solicitation has been released to the public. Telephone requests, written requests, E-mail requests, or facsimile requests for a copy of the solicitation package will not be accepted and/or honored. Applications must be prepared and submitted in accordance with the instructions and forms contained in the solicitation. The actual solicitation document will allow for requests for explanation and/or interpretation.

Issued in Pittsburgh, PA on November 20, 2002.

Dale A. Siciliano,

Director, Acquisition and Assistance Division.

[FR Doc. 02-30916 Filed 12-5-02; 8:45 am]

BILLING CODE 6450-01-P

DEPARTMENT OF ENERGY

Office of Science Financial Assistance Program Notice 03-13: Natural and Accelerated Bioremediation Research Program

AGENCY: U.S. Department of Energy.

ACTION: Notice inviting grant applications.

SUMMARY: The Office of Biological and Environmental Research (OBER) of the Office of Science (SC), U.S. Department of Energy (DOE), hereby announces its interest in receiving applications for research grants in the Natural and Accelerated Bioremediation Research (NABIR) Program. The goal of the NABIR program is to provide the fundamental science that will serve as the basis for development of cost-effective bioremediation and long-term stewardship of radionuclides and metals in the subsurface at DOE sites. The focus of the program is on strategies leading to long-term immobilization of contaminants in place to reduce the risk to humans and the environment. Research should address bioremediation of uranium, technetium, plutonium, chromium or mercury. NABIR is focused on subsurface sediments below the zone of root influence and includes both the vadose (unsaturated) zone and the saturated zone (groundwater and sediments). Applications should describe research projects in one or more of the following program elements: Biogeochemistry, Biotransformation, Community Dynamics and Microbial Ecology, Biomolecular Science and Engineering, Assessment, and Bioremediation and its Societal Implications and Concerns. Studies that integrate research from more than one NABIR element are strongly encouraged.

DATES: Researchers are strongly encouraged (but not required) to submit a preapplication for programmatic review. Preapplications will be accepted on an ongoing basis, however, early submission of preapplications is encouraged, to allow time for review for programmatic relevance. A brief preapplication should consist of one or two pages of narrative describing the research objectives and methods.

The deadline for receipt of formal applications is 4:30 p.m., E.S.T., March 11, 2003, to be accepted for merit review

and to permit timely consideration for awards late in Fiscal Year 2003 or in early Fiscal Year 2004.

ADDRESSES: Preapplications referencing Program Notice 03-13 should be sent by E-mail to anna.palmisano@science.doe.gov.

Formal applications in response to this solicitation are to be electronically submitted by an authorized institutional business official through DOE's Industry Interactive Procurement System (IIPS) at: <http://e-center.doe.gov/>. IIPS provides for the posting of solicitations and receipt of applications in a paperless environment via the Internet. In order to submit applications through IIPS your business official will need to register at the IIPS Web site. The Office of Science will include attachments as part of this notice that provide the appropriate forms in PDF fillable format that are to be submitted through IIPS. Color images should be submitted in IIPS as a separate file in PDF format and identified as such. These images should be kept to a minimum due to the limitations of reproducing them. They should be numbered and referred to in the body of the technical scientific application as Color image 1, Color image 2, etc. Questions regarding the operation of IIPS may be E-mailed to the IIPS Help Desk at: HelpDesk@e-center.doe.gov or you may call the help desk at: (800) 683-0751. Further information on the use of IIPS by the Office of Science is available at: <http://www.sc.doe.gov/production/grants/grants.html>.

If you are unable to submit an application through IIPS please contact the Grants and Contracts Division, Office of Science at: (301) 903-5212 in order to gain assistance for submission through IIPS or to receive special approval and instructions on how to submit printed applications.

FOR FURTHER INFORMATION CONTACT: Dr. Anna Palmisano, Environmental Remediation Sciences Division, SC-75/ Germantown Building, Office of Biological and Environmental Research, Office of Science, U.S. Department of Energy, 1000 Independence Ave., SW., Washington, DC 20585-1290, telephone: (301) 903-9963, E-mail: anna.palmisano@science.doe.gov, fax: (301) 903-8519. The full text of Program Notice 03-13 is available via the Internet using the following Web site address: <http://www.sc.doe.gov/production/grants/grants.html>.

SUPPLEMENTARY INFORMATION:

Background

For more than 50 years, the U.S. created a vast network of more than 113