DEPARTMENT OF ENERGY

Office of Science; Office of Science Financial Assistance Program Notice 99–10; Next Generation Internet—University Network Technology Testbeds

AGENCY: U.S. Department of Energy.

ACTION: Notice inviting research grant applications.

SUMMARY: The Office of Advanced Scientific Computing Research (OASCR) of the Office of Science (SC), U.S. Department of Energy (DOE), hereby announces its interest in receiving applications for the Next Generation Internet—University Network Technology Testbeds program. The Next Generation Internet (NGI) is a multi-agency federal research and development program to develop, test, and demonstrate advanced networking technologies and applications. This particular research notice invites research applications for DOE-university technology testbeds to focus on developing and testing techniques and technologies to allow advanced network services to be deployed across interconnected networks that are independently administered.

DATES: Applicants are encouraged to submit a brief preapplication. All preapplications, referencing Program Notice 99–10, should be received by DOE by 4:30 P.M., E.S.T., February 12, 1999. A response to the preapplications discussing the potential program relevance and encouraging or discouraging a formal application generally will be communicated within several days of receipt.

Formal applications submitted in response to this notice must be received by 4:30 P.M., E.S.T., March 31, 1999, in order to be accepted for merit review and to permit timely consideration for award in fiscal year 1999.

ADDRESSES: Preapplications, referencing Program Notice 99–10, should be sent by E-mail to seweryni@er.doe.gov.

Formal applications, referencing Program Notice 99–10, should be sent to: U.S. Department of Energy, Office of Science, Grants and Contracts Division, SC–64, 19901 Germantown Road, Germantown, MD 20874–1290, ATTN: Program Notice 99–10. This address must also be used when submitting applications by U.S. Postal Service Express Mail, any other commercial overnight delivery service, or when hand-carried by the applicant. An original and seven copies of the application must be submitted.

FOR FURTHER INFORMATION CONTACT: George Seweryniak, Office of Science, U.S. Department of Energy, 19901 Germantown Road, Germantown, MD 20874–1290, telephone: (301) 903–0071, E-mail: seweryni@er.doe.gov, fax: (301) 903–7774. The full text of Program Notice 99–10 is available via the Internet using the following web site address: http://www.er.doe.gov/production/grants/grants.html

SUPPLEMENTARY INFORMATION: The NGI initiative is a multi-agency Federal research and development (R&D) program that is developing advanced networking technologies, developing revolutionary applications that require advanced networking, and demonstrating these capabilities on testbeds that are 100 to 1,000 times faster end-to-end than today's Internet. Partnerships among academia, industry, and governments (Federal, state, local, and foreign) that will keep the U.S. at the cutting-edge of information and communications technologies are encouraged. (Details on submitting applications involving partnerships can be found in the Application Guide for the Office of Science Financial Assistance Program referenced below). The strategic R&D investments are coordinated across the agencies involved and are focused to produce an environment where advanced networking R&D breakthroughs are possible. Information concerning NGI can be found at http://www.ngi.gov/.

Topic Details

DOE's current core programs in network and application research are intended to enhance the Department's ability to satisfy mission requirements through advanced technologies such as distributed computing, national collaboratories, remote access to facilities, and remote access to petabyte-scale datasets with complex internal structure. It is critical to the Department that these advanced technologies be available not only to sites directly connected to the Department's backbone network Esnet, but also to scientists at universities and industrial partners with other types of connections to the Internet who are members of research communities important to DOE missions. The DOE NGI network research described in this notice will focus on developing and testing techniques and technologies to allow advanced network services to be deployed across interconnected networks that are independently administered.

The DOE encourages the submission of applications for University Network Technology Testbeds to address the issues of deploying advanced network services end-to-end across interconnected autonomous networks. These partnerships can include individual universities, network interconnection points such as Gigapops, and backbone network service providers. It is expected that these partnerships will work with ESnet to develop integrated testbeds and the associated management tools.

Important issues to be addressed in these testbeds include:

- Deployment of advanced differentiated services technology across autonomous networks both when the priority flow represents a small fraction of the available capability and when the priority flow is a significant fraction of the available capability;
- Development and testing of advanced tools to manage ''peering'' of networks with advanced services;
- Cross-domain implementations of security and authentication technologies;
- Development and testing of network performance monitoring and characterization software which applications can use in this environment to optimize their performance; and
- Development of policy frameworks and specification languages to facilitate the negotiation of capabilities across autonomous system boundaries.

Program Funding

It is anticipated that up to $5 million will be available for multiple awards to be made in FY 1999 in the categories described above, contingent on the availability of appropriated funds. Applications may request project support up to three years, with out-year support contingent on the availability of funds, progress of the research, and programmatic needs. Annual budgets are expected to range from $500,000 to $2,000,000 total costs.

Preapplications

A brief preapplication may be submitted. The preapplication should identify on the cover sheet the institution, Principal Investigator name, address, telephone, fax and E-mail address, title of the project, and the field of scientific research. The preapplication should consist of a two to three page narrative describing the research project objectives and methods of accomplishment. These will be reviewed relative to the scope and research needs of the Next Generation Internet—University Network Technology Testbeds Program.

Preapplications are strongly encouraged but not required prior to submission of a full application. Please

note that notification of a successful preapplication is not an indication that an award will be made in response to the formal application.

Applications will be subjected to scientific merit review (peer review) and will be evaluated against the following evaluation criteria 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 will include program policy factors such as the relevance of the proposed research to the terms of the announcement and an agency's programmatic needs. Note, external peer reviewers are selected with regard to both their scientific expertise and the absence of conflict-of-interest issues. Non-federal reviewers may be used, and submission of an application constitutes agreement that this is acceptable to the investigator(s) and the submitting institution.

Information about the development and submission of applications, eligibility, limitations, evaluation, selection process, and other policies and procedures may be found in 10 CFR Part 605, and in the Application Guide for the Office of Science Financial Assistance Program. Electronic access to the Guide and required forms is made available via the World Wide Web at: http://www.er.doe.gov/production/grants/grants.html. The Project Description must be 20 pages or less, exclusive of attachments. The application must contain an abstract or project summary, letters of intent from collaborators, and short vitaes.

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 22, 1998.

John Rodney Clark,

Associate Director of Science for Resource Management.

[FR Doc. 99–392 Filed 1–7–99; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Office of Energy Efficiency and Renewable Energy

Golden Field Office; PV Balance of System Reliability Analysis: Supplemental Announcement (05)

AGENCY: Golden Field Office, Department of Energy (DOE).

ACTION: Notice of Broad Based Solicitation for Submission of Financial Assistance Applications Involving Research, Development, and Demonstration for Renewable Energy and Energy Efficiency Technologies, DE–PS36–99GO10383.

SUMMARY: The Photovoltaic (PV) Division of the Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE) is supporting the issuance of this Supplemental Announcement to EERE's Broad Based Solicitation for Submission of Financial Assistance Applications Involving Research, Development and Demonstration, DE–PS36–99GO10383, dated November 9, 1998. Under the Supplemental Announcement, DOE is soliciting applications to analyze the U.S. Navy's Power Electronic Building Block (PEBB) technology to determine if it is a viable option for PV applications and, if so, establish a set of recommendations to the PV industry regarding methods to transfer this technology. Proposals are requested to conduct an assessment and analysis of power integrated circuits/PEBB devices for PV Balance of System (BOS) applications. The work will include assessments of the applicability, availability, and compatibility of the power integrated circuits to insure that the devices developed in the PEBB program may also be suited for BOS PV power conditioner applications with minimal modifications. Awards under this Supplemental Announcement will be Grants with a term of up to 12 months. Subject to funding availability, the total DOE funding available under this Supplemental Announcement will be $75,000.

All information regarding the Supplemental Announcement will be posted on the DOE Golden Field Office Home page at the address identified below.

DATES: DOE expects to issue the Supplemental Announcement the week of December 7, 1998. The closing date of the Supplemental Announcement is January 15, 1999.

ADDRESSES: The Supplemental Announcement will be posted on the DOE Golden Field Office Home Page at http://www.eren.doe.gov/golden/solicit.htm. It is DOE's intention not to issue hard copies of the Supplemental Announcement.

FOR FURTHER INFORMATION CONTACT: John Motz, Contract Specialist, at 303–275–4737, e-mail john__motz@nrel.gov, or Doug Hooker, Project Officer, at 303–275–4780, e-mail doug__hooker@nrel.gov.

Issued in Golden, Colorado, on December 21, 1998.

Dated: December 21, 1998.

Ruth Adams,

Contracting Officer.

[FR Doc. 99–393 Filed 1–7–99; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Office of Energy Efficiency and Renewable Energy

Golden Field Office; Innovative Technologies for Conversion of Biomass to Transportation Fuels: Supplemental Announcement (02)

AGENCY: Golden Field Office, Department of Energy (DOE).

ACTION: Notice of Broad Based Solicitation for Submission of Financial Assistance Applications Involving Research, Development, and Demonstration for Renewable Energy and Energy Efficiency Technologies, DE–PS36–99GO10383.

SUMMARY: The Office of Fuels Development of the Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy (EERE) is supporting the issuance of this Supplemental Announcement to EERE's Broad Based Solicitation for Submission of Financial Assistance Applications Involving Research, Development and Demonstration, DE–PS36–99GO10383, dated November 9, 1998. Under the Supplemental Announcement, DOE is soliciting applications to support innovative technologies that will increase the efficiency or lower the cost of producing and converting biomass to transportation fuels. The Office of Fuels Development formulates, executes, and coordinates a balanced and customer-focused national program of research, development, and demonstration of technologies for the production of transportation fuels from biomass. The biomass resources considered include agricultural residues, forestry wastes, and crops grown specifically for energy applications. Proposals are sought in areas of innovative research and development of the following: plants capable of high biomass yields; systems