

**Office of Science**  
**Notice DE-FG01-05ER05-19**

*Regional Centers for the  
National Institute  
for Climatic Change Research*

**Department of Energy**

**Office of Science Financial Assistance Program Notice**

**DE-FG01-05ER05-19: Regional Centers for the National Institute for Climatic Change Research**

**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 from U.S. universities to host one of four Regional Centers of the new DOE National Institute for Climatic Change Research (NICCR; formerly National Institute for Global Environmental Change, NIGEC).

**DATES:** Applicants are **required** to submit a two-page preapplication. All preapplications, referencing Program Notice DE-FG01-05ER05-19, must be received by April 5, 2005 (preapplications received after this date will not be considered). It is expected that a response to the preapplications encouraging or discouraging a formal application will be communicated to the applicant within 10 days of receipt.

The deadline for receipt of formal applications is 8:00 p.m., Eastern Time, May 19, 2005.

Please see the "Supplementary Information" section below for specific instructions on the preparation of the preapplication and the formal application.

**ADDRESSES:** Preapplications, referencing Program Notice DE-FG01-05ER05-19, must be sent by e-mail to: [jeff.amthor@science.doe.gov](mailto:jeff.amthor@science.doe.gov). Use "Program Notice DE-FG01-05ER05-19" as the subject of the email.

Formal applications referencing Program Notice DE-FG01-05ER05-19, must be sent electronically by an authorized institutional business official through DOE's Industry Interactive Procurement System (IIPS) at: <http://e-center.doe.gov>. In order to submit applications through IIPS a university business official will need to register at the IIPS website. Questions regarding the operation of IIPS may be e-

mailed to the IIPS help desk at: HelpDesk@pr.doe.gov or you may call the help desk at (800) 683-0751. Further information on the use of IIPS by DOE SC is available at: <http://www.science.doe.gov/grants/IIPS-Instructions.html>. **Although IIPS offers the option of using multiple files, all applications submitted in response to this Program Notice must be contained completely within a single PDF file. That file should be no larger than 2.0 MB.**

If you are unable to submit an application through IIPS, please contact the Grants and Contracts Division, Office of Science at: (301) 903-5212 or (301) 903-3064, 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. Jeff Amthor, SC-74/Germantown Building, U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, DC 20585-1290, telephone: (301) 903-2507, e-mail: jeff.amthor@science.doe.gov, fax: (301) 903-8519.

**SUPPLEMENTARY INFORMATION:** DOE was directed by Congress to establish a National Institute on Global Environmental Change (NIGEC) in FY 1990 at the University of California (UC), Davis. The Congressional language directing DOE to establish NIGEC also specified that it be composed of academic research institutions representing the four principal regions of the United States and that the institutions draw on the scholarly resources within their region to serve DOE's interests. The NIGEC is presently operated and managed for the DOE by the UC through a cooperative agreement, and consists of a National Office located at UC, Davis, and six Regional Centers, each hosted by a university (i.e., Harvard University, Indiana University, University of Alabama, Tulane University, University of Nebraska-Lincoln, and UC Davis).

The NIGEC solicits research proposals, from academic and other non-governmental research institutions, that are relevant to the DOE's climate change research priorities. Contingent on the availability of appropriated funds, proposals considered of scientific merit and relevant to the DOE's priorities are selected for funding. That funding is provided by DOE through the NIGEC National Office, which establishes subcontracts with each of the six Regional Centers, which in turn establish subcontracts with the universities carrying out the selected research projects.

**Funding by the DOE of the Cooperative Agreement with the UC to manage NIGEC will be discontinued in FY 2005 (the FY 2005 funding period is expected to end August 31, 2006). In FY 2006, NIGEC will be renamed the DOE National Institute for Climatic Change Research (NICCR) and the DOE will manage NICCR from DOE headquarters. At the same time, the number of Regional Centers will be reduced from six to four.** These actions will reduce administrative costs, and those savings will be used to support additional research on a competitive basis.

Some research projects funded by DOE through NIGEC in FY 2005 will be continued in FY 2006 with DOE funding through NICCR. The selection of those projects will be made by DOE based on progress of ongoing work and relevance to DOE's FY 2006 priorities.

**National Institute for Climatic Change Research**

The reconfigured institute will include four Regional Centers hosted by four universities (i.e., the host universities). Each Regional Center will have a Principal Investigator, who will be a member of the faculty of the host university. The host universities for each Regional Center will be located within the respective NICCR region.

Groupings of the 50 states into the four NICCR regions is as follows. (1) Western Region: Alaska, Hawaii, Washington, Oregon, California, Idaho, Nevada, Arizona, Utah, Montana, Wyoming, Colorado, and New Mexico. (2) Midwestern Region: North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Missouri, Iowa, Minnesota, Wisconsin, Illinois, Indiana, Ohio, and Michigan. (3) Southeastern Region: Texas, Louisiana, Arkansas, Mississippi, Alabama, Florida, Georgia, South Carolina, North Carolina, Tennessee, and Kentucky. (4) Northeastern Region: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, West Virginia, the District of Columbia, and Virginia. The grouping of states in the four regions was established based on a combination of the number of states within each region, the fraction of the population of the United States within each region, and the fraction of the Gross Domestic Product of the United States accounted for by each region.

The four NICCR Regional Center host universities to be selected as a result of this competitive solicitation will each enter into a cooperative agreement with the DOE. The Regional Centers will retain autonomy, but will be held accountable to DOE for the development and funding of an integrated research portfolio that is directly relevant to DOE's climatic change research needs.

Each of the four NICCR Regional Centers will fund research proposals submitted by U.S. universities and non-governmental research institutions in their region in response to future competitive solicitations. Specifically, the Regional Centers will release joint annual notices, soliciting research proposals for funding through the NICCR from universities and other non-governmental research institutions in each region. The request for proposals will include a request for preproposals. The terms of reference in the notices will be based on climatic change research issues that are relevant to DOE's priorities and that are important on a regional and/or national scale. The DOE climatic change research program participates in the interagency Climate Change Science Program, which helps develop DOE research priorities. Each notice will include input and oversight from the DOE to ensure that it reflects the DOE's research priorities. Following the publication of solicitations, NICCR Regional Center Principal Investigators, in consultation with the DOE Program Manager if necessary, will screen preproposals submitted in response to the NICCR request for proposals. Formal proposals submitted to each of the four Regional Centers will then be evaluated by the Regional Centers through a peer review panel and/or mail reviews. Based on the evaluations (including technical review by DOE as DOE deems necessary) and the terms of reference in the request for proposals, the Regional Center Principal Investigators will develop a list of proposals recommended for funding by DOE through the NICCR. That list will be subjected to a relevancy review by OBER. The results of the relevancy review will be used to determine a list of research projects to be funded by DOE through the NICCR Regional Centers, contingent on the availability of funds. The Regional Center host universities will then establish subcontracts for NICCR research projects not at the host university; for research projects to be conducted by a principal investigator at a host university, no subcontracts will be needed. **The NICCR Regional Center Principal**

**Investigators will be eligible to apply for research support by DOE through NICRR, but the screening of preproposals and the peer review of associated formal proposals will be conducted by DOE OBER rather than by the Regional Center.**

After the selection of research projects to be funded by DOE through NICCR, the NICCR Regional Centers will award subcontracts to fund the research projects, track scientific progress of the funded projects, track fiscal activities of the funded projects, report to DOE OBER on the scientific results and significance of funded projects, and foster and facilitate collaborative research among different scientists and institutions within and among the NICCR regions. The NICCR Regional Centers should also foster collaborations between NICCR researchers and the relevant DOE OBER research programs, such as the DOE Program for Ecosystem Research, Atmospheric Science Program, and Terrestrial Carbon Processes program.

In FY 2006, it is expected that three research foci will be the basis of the terms of reference of the NICCR request for proposals. Namely, (1) experimental study of effects of warming, altered precipitation, elevated carbon dioxide concentration, and/or elevated ozone concentration on the structure and functioning of terrestrial ecosystems of regional or national importance to the United States, with a priority given to studies including multiple factors; (2) development and/or evaluation of models appropriate to the prediction of effects of climatic change on regionally important terrestrial ecosystems, and development of methods for upscaling ecosystem model results to address regional-scale ecological issues; and (3) observation and analysis of contemporary exchanges of mass and energy between the atmosphere and regionally important terrestrial ecosystems or landscapes, and the use of those observations and analyses to evaluate global climate and carbon cycle models. Research directed at climatic change mitigation, such as various carbon sequestration options, will not be funded by NICCR in FY 2006. It is expected that NICCR research foci will change over time in parallel with elements of the research priorities of the DOE climate change research program.

It is anticipated that cooperative agreements establishing and maintaining the four NICCR Regional Centers will be for 5 years, with funding provided on an annual basis contingent on successful annual progress reports from the Regional Centers and availability of appropriated funds. Funding for the fourth and fifth years of the cooperative agreement will also be contingent on successful results of a review by an external committee (established by DOE) of the activities of each Regional Center during the third year of each cooperative agreement. Each cooperative agreement will be initially funded at a level consistent with annual administrative costs of each Regional Center. After the selections of the specific research projects to be funded through each Regional Center are made, the funding of the cooperative agreements will be supplemented by an amount needed to support those research projects through subcontracts from the host universities (research projects selected at the host universities, if any, will not require subcontracts but will be directly funded by supplemental funding to the cooperative agreement).

### **Request for Applications**

This notice solicits applications from universities to host the new NICCR Regional Centers. A university proposing to host a specific NICCR Regional Center must reside within one of the states (or the District of Columbia) included in that NICCR region. The applications should

include and describe necessary support of the Principal Investigator and any administrative staff required to carry out the activities of the Regional Center office.

In the narrative portion of the application, the applicant (NICCR Regional Center Principal Investigator) must demonstrate a strong background in successful climatic change related research and/or climatic change related research administration, with special emphasis on one or more of the NICCR research foci identified above for FY 2006. The application narrative must also specify a strategy for soliciting proposed research to be funded by the DOE through the NICCR Regional Center that draws on and takes advantage of the scientific expertise and capabilities for research on the foci given above at academic and other non-governmental institutions within the NICCR region. That strategy must include joint preparation of "requests for proposals" with the three other NICCR Regional Centers to be selected by DOE, fostering the submission of proposals that would result in a coherent and well integrated suite of research on one or more of the NICCR foci, screening of preproposals submitted to the Regional Center (in collaboration with OBER when necessary), organizing and overseeing the peer review (panel, mail, or a combination) of formal proposals submitted to the Regional Center, recommendation of research projects to the DOE (based on the peer review of submitted proposals and desire for proper balance among research foci), and establishment of appropriate subcontracts to support recommended projects that are selected for funding by the DOE based on DOE's programmatic (relevancy) review of recommended proposals and the availability of funds.

The narrative portion of the application must also describe how the Regional Center Principal Investigator plans to monitor and report on the scientific progress of funded research proposals to DOE. Providing DOE with periodic, timely highlights of successful and significant accomplishments and outcomes of research supported through NICCR will be required. The application must describe how the Regional Center Principal Investigator will foster and facilitate collaborative research among different scientists and institutions within the NICCR region as well as collaboration between NICCR researchers and the related DOE OBER research programs. Finally, the application must state a vision for how the Regional Center can provide added value to the present DOE climate change research program.

The application should include a budget for all anticipated administrative costs of carrying out the proposed activities of the Regional Center. The administrative budget of each application must include costs for two trips per year by the Regional Center Principal Investigator to the Washington, DC, area for meetings with the Program Manager. For budget preparation purposes, each trip should be estimated to be 3 days in duration.

### **Program Funding**

Annual budgets for administrative costs of each Regional Center, including support of the Regional Center Principal Investigator to carry out administrative duties, and other staff needed to carry out administrative duties, are expected to be less than \$200,000.

It is anticipated that \$1,930,000 will be available to each of the four Regional Centers to support multiple research projects in Fiscal Year 2006, contingent on the availability of appropriated funds. These funds would be provided to the host university through a supplement to the

cooperative agreement after the selection of research projects to be funded. This amount will include charges the host university makes to establish and maintain subcontracts to other universities and non-governmental research institution. Out year support for research is expected to remain constant for the duration of the cooperative agreements. It is expected that individual research projects (subcontracts) within the Regional Centers will have three-year durations, with out-year support contingent on the availability of funds, progress of the research, and DOE's evolving programmatic needs. Regional Center host universities will be eligible for up to 25% of the research support administered through that Regional Center. The same 25% limit will apply to other individual institutions within a Regional Center. Regional Center Principal Investigators will be eligible for research awards within their Regional Center, but technical reviews of their proposals will be coordinated by DOE rather than their own Regional Center.

### **Preapplications**

A two-page preapplication is required prior to submission of a full application.

The first page of the preapplication should identify the (1) institution (proposed host university); (2) Principal Investigator's name, telephone number, and e-mail address; and (3) a clear and concise description of the proposed strategy for soliciting and selecting research projects to be funded by the DOE through the NICCR. That strategy must include joint preparation of "requests for proposals" with the three other NICCR Regional Centers to be selected by DOE, screening of preproposals submitted to the Regional Center (in collaboration with OBER if necessary), peer review (panel, mail, or a combination) of proposals submitted to the Regional Center, recommendation of research projects to the DOE (based on the peer review of submitted proposals), and establishment of appropriate subcontracts to support recommended projects that are selected for funding by the DOE based on DOE's programmatic (relevancy) review of recommended proposals. The first page of the preapplication should also briefly state how research progress of funded proposals will be monitored by the Regional Center and communicated to OBER, and how the Regional Center will foster collaborative research among different institutions funded through the NICCR.

The second page of the preapplication must be a curriculum vitae that highlights the Principal Investigator's expertise and research success in the three technical areas (research foci) identified above. It should include any relevant management of multi-institutional research projects and/or synthesis activities in the technical areas described above.

Preapplications will be screened and potential applicants will be notified if a formal application is encouraged. Please note that notification of a successful preapplication is not an indication that an award will be made in response to the formal application.

### **Merit Review**

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

1. Merit of the Proposed Cooperative Agreement;
2. Appropriateness of the Proposed Method or Approach;
3. Competency of the Applicant's Personnel and Adequacy of Proposed Resources; and
4. Reasonableness and Appropriateness of the Proposed Budget.

For this competition, special emphasis will be placed on a demonstrated expertise by the applicant in research related to the NICCR foci identified above and the quality of the plan for soliciting, developing, managing, and monitoring a portfolio of research projects that will add value to the ongoing DOE climatic change research program.

Note that external peer reviewers are selected with regard to both scientific expertise and absence of conflict-of-interest issues. Both federal and non-federal reviewers may be used, and submission of an application constitutes agreement that this is acceptable to the investigator and the submitting institution.

### **Submission Information**

Information about the development, submission of applications, eligibility, limitations, evaluation, the 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 SC's Financial Assistance Application Guide is possible via the World Wide Web at: <http://www.science.doe.gov/grants>. DOE is under no obligation to pay for any costs associated with the preparation or submission of applications if an award is not made. In addition, for this Notice, applications must conform to the following two requirements: the height of the letters must be at least 10 point and the margins must be at least one inch on all sides. Figures, charts, tables, figure legends, etc., may contain smaller type as long as it is legible.

The application should be arranged in the following order:

- Application Cover Page (DOE Form 4650.2)
- Budget (DOE Form 4620.1) and Budget Explanation
- Narrative
- Literature Cited
- Biographical Sketch of Principal investigator
- Description of Facilities and Resources
- Other Support of the Principal Investigator
- Assurance of Compliance (DOE Form 1600.5)
- Certifications Regarding Lobbying; Debarment, Suspension and Other Responsibility Matters; and Drug-Free Workplace Requirements. Submit "Disclosure of Lobbying Activities," Standard Form-LLL, with the application 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.

Do not include letters of endorsement of the application or the principal investigator.

### *Narrative*

The narrative comprises the research plan for the project and is limited to **15 pages (maximum)**. It should contain a description of the technical qualifications of the principal investigator, the proposed strategy for soliciting and reviewing research proposals, the proposed approach to establishing needed subcontracts, the guiding strategy for tracking research progress and reporting research accomplishments and outcomes to DOE, a clear statement of the vision for how the Regional Center would add value to the DOE climatic change research program, and an outline of the responsibilities of key project personnel (i.e., the principal investigator and any "office staff").

The first page of the narrative must begin with a heading showing the university submitting the application, the name of the principal investigator, and the address, phone number, and email address of the principal investigator.

### *Literature Cited*

Give full bibliographic entries for each publication cited in the narrative.

### *Biographical Sketch of Principal Investigator*

This information is required for the principal investigator. The biographical sketch is limited to a maximum of **three pages**. The focus should be on activities related to the NICCR research foci stated above.

To assist in the identification of potential conflicts of interest or bias in the selection of reviewers, the following information **must be provided in each biographical sketch**.

**Collaborators and Co-editors:** A list of all persons in alphabetical order (including their current organizational affiliations) who are currently, or who have been, collaborators or co-authors with the investigator on a research project, book or book article, report, abstract, or paper during the 48 months preceding the submission of the application. Also include those individuals who are currently or have been co-editors of a special issue of a journal, compendium, or conference proceedings during the 24 months preceding the submission of the application. If there are no collaborators or co-editors to report, this should be so indicated.

**Graduate and Postdoctoral Advisors and Advisees:** A list of the names of the individual's own graduate advisor(s) and principal postdoctoral sponsor(s), and their current organizational affiliations. A list of the names of the individual's graduate students and postdoctoral associates during the past 5 years, and their current organizational affiliations.

### *Description of Facilities and Resources*

Facilities to be used for the conduct of the proposed NICCR Regional Center management activities should be briefly described. Indicate the pertinent capabilities of the institution that would be used by the NICCR Regional Center.

***Other Support of Principal Investigator***

Other support is defined as all financial resources, whether Federal, non-Federal, commercial, or institutional, available in direct support of an individual's research endeavors. For each item of other support, give the organization or agency, inclusive dates of the project or proposed project, annual funding, and level of effort (months per year or percentage of the year) devoted to the project.

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

Martin Rubinstein  
Grants and Contracts Division  
Office of Science

Posted on the Office of Science Grants and Contracts Web Site  
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