South Dakota NASA EPSCoR Program Form for Submission of Pre-Proposal for Major Research Grants

Submit completed form and any related files by <u>December 16, 2016 (4:00 pm Mountain Time)</u> to: Edward F. Duke, Director, South Dakota NASA EPSCoR Program, South Dakota School of Mines and Technology, 501 E. Saint Joseph Street, Rapid City, SD 57701-3995, 605-394-2388 (voice), 605-394-3366 (fax), <u>Edward.Duke@sdsmt.edu</u>.

Please submit all parts of the pre-proposal as a single PDF file.

A. General Information (limit responses to one or two lines)

- 1. Tentative title of research:
- 2. PI or Co-PIs (name, title, institution, contact information):

 (An individual researcher may submit only one pre-proposal as PI, but may be listed as a participant on more than one pre-proposal. US citizenship is not required.)
- 3. Other in-state or out-of-state collaborators (names, titles, institutions) and their role in project (note: SD NASA EPSCoR funds may not be used for direct support of out-of-state collaborators):

(Though not required, collaborations among individuals and institutions are strongly encouraged; the goal of EPSCoR is not to fund individual investigators, but rather to develop research teams and programs that will improve the capability of the state to compete for NASA and other funds.)

- 4. NASA research contact or technical monitor, if known (name, title, organization), and their role in project (see also Section F, Support Letter from NASA Contact):
 - (It is the responsibility of the proposer to identify a NASA contact. Colleagues who are familiar with your research may be able to suggest a researcher at a NASA Center, or you may contact the University Affairs Officers at NASA's ten Research Centers, http://www.nasa.gov/offices/education/contacts/highed.html
- 5. General budget level and special budget items (major equipment, travel, etc.):

 (A detailed budget is not required, but please provide general information about the institutions, personnel, students, and activities that will be supported as well as any major equipment or research infrastructure cost estimates. The maximum funding request per proposal is \$750,000. This amount is to be expended over a three-year period. All NASA EPSCoR monies must be matched 50% with non-federal monies. In-kind matches are allowable.)

24-Sep-2016

6. Tentative plan for securing non-federal matching funds (50% match requirement, \$375,000):

B. Project Description (limit three pages, single spaced, 1-inch margins, size 12 font)

Describe the science or engineering problem that would be addressed, the plan of attack, any special research methods, and the capability of the research team to accomplish the goals of the project.

(References Cited may be included and will not count toward the 3-page limit.)

C. Required Supplementary Information (limit responses to a few lines)

- 1. Are any of the investigators currently funded by NASA or NASA subcontractors and, if so, what is the relationship of that work to the proposed NASA EPSCoR project?
- 2. Are any aspects of the proposed research currently funded through other grants or contracts and, if so, what is the relationship of that work to the proposed NASA EPSCoR project?

(Specify the source of current funding [e.g., NSF, NSF EPSCoR, DoD, etc.], the nature of the currently funded research, and how additional funding from NASA EPSCoR would be used to modify the focus of the current work. Make sure the current project is properly cited in Section D, Current and Pending Support.)

- 3. What is the relevance of the proposed work to NASA? (See also Section F, Support Letter from NASA Contact.)
- 4. What is the relevance of the proposed work to the state of South Dakota (and potential synergy with other state or regional programs)?

(Cite any connection with state research or education priorities such as SURF, EROS, state research centers, new Ph.D. programs, etc. See also: "2020 Vision: The South Dakota Science and Innovation Strategy" http://sdepscor.org/2020vision/.)

5. What lasting contributions would be made to improve research infrastructure in South Dakota (training, collaborations, new equipment, new programs, etc.)?

24-Sep-2016 2

- 6. What is the potential for sustainability after the three-year period of the award? List any specific plans for obtaining further research funding or commercialization.
- 7. Identify any potential economic development or commercialization that might result from this work
- 8. Identify any industry partners and their role in the project (attach letter of support if available).
- 9. Identify any potential research or training collaborations with tribal colleges or other minority-serving institutions. (These may include institutions outside of South Dakota, although funds may not be transferred out of the state.)

D. Current and Pending Support for Research (no page limit)

Insert or attach an up-to-date list of <u>all</u> sources or research support, whether as PI, Co-I, or other funded participant. If applicant has no current support, indicate this below. <u>Preproposals without this information may be declined</u>. This is required for the PI and all Co-I's.

The following information is required (use attached template or NSF Current and Pending Support Form also acceptable):

- 1. Title of project
- 2. PI/PD on project, and your role if not PI/PD
- 3. Organization providing support (NSF, NSF EPSCoR, etc.)
- 4. Amount of award (if subaward or multi-investigator award, explain amount of support that you receive)
- 5. Period of support
- 6. Approximate effort committed to project (months/year)
- 7. Status (current/pending)

E. Biographical Information (no page limit)

Insert or attach an up-to-date curriculum vitae, including recent publications. <u>Limit two</u> pages per PI/Co-I). An NSF-style biographical sketch (2 pages) is acceptable.

24-Sep-2016 3

F. Support Letter from NASA Contact (no page limit)

Insert or attach a letter or e-mail from a NASA contact that demonstrates that the proposed project is aligned with NASA research priorities. A high level of interaction with NASA is recommended (exchange of materials, faculty/student use of NASA facilities, other visits to NASA Centers, etc.). Letters of support from industry partners should also be attached.

24-Sep-2016 4