NM EPSCOR SMART GRID CENTER
COLLABORATIVE INNOVATION WORKING GROUP (C-IWG)
2020 CALL FOR PROPOSALS
BEST CONSDIERATION DATE: March 15, 2021

OVERVIEW

The NM EPSCoR (Established Program to Stimulate Competitive Research) SMART Grid Center seeks applications for Collaborative Innovation Working Groups (C-IWGs). These awards primarily support groups of researchers (faculty, post-docs, and students), educators, and/or nationally recognized experts that seek to promote research innovation and integration in the area of smart grids, microgrids, cybersecurity, and cutting-edge research applications for advancing the country's electricity production and delivery system. In addition, C-IWGs can support training/learning activities in emerging smart grid–related areas and address core challenges of advancing and diversifying disciplines, workforce training, and industries related to the electricity sector. Any individual from a New Mexico academic institution or national laboratory may submit a proposal.

ABOUT THE NM SMART GRID CENTER

The NM SMART Grid Center seeks to design a future electricity grid that is resilient, economic, and environmentally sustainable. The project's approach is to establish the architecture, networking, and decision-support elements to evolve existing distribution feeders into interconnected Distribution Feeder Microgrids (DFMs). Focus disciplines include power engineering, controls theory, optimization, machine learning, data analytics, knowledge representation and reasoning, economics and relevant social sciences, opto-electronics, high-performance computing, communications theory, and cybersecurity. The project also encompasses significant elements of workforce development and inclusion of under-represented groups (e.g., women and under-represented minorities) in the above-listed disciplines. For more information, please visit http://www.nmepscor.org.

COLLABORATIVE INNOVATION WORKING GROUP (C-IWG) OBJECTIVES

C-IWGs provide a venue for researchers, educators, and nationally recognized experts to integrate disciplines, institutions, models, testbeds, and/or approaches to modernizing the electricity grid. Successful C-IWGs will result in innovative proposals to the National Science Foundation (NSF) or other agencies, publication of synthesis papers in peer-reviewed journals, valuable data products, or other *defined outputs* that are likely to increase knowledge in research areas relevant to the NM SMART Grid Center. C-IWG support is aimed at working groups that emphasize collaborative development and testing of important ideas and theories, cutting-edge analysis of recent or existing data and information, industry engagement in research, the use of sound science policy and management decisions, and investigation of social issues that pertain to electricity grid modernization and security. C-IWGs are not intended to fund the collection of new data.

ELIGIBILITY

Any individual from a New Mexico academic institution or national laboratory may submit a proposal; postdocs are encouraged to submit as a co-PI. Direct involvement in a NM EPSCoR–funded project is NOT a prerequisite for submitting a proposal.

FUNDING AMOUNT AND AWARD PERIOD

C-IWG funding includes reimbursement for actual travel and meeting costs, including meals, lodging, meeting space, and incidentals, using GSA rates (http://www.gsa.gov) and must not exceed $7,500. The C-IWG must be held within 6 months of the date of the award letter.

PROPOSAL GUIDELINES

C-IWG proposals should be question-driven and outcome-oriented, focusing on integrating disparate disciplines, facilities, and institutions working on aspects of smart grid development and deployment. **Outcomes of the C-IWG must be specified**. C-IWG funds cannot be used for proposal writing, but can be used to generate ideas that will be crafted into a competitive proposal in the future. If a proposal is an intended outcome, the program/agency to be targeted should be identified. Similarly, C-IWG proposals should specify journals targeted for publication outcomes. New collaborations with industry are an acceptable outcome, but the nature and extent of how the C-IWG will further this collaboration should be fully explained. Proposals should also include mechanisms for sharing what is learned during the C-IWG, including seminars, conference presentations, online materials, etc.

Working Groups of 8–12 individuals meeting for 2–3 days have been shown to be the most productive, though C-IWG proposals of shorter duration and varying participant levels (with commensurate budgets) will be considered. Proposals must include a diverse array of participants, balancing geographic, gender, and ethnic diversity as well as disciplinary area. **At least two New Mexico institutions must be represented and participation from three or more New Mexico institutions is encouraged.** Proposals that involve participants from New Mexico's primarily undergraduate institutions (i.e., four-year comprehensives or community colleges) and national laboratories are especially encouraged. C-IWG proposals that have *confirmed* participants are rated more highly.

It is recommended that the C-IWG be held off-campus. Field stations such as the Sevilleta have been effective IWG locations that minimize distractions and allow for a residential experience while keeping costs low. The proposal must include an anticipated date for the C-IWG, within 6 months of the date of the award, as well as a location. The proposer should contact the facility to determine availability and costs.

FORMAT OF PROPOSAL

Proposals must be submitted as a PDF file, using a standard font in 11 point or larger, with one-inch margins. A maximum of 5 pages, excluding any appendices, is allowed and must include the information below. Reviewers will not review materials that exceed the page limit.

Proposal Cover Page (1 page)	• Proposal Title • Lead Investigator, Co-Investigator(s), primary affiliation, and all contact information • Date of Submission and Total Amount Requested

Summary (0.5 page)	• Half-page summary statement (maximum of 200 words)
Project Description (2.5 pages max)	• Statement of C-IWG focus area/specific questions that will be addressed/key areas of integration • Proposed activities/draft agenda • Statement of expected outcomes, including specific grant programs, publications targeted, or data products • C-IWG convening dates and location • Participant names, roles, institutions, disciplines, and *whether they are confirmed* • Project management timetable including pre-meeting coordination, working group, post-meeting deliverables and responsible person(s) for each task
Budget with Justification (1 page)	• The proposal must include a one-page budget that does not exceed $7,500. C-IWGs do not support salary for participants, but could provide modest honoraria for some participants, such as meeting facilitators or distinguished speakers. • The budget may include expenses in the following categories: ***Travel*** o Airfare (number of individuals and location) o Mileage (number of individuals and location) o Ground Transportation (car rental, shuttle, etc.) ***Lodging*** o Location (number of individuals, daily rate, # days) ***Meals*** o Provided by location o Per diem (based on GSA rates) ***Meeting Facility Expenses*** o Meeting rooms (if not included in lodging expenses) o AV or other equipment o Note that the NM EPSCoR office can supply flip charts, markers, etc. at no charge ***Other expenses*** o Honoraria (identify individuals, role in meeting, organization and amount)
Appendix (not included in the 5 pages)	• Curriculum vitae of proposal lead in NSF Biosketch style (maximum 2 pages)

PAYMENT

No funds will be paid to the leader's organization/institution. The C-IWG organizer will work with a NM EPSCoR staff person to pay for the meeting venue and/or establish a contract for lodging; the NM EPSCoR office will pay these expenses directly. The NM EPSCoR State Office will reimburse participants for other travel expenses after the meeting.

REPORTING REQUIREMENTS

The C-IWG lead is required to submit a summary report of the C-IWG efforts and outcomes within one month of convening the meeting. The report should include the key discussion topics/activities and outcomes, a list of participants, and photographs from the meeting. In addition, participants are required to provide information requested by the NM EPSCoR External Evaluator (The Mark USA) and NM EPSCoR State Office needed for reporting to NSF. The C-IWG lead and all participants must provide the NM EPSCoR State Office information about proposal submissions, publications, and other presentations resulting from the C-IWG.

PROPOSAL REVIEW

The NM EPSCoR State Office will coordinate a review process with reviewers comprised of members of the staff, the NM SMART Center Management Team (not participating in the proposal), and additional external reviewers. Please see Appendix A for proposal review criteria.

PROPOSAL SUBMISSION

Proposals should be submitted electronically as a single complete document with any graphics embedded in the document. Submit the proposal document via the NM EPSCoR website at: https://www.nmepscor.org/collaborative-innovation-working-group

For best consideration, proposals should be submitted by **March 15, 2021**.

Proposers are encouraged to contact the New Mexico EPSCoR Associate Director with any questions:

Selena Connealy
connealy@epscor.unm.edu

APPENDIX A
NM EPSCoR C-IWG
Review Form

Project Title:
Lead Investigator:
Reviewer Name:
Review Date:

1. The proposal seeks to 1) promote research innovation and integration in the area of smart grids, microgrids, cybersecurity, and cutting-edge research applications for advancing the country's electricity production and delivery system **and/or** 2) support training/learning activities in emerging smart grid–related areas and address core challenges of advancing and diversifying disciplines, workforce training, and industries related to the electricity sector.

Not at all		Partially		Fully
1	2	3	4	5

Comments:

2. How likely does it seem that this C-IWG will result in defined outputs that increase knowledge, collaboration, or training in areas relevant to the NM SMART Grid Center (e.g., innovative proposals to NSF or other agencies, publications of synthesis papers in peer-reviewed journals, new collaborations with industry)?

Not at all		Partially		Fully
1	2	3	4	5

Comments:

3. There is sufficient commitment from participants to meet the C-IWG's specified outcomes:

Not at all		Partially		Fully
1	2	3	4	5

Comments:

4. There are two or more New Mexico institutions that will participate in the C-IWG and a diversity of participants listed (diversity defined as a range of participant seniority, sectors [e.g., academia, national labs, industry], gender/ethnicity/race):

Not Adequate Representation Partial Representation Fully Adequate Representation

1 2 3 4 5

5. The budget appears reasonable for the activities described:

Not at all Partially Fully

1 2 3 4 5

Comments:

Strengths of Proposal:

Weaknesses of Proposal:

Do you recommend that this proposal be funded?

Yes No

Explanation: