NREL
NATIONAL RENEWABLE ENERGY LABORATORY

Solar Resource Measurements in 1400 JR Lynch Street, Jackson, Mississippi

Cooperative Research and Development Final Report

CRADA Number: CRD-07-254

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Cooperative Research and Development Final Report

In accordance with Requirements set forth in Article XI.A(3) of the CRADA document, this document is the final CRADA report, including a list of Subject Inventions, to be forwarded to the Office of Science and Technical Information as part of the commitment to the public to demonstrate results of federally funded research.

CRADA Number: CRD-07-254

CRADA Title: Solar Resource Measurements in 1400 JR Lynch Street, Jackson, MS

Parties to the Agreement: Jackson State University

Joint Work Statement Funding Table showing DOE Commitment:

Estimated Costs	NREL Shared Resources
Year 1	$ 2,155.00
Year 2	$ 00.00
Year 3	$ 00.00
TOTALS	$ 2,155.00

Abstract of CRADA Work:

Site-specific, long-term, continuous, and high-resolution measurements of solar irradiance are important for developing renewable resource data. These data are used for several research and development activities consistent with the NREL mission:

- Equipment will be used by Jackson State University for solar radiation data monitoring. This is a continuing effort of the Historically Black Colleges and Universities Solar Measurement Network
- Provide high quality ground-truth data for satellite remote sensing validation
- Support development of radiative transfer models for estimating solar irradiance from available meteorological observations
- Provide solar resource information needed for technology deployment and operations.

Data acquired under this agreement will be available to the public through NREL's Measurement & Instrumentation Data Center (MIDC) (www.nrel.gov/midc) or the Renewable Resource Data Center (RReDC) (http://rredc.nrel.gov). The MIDC offers a variety of standard data display, access, and analysis tools designed to address the needs of a wide user audience (e.g., industry, academia, and government interests.

Summary of Research Results:

Beginning in 2007, Jackson State University collected solar resource measurements at their campus in Jackson, Mississippi, using equipment on loan from NREL. The equipment was also used for training on the operation and maintenance of solar radiometers. The resulting data were used for a variety of applications addressing solar energy conversion technology development. The cooperative agreement was also consistent with NREL's goal of developing an educated workforce to advance renewable energy

technologies. The measured solar irradiance data were never captured by NREL's MIDC due to a variety of techical issues. The now obsolete equipment has been abandoned in-place and continues to serve the needs of the university.

Subject Inventions Listing:

N/A

Report Date:

September 24, 2013

Responsible Technical Contact at Alliance/NREL:

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