

North Dakota Renewable Energy Program Status Report

Recipient: eSmart Systems US, Inc.

Contract Number: R-038-048

Report for time period of: March 1, 2019 – December 31, 2019

Description of Project

Please provide a brief description of the project:

The Fargo Smart Energy Ramp Project is designed to combine renewable energy with digital intelligence to maximize the value of renewable energy. In particular, the City of Fargo has a parking ramp at the Roberts Commons mixed use space where photovoltaics are supplying renewable energy that is being used with intelligent control of battery storage, electric vehicle charging and other controls to reduce both electricity costs and carbon footprint.

Project Tasks

Please describe the progress on all project tasks achieved during the reporting period:

We had some issues concerning finding the right type of battery storage system with which we could communicate. The issue was finally resolved. The equipment was re-specified and then purchased. An electrical contractor has been selected to install the equipment.

We note that the EV Charging equipment is not currently anticipated to be paid for in this project. Due to higher than expected costs on some equipment (e.g., Lighting controls) and extra labor (e.g., equipment specification), we applied to the North Dakota Department of Environmental Quality (ND DEQ) for funds to cover the EV Charging equipment. We have been notified that we were selected for an award – which would cover the cost of the EV Charging equipment.

Currently the total cost share of NDIC is not expected to change.

Deliverables

Please describe the progress on project deliverables, as stated in your contract, achieved during the reporting period:

- *Report on the final design and specification and installation of the Package:*
 - The equipment has been re-specified and purchased during this period.
- *Report on the selling of solar credits:*
 - No progress
- *Report on the operation of the package for 12 months, including information on the integration of current utility rates and potential real-time pricing rates that reflect MISO prices:*
 - No progress
- *Report on the evaluation of the Demonstration, including:*
 - *Workability of the approach.*
 - *Performance of components of the Package.*

- Electricity use impacts – peak kW demand, total kWh use, and hourly kWh use.
 - Utility cost savings.
 - Carbon impact.
 - Potential cost-effectiveness if this Package were included in the preliminary design phase building remodel or new construction.
 - o No progress.
- Guide for Smart Clean Energy Solutions in Commercial Facilities:
 - o No progress.

Expenditures

Please provide a breakdown of expenditures. Include all sources of match. Provide supporting documentation as a separate attachment.

Due to the change in equipment specs, the original equipment bid reported in the first status report was withdrawn. So below we provide a corrected Expenditure Report for Dec 15, 2018 to Feb 28, 2019 as well as the Expenditure Report for March 1, 2019 to December 31, 2019. The supporting documentation has been provided in a separate attachment.

EXPENDITURES FOR FIRST REPORTING PERIOD ONLY				
Project Expenses	NDIC	REP Recipient	Other Sponsor	Total
Hardware				\$0.00
Labor	\$54,601.45	\$0.00	\$23,000.00	\$77,601.45
Travel				\$0.00
License		\$50,000.00		\$50,000.00
Total	\$54,601.45	\$50,000.00	\$23,000.00	\$127,601.45
EXPENDITURES FOR THIS REPORTING PERIOD ONLY				
Project Expenses	NDIC	REP Recipient	Other Sponsor	Total
Hardware	\$134,092.23			\$134,092.23
Labor	\$50,398.55	\$73,351.45	\$62,530.00	\$186,280.00
Travel		\$4,307.03		\$4,307.03
License				\$0.00
Total	\$184,490.78	\$77,658.48	\$62,530.00	\$324,679.26
CUMULATIVE EXPENDITURES				
Project Expenses	NDIC	REP Recipient	Other Sponsor	Total
Hardware	\$134,092.23			\$134,092.23
Labor	\$105,000.00	\$73,351.45	\$85,530.00	\$263,881.45
Travel		\$4,307.03		\$4,307.03
License		\$50,000.00		\$50,000.00
Total	\$239,092.23	\$127,658.48	\$85,530.00	\$452,280.71