



**Texas Commission on Environmental Quality
New Technology Implementation Grant (NTIG) Program**

Implementation Phase Quarterly Project Status Report

Contract Number:	582-17-72096-2569		
Application Number:	2017-08-0006-NG		
Grantee:	Pedernales Electric Cooperative, Inc. (PEC)		
Physical Address of Project:	Johnson City Substation 201 Los Encinos Drive, Johnson City, TX 78636		
Report for the Quarterly period:	April 1, 2018 to June 30, 2018	Date Submitted:	July 3, 2018
Authorized Official/Project Representative Name:	James Spaulding		
Authorized Official/Project Representative Contact Details:	Email Address: James.Spaulding@peci.com	Phone Number: 830-868-6128	
Project Summary: (150 word max)	The Pedernales Energy Storage Automation & Management with Solar (PESAMS) project integrates a 2 MW / 4 MWh lithium-ion battery energy storage system (BESS) in Blanco County, Texas, near the newly installed Johnson City solar Photovoltaic array. The PESAMS project is a cost-effective, reliable, duplicable and scalable system design that will achieve reduced emissions, while providing economic and operational benefits to PEC members.		

Section I. Accomplishments

Provide a bulleted list of project accomplishments since the last report and identify the corresponding task (if applicable).

- **Competitive Procurement Process:** PEC has completed the competitive procurement process for BESS components and integration. Conducting the competitive procurement process relates to Task 3 – Conduct RFP Process for BESS. Task 3 has been completed. The published RFP was submitted to NITG grant administrators on July X, 2018.
- **Awardee Selected:** Resulting from the competitive procurement process, PEC has selected a vendor to provide hardware, software and integration service for the NITG project. Selecting a Contractor relates to Task 4 – Select BESS Integrator Awardee and Review Contracts for Acceptance. Task 4 has been completed.

- **ERCOT Interconnection Application:** PEC completed the interconnection application process with the grid operator - Electric Reliability Council of Texas (ERCOT) for the BESS. This relates to Task 7 – ERCOT Generation Interconnection. Task 7 is complete and concludes the following requirements:
 - Register a resource entity with ERCOT
 - Designate a Qualified Scheduling Entity (QSE)
 - Submit the technical requirements documentation to include:
 - Responsibilities for ERCOT Modeling
 - Responsibilities for Telemetry to ERCOT
 - An Interconnect Agreement between PEC and the Transmission Operator with communication and notification responsibilities clearly identified
 - Submission of a Resource Asset Registration Form (RARF) with ERCOT
 - Preliminary scheduling for unit commissioning and testing
- **QSE Coordination:** PEC has selected the Lower Colorado River Authority (LCRA) as the QSE. The QSE is required to submit offers to sell and/or bids to buy energy in the Day-Ahead Market and the Real-Time Market in ERCOT. PEC provided the following inputs to the QSE:
 - ERCOT RARF
 - Transformer Specifications
 - One-Line Diagram
 - CT/PT Specifications
 - Fiber to BESS
 - SCADA Specifications
- **Permitting:** No city, county or environmental permits were required for the project given the site location. Permits relate to Task 5 – Secure Necessary Permits to Install and Operate Project. Task 5 has been completed.
- **Full Notice to Proceed:** PEC received full notice to proceed (FNTP) on April 3, 2018 following completion of Task 1 and Task 2 during Q1/2018. PEC is now eligible to submit project costs for reimbursement.

List any invoices being submitted for reimbursement in reference to the project accomplishments listed above: (Add rows as necessary.)

- No invoices have been submitted during Q2/2018.

Section II. Problems/Solutions

Problem(s) Identified: Report anticipated or unanticipated problem(s) encountered and their effect on the progress of the project.

- PEC discovered significant gaps in performance guarantees and warranty representations during the contract negotiation process.

Proposed Solution(s): Report any possible solution(s) to the problem(s) identified above.

- PEC utilized a third-party consulting firm and attorney experienced in energy storage procurement management to cure gaps in contracting language to ensure proper safeguards for liability, performance and warranty.

Action(s) Conducted: Describe the action(s) taken to resolve the problem(s) identified above.

- Negotiations were conducted in good faith and contracts were revised to reflect the appropriate safeguards.

Describe results of these actions identified above.

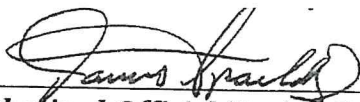
- PEC achieved the necessary contract revisions to eliminate unnecessary physical and financial project risk.

Section III. Goals and Issues for Upcoming Period

Provide a brief description of the goal(s) you hope to realize in the coming period and identify any notable challenges that can be foreseen:

- **Contract Execution:** The BESS contract is slated for executed during July 2018.
- **Project Engineering:** PEC will receive and review electrical and civil engineering design packages from the vendor.
- **Equipment Procurement:** Long-lead items will be ordered to ensure timely arrival for project installation.
- **Secure Permits:** Selected vendor will obtain any necessary city and county permits to perform site preparation and BESS installation.

The engineering phase make consume additional time depending on the frequency and magnitude of revisions. Procurement of batteries is subject to the manufacturer's current supply timeline and may be lengthy due to current demand in the industry.



Authorized Official/Project Representative's Signature

07/02/2018

Date

NOTE: *Please attach any additional information that you feel should be a part of your report or that may be required to meet the deliverable requirements for tasks completed during this reporting period.*

This form may be submitted via e-mail to your Grant Coordinator or a paper copy may be sent to the following address:

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Air Quality Division
Implementation Grants Section (NTIG), MC-204
P.O. Box 13087
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