

**Texas Commission on Environmental Quality
New Technology Implementation Grant (NTIG) Program
Quarterly Project Status Report**

Contract Number:	582-17-70806-2569	
Grantee:	The City of San Antonio, acting by and through City Public Service Board (CPS Energy)	
Report for the Monthly Period:	Q1 2017 (Jan-Mar 2017)	Date Submitted: April 04, 2017

Section I. Accomplishments

Provide a bulleted list of project accomplishments as well as a description of their importance to the project.

- **Final Location Selection.** CPS Energy has selected the final location for construction of the NTIG project shown in Figure 1. The project will use land and a building owned by Southwest Research Institute for the Solar PV (A. Yellow) and the Battery Energy Storage System (BESS) (B. Blue) located near a 138/35 kV substation (C. Red). The building is located at 9800 W. Commerce Street, San Antonio, Texas 78227.

Figure 1 - CPS Energy NTIG Project Final Location



The selected project location provides the following benefits:

- **Emission Reduction.** The project site enables the BESS to achieve the goals and purpose of the Texas Emissions Reduction Plan (TERP) and to meet the requirements of the New Technology Implementation Grant (NTIG).

- **Proximity to Substation.** The Solar PV and BESS are close to a dedicated substation and will utilize an existing transformer with spare capacity. The existing infrastructure and line distance minimizes interconnection-related expenses for the project.
 - **Accessibility.** CPS Energy anticipates the NTIG project to garner national attention and intends to use the site for education and research purposes. Locating the project within the metropolitan area and close to the airport will provide visitors ease of access.
 - **High Visibility.** The site provides a 360-degree view using surrounding roads.
 - **Support of Education.** The project will create awareness and support education for students, municipalities, utilities, government and energy professionals. The BESS will be housed indoors using a custom-built enclosure with large viewing windows. Graphics, monitors, interactive displays and exhibits will be incorporated to create a dynamic experience for visitors and partners.
- **Distribution-Connected Impact Analysis.** CPS Energy conducted technical studies to understand how operation of the solar and energy storage system may impact local distribution operations, and understand the envelope of operation that can be accommodated without creating local adverse effects. The impact analysis produced favorable results and concluded that the local distribution system can accommodate the proposed NTIG project without negatively impacting the feeders and without causing any reliability violations. Table 1 lists the tasks related to the distribution impact analysis.

Table 1 - CPS Energy Q1/2017 NTIG Project Distribution-Connected Solar and Storage Impact Study Tasks

Task	Status
Solar PV and Energy Storage Interconnection Screening Analysis	Completed 03/03/2017
Detailed Distribution-Level Analysis and Control Study	Completed 03/23/2017

- **Environmental Surveys and Permitting.** CPS Energy is required to comply with all environmental and regulatory requirements associated with its construction activities. Table 2 shows the environmental survey and permitting project site tasks completed by CPS Energy during Q1/2017. All project site feasibility studies and services were contracted with local firms.

Table 2 - CPS Energy Q1/2017 NTIG Project Environmental Survey and Permitting Tasks

Task	Status
Asbestos-Containing Material / Lead-Based Paint Survey	Completed 03/09/2017
Phase 1 Environmental Site Assessment (ESA) and Drinking Water Sampling	Completed 03/23/2017
Habitat Evaluation / Karst Survey	Completed 03/27/2017
Wetlands / Jurisdictional Waters Determination	Completed 03/27/2017

- **Request for Proposals (RFP).** On January 13, 2017, CPS Energy issued a Request for Proposals (RFP) from experienced companies to engineer, design, procure, install, test and commission the BESS. Table 3 shows the procurement activities completed by CPS Energy during Q1/2017.

Table 3 - CPS Energy Q1/2017 NTIG Project Procurement Tasks

Task	Status
RFP Issuance	Completed 01/13/2017
Respondent Proposals Received	Completed 03/03/2017
Respondent Shortlist and Interviews	In Process, Scheduled for Completion on 4/07/2017

Indicate which part of the Grant Activities, as defined in the grant agreement, the above accomplishments are related to:

- Table 4 defines how the Q1/2017 grant activities relate to the grant agreement tasks.

Table 4 - Grant Activity Task Association

Grant Activity	Related to Task
Final Location Selection	Task 1
Distribution-Connected Impact Analysis	Task 1
Environmental Surveys & Permitting	Task 2
Procurement Process	Task 2

Section II. Problems / Solutions

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

- In the NTIG application, CPS Energy proposed to break ground in October 2016 and complete installation by September 2017. The project start date was slightly postponed accommodating the delayed receipt of the grant award contract from the TCEQ.
- In the NTIG application, CPS Energy proposed installation of the project at the Alamo 1 solar facility (40 MW), but the project was switched to the SwRI project site. The negotiation of the term sheet with SwRI also contributed to postponing the project start date.

Proposed Solution(s): Report any possible solution(s) to the problem(s) that were considered / encountered

- Minor delays due to TCEQ contract delivery were insignificant and addressed through basic communication and administrative procedures.
- The location change increased visibility and accessibility (discussed on page one – Final Location Selection).

Action(s) Conducted and Results: Describe the action(s) taken to resolve the problem(s) and effect(s) had

- No substantial action was required to address the issues.

Section III. Goals and Issues for Succeeding 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

- **Procurement Process Continuation and Completion.** CPS Energy will complete the remaining procurement process tasks shown in Table 5 according to the schedule provided in the RFP. Most notably, CPS Energy will select a winning respondent to construct the NTIG project. Additional time has been allocated to accommodate contract negotiations.

Table 5 - CPS Energy Q2/2017 NTIG Project Procurement Tasks

Task	Status
Respondent Shortlist and Interviews	Pending, Scheduled for Completion on 4/07/2017
Contract Negotiations	Pending, Scheduled for Completion by 05/05/2017
Contract Execution	Pending, Scheduled for Completion by 05/30/2017
Factory Acceptance Tests	Pending, Scheduled for Completion by 10/13/2017
Complete Construction	Pending, Scheduled for Completion by 11/10/2017
Site Acceptance Test	Pending, Scheduled for Completion by 11/17/2017
ERCOT Qualification	Pending, Scheduled for Completion by 11/21/2017
Commission	Pending, Scheduled for Completion by 12/01/2017

- **Preliminary Engineering.** CPS Energy will begin preliminary engineering and site plan work in preparation for construction of the BESS. CPS Energy will coordinate scheduling, scope of work, budget and responsibility for interconnection services including metering, communications, SCADA, site security and accessibility.


 Authorized Project Representative's Signature

Date: 4/4/17

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