



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

Implementation Quarterly Report Form

Contract Number: 582-21-23793-NG	Grantee Name: Nelson Gardens Energy, LLC
Report for Quarterly Period: 07/01/21 to 09/30/21	Physical Project Address: 8963 Nelson Road, San Antonio 78252
Date Submitted: 10/08/21	Project Representative Name: W. Gary Craig
Project Representative E-mail: gcraig@edgewater.net.com	Project Representative Phone Number: (315) 471-4420 x 170, (315) 415-3349 (preferred)

Project Summary (150 words or less): The project located at 8963 Nelson Road, San Antonio, Texas involves the design and installation of a hybrid system of landfill gas-to-energy, solar energy, and flow battery storage on a closed landfill through integration of approximately 5.81 MW gross of DC solar generation together with 13 vanadium flow batteries totaling approximately 1.014 MW without exceeding the Energy Reliability Council of Texas (“ERCOT”) and CPS Energy Power Purchase Agreement (“PPA”) requirements for the Nelson Gardens Landfill on which 4.236 MW AC of landfill gas fueled generation exists on a 13.2 kV interconnect.

Only solar energy generated on-site will charge the batteries. Stored solar energy will be sold to CPS Energy through the 13.2 kV interconnect for their use in time-of-day shifting of the renewable energy as well as for frequency modulation when, and, if required.

The PERFORMING PARTY is Nelson Gardens Energy, LLC (“NGE”).

Section I. Project Progress

A. Indicate which Tasks, as defined in the Grant Contract Scope of Work, are currently in

progress. Describe any challenges encountered during the completion of these Tasks. Discuss plans or actions taken to resolve them.

Task 1: Secure Rights to Location

Subtask 2.1.1 NGE and the City of San Antonio already have an existing Lease (“Lease”) in place that has been effective since April 1, 2014. The existing Lease provides for the opportunity to install solar energy at the landfill using agreement(s) under similar terms and conditions as the existing Lease.

NGE and the City are mediating the terms of other solar leases and have not specifically discussed this project. See Section II at Subtask 2.1.1 for the next steps in this project which is below the size thresholds known to be objectional to the City.

Task 2: Secure All Necessary Permits to Install and Operate Project

Subtask 2.2.1 NGE has not yet provided its consultant team with all the information needed to modify the Subchapter T application for City signature before submission to TCEQ. Completion of Subtask 2.3 (below) should allow this subtask to proceed.

Task 3: Specific Project Site Preparation

Subtask 2.3.1 NGE has not completed revision to the solar layout as a result of 1) using only Hill C at the Nelson Gardens Landfill as the solar site and 2) increased capacity of solar modules (panels) available for project use. There are no known challenges to completing this subtask.

Task 4: ERCOT Power Interconnection and Feeders

No work performed in this quarter.

Task 5: Equipment Purchase and Installation

No work performed in this quarter except for discussions with battery vendor on handling of future publicity.

Task 6: Relay Testing

No work performed in this quarter.

Task 7: Implementation Reporting

Subtask 2.7.2 NGE has adapted the TCEQ quarterly report templates for NGE’s use beginning with this first quarterly report. Reporting due dates have been

calendarized.

- B. Indicate which Tasks have been completed and any associated accomplishments to date. Describe any challenges encountered during the completion of these Tasks. Discuss actions taken to resolve them.

Of the Section A tasks described above, only the setup portion of Subtask 2.7.2 has been completed.

Task 2: Secure All Necessary Permits to Install and Operate Project

Subtask 2.2.1 Due to current ERCOT protocols for distributed circuits, the existing landfill gas generation capacity and the generation capacity of the solar system that will power the batteries, cannot exceed 10 MW AC. As a result, a solar lease for up to 5.76 MW AC will have to be prepared under similar terms and conditions as the existing landfill gas Lease.

Nelson Gardens Energy, LLC has been pursuing solar leases for a larger capacity with the City of San Antonio, but so little progress has been made that the parties entered into mediation to resolve their differences with the larger capacity leases having no PPA in place. This project will utilize the existing PPA that will have to be amended or revised to incorporate stored solar energy. The impact of Winter Storm Uri could offset CPS's ability to respond to PPA revisions.

Section II. Goals for Upcoming Period

- A. Provide a brief description of the Tasks and/or other project goals you hope to realize in the coming period and identify any notable challenges that can be foreseen.

Task 1: Secure Rights to Location

Subtask 2.1.1 Prepare and send to City a project specific solar lease draft prepared per the requirements of the existing Lease.

Task 2: Secure All Necessary Permits to Install and Operate Project

Subtask 2.2.1 Complete the markup of the changes needed for the revised TCEQ Subchapter T application.

Task 3: Specific Project Site Preparation

Subtask 2.3.1 Complete revisions to the site layout for use in Subtask 2.2.1 and other subtasks.

Authorized Official/ Project Representative's Printed Name

W. Gary Craig

Authorized Official Signature/ Project Representative's Signature

Date



10/8/2021

Note: Please attach any additional information that you feel should be a part of your report.

This form may be submitted via e-mail to your Grant Manager at terp@tceq.texas.gov.