



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: 10/01/21 to 01/03/2022	Physical Project Address: 8963 Nelson Road, San Antonio 78252
Date Submitted: 01/07/22 Revised 2/28/2022	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.

As a result of revisions made by ERCOT in revising and reorganizing Section 5 of its protocols which includes PGRR082 and PGRR085 which were released on December 17, 2021, NGE must modify its previous Lease notices submitted to the City of San Antonio since the revised ERCOT protocols affect the previous notices sent to the City as part of the NGE Lease with the City of San Antonio. Previously Section 5 of the ERCOT planning did not apply to projects less than 10 MW in size.

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. As a result of the ERCOT change in protocol and the need to send a different notice to the City of San Antonio under its Lease, NGE cannot provide its consultant team with the information necessary to modify the Subchapter T application until the specific area to be used for the installation for the solar facilities is resolved with the City of San Antonio. Note: As a result of the particulars of ERCOT protocols PGRR082 and PGRR085, both NGE and the City of San Antonio might find the use of Hill A to be a better location for both parties for the solar facilities, instead of Hill C as originally intended, now that ERCOT has clarified its protocols. Completion of Subtask 2.3.1 (below) should allow this subtask to proceed.

Task 3: Specific Project Site Preparation

Once the site is determined, NGE can complete revisions to the solar layout as a result of increased capacity of solar modules (panels) available for project use. There are no known challenges to completing this portion of Subtask 2.3.1.

Subtask 2.3.1. NGE may need to revise the solar layout as a result of a portion of the Nelson Gardens Landfill other than Hill C being the solar site and increased capacity of solar modules (panels) available for project use. NGE and the City of San Antonio deciding that this portion of the Subtask 2.3.1 depends on NGE and the City of San Antonio agreeing on what portion of the Nelson Gardens Landfill should be used for this solar project.

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

Reporting due dates have been calendarized. NGE submitted the first quarterly report to TCEQ on October 8, 2021. The second quarterly report was submitted on January 7, 2022 and revised on February 28, 2022.

- 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 revisions in the ERCOT protocols for distributed circuits, the combined nameplate capacities of 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 or the existing Lease will have to be amended.

NGE is now pursuing with the City of San Antonio a revised solar proposal to install solar under the current Lease with the City of San Antonio for a solar layout that has been modified to meet the recently clarified ERCOT Section 5 protocols.

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. Several written communication attempts with CPS regarding PPA revisions to incorporate the solar storage have not been responded to by anyone at CPS.

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 revised project specific solar lease draft prepared per the requirements of the existing Lease and the recent ERCOT protocol revisions.

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 in the event that revisions are needed.

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

2/28/2022

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.