
Energizing Rural Communities Prize

- **Title**

“The Vieques Emergency Operations Solar Farm & David Sanes-Rodriguez Memorial Project”

In honor of the late David Sanes, whose passing served as a unifying force for the local community, rallying them towards achieving peace on the island.

- **Competitor name**

David Sanes Partnership

- **Organization (name, contact information, web link, 9-digit zip code)**

-Name: Solar Doctor Online & Quest Power International

-Contact: Patricia Arauz-Corrow

-Patricia.arauz@questpowerintl.com /

-407-808-8077

-<http://solardoctor.solar/>

-9-digit zip code: 00765-4023

- **Location of primary benefits:**

Vieques, PR 00765-3106

Vieques, officially known as Isla de Vieques, is an island and municipality situated 8 miles east of the Puerto Rican mainland. Spanning approximately 20 miles in length and 4.5 miles in width, it is home to an estimated population of 8,043 individuals, residing in around 2,374 households, according to the latest available data from the US Census in 2022. Notably, a significant portion of the population, reported unofficially as 65% but officially at 53.2%, is living below the poverty line.

Following the withdrawal of the Navy from Vieques in May 2003, a considerable portion of the island was designated as a National Wildlife Refuge, falling under the jurisdiction of the United States Fish and Wildlife Service. Additionally, Vieques was included on the National Priorities List (NPL), which encompasses hazardous waste sites in the United States eligible for long-term remedial action funded through the federal Superfund

program. Prior to Hurricane Maria, the Roosevelt Roads Naval Station had also been reopened.

Given its geographical location, Vieques is susceptible to the impacts of hurricanes. The combination of these factors, including its designation as a wildlife refuge, its presence on the NPL, and its vulnerability to natural disasters, contributes to Vieques being categorized as a rural or remote and underserved community.



Fig 1 Vieques, PR

● Short description of proposed plan, activities, and use of the prize funds

The David Sanes Partnership's mission is to build a permanent emergency power system to power the core infrastructure, government, and essential services (future hospital, police, etc.) on the island of Vieques in the event of catastrophic power separation from the main power grid of Puerto Rico's main island. During non-emergency times the solar farm will supplement the grid, providing up to 12 carbon-free megawatts of power daily, and stabilize power fluctuations caused by the long line feeding power to Vieques. Our proposed solution does not rely on the delivery of fossil fuel from the main island (limited support or access during emergencies), or

many man hours of labor to keep active, high cost of maintenance, exhaust emissions, or noise pollution.

The proposed plan includes the construction of a 2.4 MW solar microgrid to support emergency operations as well as two cell towers, keeping vital communications and weather data flowing, and power to the propane yard and one gas station. This facilitates resident power generation, mobility, and calling for help.

The grant funds will provide a significant boost to our project, allowing us to dedicate more manpower and resources towards bringing it closer to reality. A portion of the funds will be allocated to initiate on-the-job training programs for new technicians, addressing the community's pressing needs. Currently, there is a shortage of skilled technicians within the community to meet the demand. Through the "earn as you learn" approach, we aim to train and develop new technicians who can not only address the immediate needs but also contribute to the implementation of the Solar Farm.

Moreover, a portion of the funds will be utilized to engage engineering support from experienced professionals, such as the engineers at Lord Construction Group and those who have successfully worked on the Humacao project. Collaborating with them, our team will work on the initial details and designs, laying the groundwork for negotiations with the Puerto Rico Electric Power Authority.

The infusion of financial support from this grant will be transformative, bringing us closer to turning the Solar Farm from a mere dream into a reality for this small community. It opens opportunities and propels us forward, enabling us to make significant progress in our pursuit of sustainable energy solutions.

The Solar Farm in memory of David Sanes (David Sanes Memorial Project) is an energetic tribute to the life sacrificed that delivered peace to Vieques.

● **Link to the 3-minute, online video pitch**

https://youtu.be/i_MH41iREYU

● Project members (names and high-level backgrounds of team members)

1. Project Designer, Technical Manager – Team Lead

Chase J. Jazzborne – Master Tech Services / Experience: 40 years.

Originally from San Diego, California, Chase has been debugging and enhancing the solar designs of many projects since the early 1980's. His online presence: "The Solar Doctor Online - Since 1994" has been a formerly active consulting channel for industry professionals and DIY solar installers. He is hands-on with research and development of new equipment designs and assists in industry testing. His experience and skillset are diverse and has a working background with power utility design, operations, and emergency management. Combining his background in utility Distribution Operations and Power Control with his solid solar upbringing, makes him the idea candidate for the technical administration for this project's technical goals.

Past experience includes, but it is not limited to: Master Technician & Systems Designer, Aircraft Builder & Mechanic, Field Troubleshooting Engineer and Troubleshooting Electrician, Power Dispatcher for companies such San Diego Gas & Electric, ARIA Services, TigerCopter, and most recently Master Tech Services (owner) to name a few.

2. Project Administrative Manager

Patricia Arauz-Corrow, PMP – Quest Power Intl, llc / Experience: 23 years.

Patricia, the founder of Quest Power International, LLC (QPI), is dedicated to delivering tailored and personalized power generation solutions. Her utmost focus lies in providing streamlined customer service with rapid response times. With over 23 years of experience in the power generation industry, Patricia has a diverse background that includes providing technical and project management support to the U.S. Space Program at Kennedy Space Center. She has also worked for Siemens Energy Inc., developing power plant solutions for customers in South America and England. Patricia's qualifications include a Mechanical Engineering degree, a Master's in Management of Technology, and certification as a Project Management Professional (PMP) from the Project Management Institute.

3. Project Administrative Support

Luz D. Sanes-Guzman – Experience: 33 years.

Luz is a native to Vieques. Her role has been one of an Administrative Assistant and Bookkeeper for a few of the largest companies in Vieques. Her strength is a

genius level way of working with numbers and is probably the strongest auditor we know. Her attention to fine detail and astounding memory makes her a blessing to add to any venture and she is respected and well compensated by those her enjoy the benefits of her work.

4. Vieques Project Forman / Technical Translator
Raymond De La Cruz – Experience: 25 years

Originally from New York City, Ray started out as an assistant for Chase with local solar installations on Vieques, but quickly developed his own “island presence” having a solid background and exceptional construction skillset. Ray was a Foreman for a rather prestigious Manhattan contractor for many years. He relocated to Vieques for the sake of his children growing up in a clean environment.

• Other partners

1. Jose Corcino Acevedo
Mayor, Vieques Municipality