Puerto Rico
Electric Power
Authority

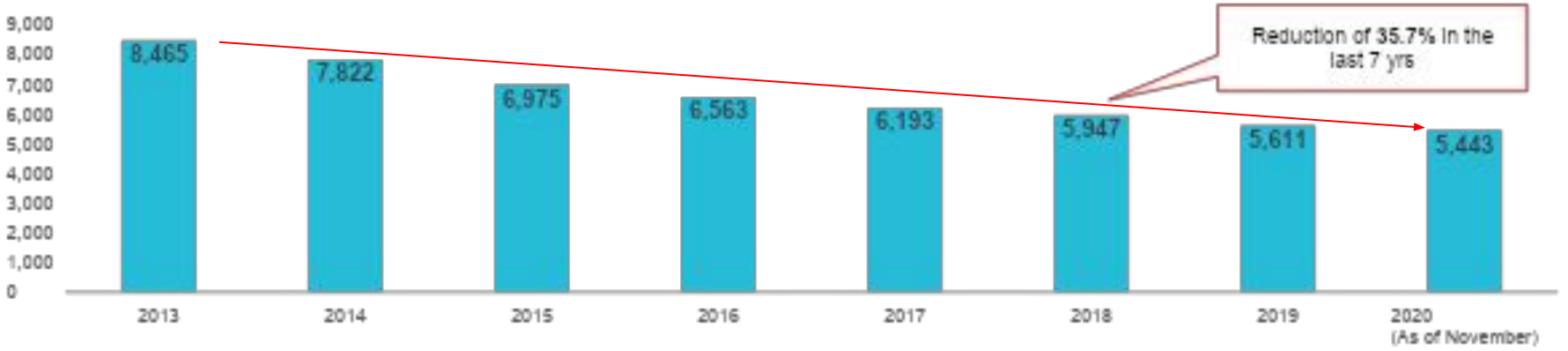
THE ISLAND RESILIENCY ACTION CHALLENGE

Caribbean Renewable Energy Forum (CREF)
December 17, 2020

Introduction

The Puerto Rico Electric Power Authority (PREPA) faces an unprecedented level of employee attrition. Impacts are felt across the island in the form of workforce shortage, increased competition to attract talent and retain employees, and lack of training or technical experience.

PREPA Employees (2013 - 2020 YTD)



What are the issues?

Skills Gaps

Skills in energy efficiency, renewable energy, and Smart Grid design and implementation will be increasingly important, but difficult to find

Generational Differences

Challenges in managing the different work styles, expectations, and interactions among the different generations (e.g., Baby Boomers, Gen X, Millennials, etc.)

Operational Challenges

Lack of knowledge documentation, insufficient workforce planning procedures, and reduced training budgets due to cost containment activities

Supply and Demand

Difficulties to replace retirees and attract new employees needed to build a 21st century infrastructure and system operations

PREPA is not the only Caribbean utility experiencing this challenge!

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Root Causes

The economic downturn and financial difficulties (e.g., bankruptcy) has resulted in many workers retiring early or seeking opportunities in the US mainland or other more stable regions

Changes in technology are driving the need for new knowledge, skills, and abilities to address more complex systems and grid modernization. Demand for workers with this type of experience is high, creating additional labor challenges for the region

For many of us, the island environment results in a limited local talent pool, lower pay, inadequate career growth opportunities, lack of diversity, and little regional recruitment and talent development approaches

Limited electric industry training programs (local or regional) and the amount of time required to train new workers hinders ability to deploy the necessary resources to execute the work safely and at reasonable cost

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Key Obstacles and Our Role to Play

Key Obstacles		What can we do about it?
Regional Collaboration 	*Limited coordination between sister Caribbean utilities to develop baseline codes and standards, share training facilities, provide engineering resources, leverage contractor pool, and improve supply chain logistics*	▪ Promote collaboration among sister utilities to develop consistency around utility codes and standards, training curricula, and safety practices ▪ Work with local and regional policy makers to establish partnerships and exchange opportunities with different training programs and educational institutions ▪ Promote services, competencies, and availability of contractor pool across the region ▪ Identify and develop non-traditional methods to find and assess talent ▪ Determine standard set of competencies and skills needed for the future and identify unique ones for each jurisdiction ▪ Establish meaningful relationships to share best practices, leadership philosophies, marketing approaches, and more
Laws and Regulations 	*Immigration laws and local or regional regulations make it difficult to leverage resources across the region, transport goods (e.g., Jones Act), and hire permanent workers*	
Training Programs 	*Limited access to training facilities, apprenticeship programs, community college partnerships, and development of standardize safety practices has shrunk the pool of available workers and resulted in a lack of uniformity of standards and curricula*	
Talent and Cost 	*Lack of awareness with younger generations and ability to attract talent while competing with other industries has resulted in difficulties to identify, recruit, and retain a competent workforce at a reasonable cost*	

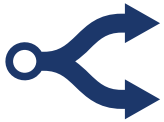
Benefits

Grid transformation efforts in Puerto Rico and across the Caribbean will not be achieved unless the right resources are in place to execute on this vision and the right skills sets have been developed to operate and maintain the grid of the future. Embracing a regional collaborative approach to this issue could provide an avenue to improve resiliency, reduce cost, deploy 21st century technology, and develop centers of expertise.

Resiliency – **Improve response** and **recovery time** associated with largescale **disaster recovery efforts** by collaborating with nearby utilities, sharing best practices, and leveraging utility resources through possible agreements

Cost Savings – **Reduce labor costs** and **create cost advantages** within the Caribbean by having additional labor pool to select from, developing partnerships, and achieving possible economies of scale

Execution – Ensure the **right resources** with the **necessary qualifications** are available to support the deployment of **new technology** and **large construction projects** across the region



Center of Excellence – Create an avenue for **thought leadership** and **expertise** across the islands to communicate, share best practices, and research new technologies for deployment and operations

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Final Statement

The most urgent obstacle to greater energy resiliency for islands is:

*"The **lack of adequate resources and talent** in place to **manage the execution** of utility infrastructure investments across the region at a **reasonable cost** while promoting the **economic well being** and **intellectual capital** of the **region**"*

"To win the marketplace you must first win the workplace"

- Doug Conant, Retired President and CEO of the Campbell Soup

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