

AES Corporation – A CLEAN Program Brief

The unleashing of wholesale distributed generation in key market segments

Overview

The AES Corporation is a Fortune 200 global energy company with operations in 17 countries spanning four continents. AES companies are organized into six market oriented strategic business units worldwide.

AES' United States Strategic Business Unit is comprised of 10 businesses in the United States, including AES Distributed Energy. To date, the AES Distributed Energy generation portfolio includes more than 725 megawatts (MW) of wind, 80 MW of energy storage, and approximately 200 MW of solar photovoltaic (PV) systems. AES Distributed Energy brings reliable and economical distributed energy systems to schools, municipalities, utilities, corporations, and commercial and industrial (C&I) clients.

AES Distributed Energy is unleashing wholesale distributed generation (WDG) nationwide. It works in partnership with engineering, procurement, and construction (EPC) contractors, equipment manufacturers, and project financiers to develop WDG solar PV solutions that require no upfront capital.

Through work with utilities like Georgia Power, AES Distributed Energy is focused on the WDG market segment that allows for 100% of the energy to be sold to the utility on a wholesale basis — rather than reducing behind-the-meter load to offset retail energy purchases.

Project Sector Details

AES Distributed Energy builds reliable, affordable, and turnkey commercial and utility scale WDG solar projects. They develop, own, and operate WDG solar PV projects for customers in the following sectors: government and municipalities, schools and universities, C&I, and utilities.

Government & Municipalities

Village of Waterbury, Vermont

Completion date: December 2014

Project size (DC): 667.92 kW

Number of sites: 1

System type: Ground mount

Contract duration: 20-year PPA

Town of Barre, Vermont

Completion date: December 2014

Project size (DC): 667.92 kW

Number of sites: 1

System type: Ground mount

Contract duration: 20-year PPA

Rosamond Community Services

District, California

Completion date: May 2015
Project size (DC): 453 kW
Number of sites: 3
System type: Tracking ground mount
Contract duration: 20-year PPA

Town of Chelmsford, Massachusetts

Completion Date: November 2013
Project size (DC): 5,951 kW
Number of sites: 1
System type: Fixed ground mount
Contract duration: 20-year PPA

Town of Scituate, Massachusetts

Completion date: October 2013
Project size (DC): 2,995 kW
Number of sites: 1
System type: Ballasted ground mount
Contract duration: 20-year PPA

Contra Costa County, California

Completion Date: December 2012
Project size (DC): 2.2 MW
Number of sites: 12
System types: Rooftop, single-axis trackers, and carport
Contract duration: 20-year PPA

Colorado Department of Corrections

Completion date: January 2011
Project size (DC): 389 kW
Number of sites: 4
System type: Fixed tilt ground mount
Contract duration: 20-year PPA

County of Pueblo, Colorado

Completion date: December 2010
Project size (DC): 727kW
Number of sites: 10
System types: Rooftop and carport
Contract duration: 20-year PPA

City of Denver, Colorado

Completion date: December 2010
Project size (DC): 945 kW
Number of sites: 13
System type: Rooftop
Contract duration: 20-year PPA

City of Lafayette, Colorado

Completion date: December 2009
Project size (DC): 357 kW
Number of sites: 4
System types: Rooftop and ground mount
Contract duration: 20-year PPA

Schools & Universities

Green Mountain College, Vermont

Completion date: December 2014
Project size (DC): 667.92 kW
Number of sites: 1
System type: rooftop
Contract duration: 20-year PPA

**Bridgeport Unified School District,
Bridgeport, Connecticut**

Completion date: December 2013
Project size (DC): 306.36 kW
Number of sites: 2
System type: Rooftop
Contract duration: 20-year PPA

San Diego Unified School District

Completion Date: July 2013
Project size (DC): 3 MW
Number of sites: 31
System type: Rooftop
Contract duration: 20-year PPA

**Paradise Valley Unified School District,
Phoenix, Arizona**

Completion date: May 2013
Project size (DC): 11.8 MW

Number of sites: 25
System types: Rooftop and carport
Contract duration: 20-year PPA

University of California Davis
Completion date: December 2011
Project size (DC): 756.52 kW
Number of sites: 7
System types: Rooftop and ground mount
Contract duration: 20-year PPA

Arizona Western College
Completion date: December 2011
Project size (DC): 5 MW
Number of systems: 5
System types: Single-axis trackers, dual-axis trackers
Contract duration: 20-year PPA

Denver Public School District
Completion Date: December 2010
Project size (DC): 1.19 MW
Number of sites: 12
System type: Rooftop
Contract duration: 20-year PPA

Colorado University Real Estate Foundation
Completion Date: December 2009
Project size (DC): 340 kW
Number of sites: 2
System type: Rooftop

Contract duration: 20-year PPA

Commercial & Industrial

Solar Access California (SACA)
Completion date: August 2013
Project size (DC): 554 kW
Number of Sites: 14
System types: Rooftop and carport
Contract duration: 20-year PPA

Utilities

Georgia Power
Completion date: April 2015
Project size (DC): 4.4 MW
Number of sites: 1
System type: Tracking ground mount
Contract duration: 20-year PPA

USVI Solar I, St. Thomas
Completion date: February 2015
Project size (DC): 5 MW
Number of sites: 1
System type: Ground mount
Contract duration: 20-year PPA

Hudson Light and Power Department, Stow, Massachusetts
Completion date: December 2013
Project size (DC): 2,515 kW
Number of sites: 1
System types: Fixed ground mount
Contract duration: 20-year PPA

Utility Highlight

AES Distributed Energy brings cost-effective WDG energy systems to multiple sectors

AES Distributed Energy received the 2014 “Photovoltaic Project of Distinction” award from the Solar Energy Industries Association and the Solar Electric Power Association for their 3 MW project in the Town of Scituate in Massachusetts. This prestigious award is noteworthy

recognition within the utility industry sector. The town buys all the power produced from the system, which is able to provide clean energy for Scituate's emergency facilities, streetlights, schools, and more.

AES Distributed Energy has emerged as a national leader in the clean energy sector and is poised for continued growth due to ample solar resources and their support of CLEAN (Clean Local Energy Accessible Now) programs. CLEAN programs are designed to make it easier to build clean local energy projects, connect them to the grid, and establish long-term contracts to sell the power produced to utilities. Additionally, AES Distributed Energy's projects help drive the deployment of WDG renewable energy projects to targeted locations on the grid.

AES Distributed Energy was one of the first independent power producers in the United States and helped to construct the now ubiquitous PPA. They have financed over \$20 billion in the past five years and have broad access to global capital markets to offer efficient project financing structures.

AES Distributed Energy's financing program is very simplified and deserves to be highlighted for the following three reasons:

- No capital outlay is required
- PPA pricing is set to achieve immediate and long term savings
- Achievement of cost-effective sustainability objectives is the key focus

AES Distributed Energy continues to demonstrate and prove the value in developing, owning, and operating turnkey WDG solar projects. With more than a decade of solar PV development and operating experience, AES Distributed Energy has successfully negotiated and executed PPAs, and similar financial instruments for their customers. They offer a variety of financing solutions that address a wide range of PV projects that may be early-stage, shovel ready or in operation.

AES Distributed Energy is worthy of praise and recognition as they offer unfailing, cost-effective and turnkey WDG renewable energy ventures to key business and economic sectors in the United States.

Lessons Learned

AES Distributed Energy understands that WDG is the wave of the future. The company has learned that it makes sound business sense to develop, own, and operate WDG solar projects — allowing it to bring reliable and affordable solar power to schools, municipalities, utilities, and private-sector commercial entities.

AES Distributed Energy is increasing its work with investor owned utilities, and most recently partnered with Georgia Power. The company is in the process of constructing two commercial-scale WDG solar projects for Georgia Power. These projects are expected to

supply 20 MW to the utility's grid by the second half of 2016. Georgia Power, a subsidiary of Southern Company, will purchase 100% of the energy production from both projects from AES Distributed Energy under 20-year contracts. These projects will support Georgia Power's Advanced Solar Initiative, which is bringing large amounts of renewable energy online with no upward impact on electric rates.

AES Distributed Energy is becoming a leader in the utility-scale and commercial-scale WDG sector in the United States — expanding deployment of WDG projects by offering streamlined procurement through standard offer pricing mechanisms and contracts. The Clean Coalition continues to support local commercial-scale WDG and is thrilled with the success AES Distributed Energy has achieved with its projects around the country.

References

AES Corporation. [2014 Sustainability Report](#).

AES Distributed Energy. [AES Distributed Energy Fact Sheet](#).

AES Distributed Energy. [AES Distributed Energy Website](#).