Top 5 Reasons Hybrid Power Plants Are Growing

Overview

Hybrid power plants generally consist of solar, wind, or other renewable energy generation sources co-located with energy storage facilities. At the end of 2021, there were more than 8,000 MW of wind or solar generation connected to storage. Nationwide, hybrid projects make up 32% of all planned capacity and 90% of that is solar + storage.



1

Growing Interest in Hybrid Power Plants Nationwide

- Falling battery prices/growth of renewables is driving interest
- 133% increase in operational capacity from 2020 to 2021
- 286+ GW of solar + storage projects proposed in the U.S.



2

Solar + Storage Hybrids Prices are Dropping Nationwide

- 2017 PPA Prices = \$40-\$95 per MWh-PV
- 2021 PPA Prices = \$30-\$75 per MWh-PV



3

Tax Credits and Other Benefits are Driving Solar Hybrid Plants

- Hybrid plants can benefit from construction cost savings and tax credits
- Developing and siting renewables and battery storage projects together is cost-effective



4

Hybrid Power Plants Create "Mini-Grids" in Remote Locations

 Hybrids act as stand alone power systems to generate, store and provide clean energy in locations that lack infrastructure and have limited access to the electric grid



5

Where next? Priority Areas for Hybrid Power Research

 Ongoing work and research are focused on developing rules and establishing how best to value hybrid resources in the marketplace



American Clean Power, https://cleanpoweriq.cleanpower.org/app/, 2021 Annual Report