

PROJECT SPOTLIGHT

Energy Storage Used
in Place of Traditional
Infrastructure on the
Distribution Grid



Punkin Center, Arizona, United States



This is the type of project that APS has been working towards for a long time...Our company is looking at how we can provide the greatest benefit for customers, while also laying the foundation for a sustainable approach to battery storage in the future. The Punkin Center project meets both of those goals.

Scott Bordenkircher, Director of Transmission and Distribution Technology Innovation and Integration at APS



SYSTEM OVERVIEW

- Fluence’s Advancion Energy Storage Platform
- 2 MW / 8 MWh
- Owned and operated by Arizona Public Service (APS)
- Entered commercial operation in 2018

APPLICATION

- Transmission & Distribution Enhancement

PROJECT HIGHLIGHTS

- In this project, energy storage proves an alternative to rebuilding approximately 20 miles of transmission and distribution poles and wires—making APS one of the first electricity companies in the nation to use battery-based energy storage in place of traditional infrastructure for basic grid operation.
- The services provided by this project are transmission and distribution capacity for managing local peaks, as well as additional benefits including voltage regulation and delivery of excess solar power.
- Using energy storage as a non-wires alternative enables APS to improve power reliability at half the upfront cost of a transmission line. Incremental deployment of energy storage delivers more flexibility in siting, shorter lead times, improved asset utilization and right-sized investments that match load growth and avoids stranded assets.
- The project demonstrates how energy storage can address local needs in areas experiencing population growth and associated load growth.