



Project

- Power South Energy Cooperative
- McIntosh, AL
- USA
- generation and transmission (G&T) electric cooperative
- Commercial operation: 1991

Strategic levers



Energy efficiency



Electrification



Hydrogen



Digitalization

Longterm storage solution: Compressed Air Energy Storage (CAES) Revitalization

Challenge / opportunity

Power South Energy Cooperative operated a Compressed Air Energy Storage system until 2022. Due to a low-pressure expander failure repair and modernization is needed to resume full 110 MW capacity.

Solution

- Modernization and repair of the rotor
- Additional new rotor supply
- New inner barrel assemblies
- 2 sets transition ducts, HP & LP Combustor Baskets
- Engineering to renew maintenance intervals & repair recommendations

Benefits

- Restart of long-term storage solution CAES and extension of CAES operation for 30 years

Contribution to the energy transition

Compressed air energy storage is an innovative long term energy storage technology that utilizes pressurized air and natural gas to store electrical energy for extended periods.

The Power South Energy Cooperative is one of the pioneers operating such a system.