Green Hydrogen in Power Generation

A Seasonal Energy Arbitrage Strategy
Green H2 technology is commercially mature and has been demonstrated at scale

Primary Energy → Electrolysis → Compression → Pipeline → Gas Turbine

Water Treatment → Salt Cavern
Green H2 systems are benchmarked against other decarbonized storage systems

**Hydrogen Storage System**
- Electrolyzer
- Salt Cavern
- Gas Turbine

**Battery Storage System**
- Rectifier
- Battery
- Inverter

Controls:
- Charging Rate (MW)
- Storage Amount (MWh)
- Discharging Rate (MW)
Green H2 enables seasonal energy arbitrage in high renewable penetration regions

Hydrogen Inventory

Electrolyzer Capacity Factor

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