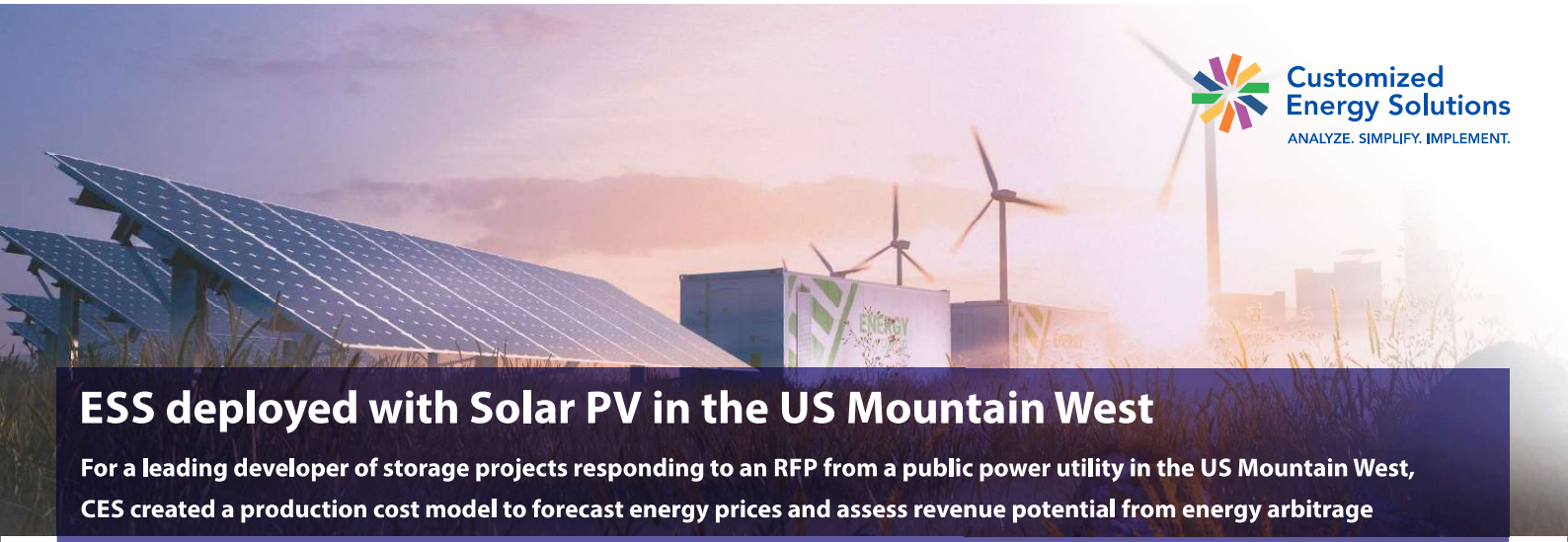

Customized Energy Solutions
ANALYZE. SIMPLIFY. IMPLEMENT.

ESS deployed with Solar PV in the US Mountain West

For a leading developer of storage projects responding to an RFP from a public power utility in the US Mountain West, CES created a production cost model to forecast energy prices and assess revenue potential from energy arbitrage

Client Needs

- Quantify forward energy prices for a public power utility in the non-market US Mountain West
- Model the expected dispatch, performance and revenue potential for an ESS operating in the utility territory
- Create sensitivity cases for additional indicative revenues from provision of ancillary services

Analysis Highlights

- Built a scalable production cost modeling framework from the ground up using open-source software
- Researched relevant Integrated Resource Plans (IRPs) and other power planning
- data to develop key modeling inputs for the evolving generation mix, penetration of storage and renewable energy projects
- Simulated the production cost model to forecast system capacities, PLF's, curtailment and resulting forward energy price curves for 10 years
- Forecasted revenues from Solar PV and the ESS from doing energy arbitrage
- Included sensitivity case by including performance and revenues from providing ancillary services

Outcomes

- CES provided the client with a revenue forecast for the Solar PV and ESS project
- Supported the client craft a competitive response to the RFP from the public power utility