



# Energy storage: owner's engineer

## *Sizing of a RES plus storage plant and management of request for proposal*

### Clean Horizon evaluation and actions:

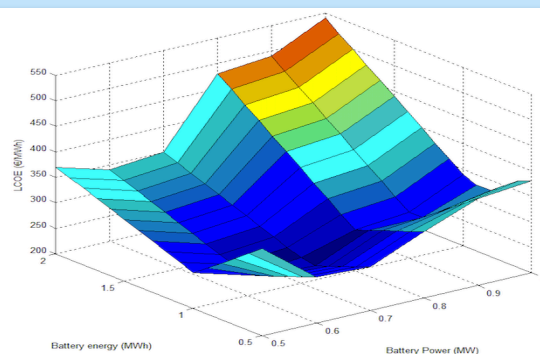
- **Optimal sizing and technology selection for energy storage** (lithium-ion battery) to operate appropriately under specific RES plus storage tariff
- **Modeling of battery use** with grid-connected renewable energy resources to ensure optimized return on investment under network constraints and tariff conditions
- **Profitability analysis** based on capital and operational expenditures and system energy flows
- **Request for proposal written to procure energy storage system components** for project developer/IPP

### Results:

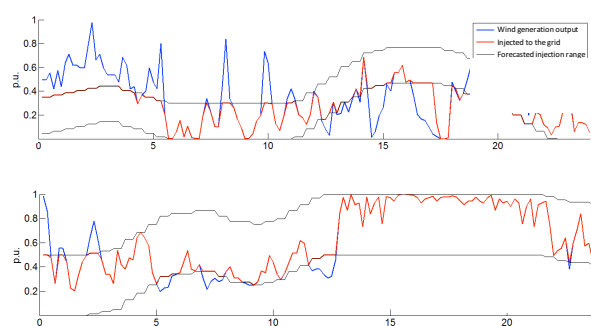
1. **Clean Horizon determined battery system requirements** for three RES farms with positive project IRR
2. **Request for proposal written with IPP** to procure appropriate energy storage system
3. **Administration of the RFP** including short listing suppliers, providing Q&A and supporting negotiations with selected suppliers

### Energy storage implementation

**case:** Determination of battery size and operation with a RES farm to optimize return on investment under strict tariff conditions, followed by composition of request for proposal to procure storage components for IPP



Results of the simulation with LCOE as an optimization metric



RES generation forecast and grid injection simulation without and with batteries

**Engagement duration:** 3 months

**Customer involvement:** 5 days / no need for on-site visit