

#### What does it do

The Hybrid Architect is a techno-economic modeling tool that evaluates hybrid renewable power plant project economics and fine tunes system configuration to help to improve value for the plant owner.

- Accommodates dozens of generation source combinations including Solar PV, wind, BESS and gas turbines
- Simulates hourly plant operation for the life of the project
- Calculates project life costs, including CAPEX, OPEX, financing, depreciation, capital reserves, tax liability and incentives
- Enhances plant configuration for maximized return on investment

### Customer value

- Refines plant configuration to enhance KPIs – IRR, NPV, LCOE
- Proforma calculation for global sites using market specific use cases, financial and tax inputs
- Detailed report ranging from KPIs to annual plant performance to plant hourly operation details

# **Key Applications**

- · PPA: flat rate/tiered
- Merchant markets
- Capacity: Peak hours for capacity payment calculation.
- Ancillary services/Load-following: Hourly price strips and load profiles for all major ISOs and Grid Authorities.

#### How does it do it

#### Inputs Inputs Inputs Inputs Location Engine · Project life Load profile GENERATOR /Turbine model Turbine model Price to buy MWh • CAPEX MWh output • Debt/equity financing • Tax rate & incentives Inputs Location Module technology MWh output **....** 💋 III · **(S)** · DISPATCHER NPV/IRR/ Proforma Calculation LCOE Inputs Battery type/usage Capacity **Energy Storage** /Battery Life Inputs · Revenue streams 8,760 hourly power Multidimension optimization for max NPV/IRR or min LCOE

## Other Related FLEXIQ Solutions

- Plant Control
- Dispatcher
- Monitoring & Diagnostics (MD)

# www.ge.com/renewableenergy/hybrid