RE & STORAGE ADVISORY · STEP 02 · CONCEPT, SIZING & RTC/FDRE MODELLING · DASHBOARD

Yield Study & Bankability Dashboard

P50/P90 annual generation estimates with degradation and availability assumptions, formatted for lender and IC review.

Worked example (anonymised): Hybrid RTC Supply Portfolio · 300 MW solar + 150 MW wind + 300 MW/1,200 MWh BESS · Western India. Illustrative round-the-clock supply portfolio modelled for a state DISCOM tender requiring 85% annual availability against a flat RTC schedule.

Sample excerpt · P50/P90 Annual Yield Summary (illustrative)

Year	P50 (MU)	P90 (MU)	Degradation (%)	Availability (%)
1	912	861	0.0	98.5
5	886	832	0.7	98.0
10	852	796	1.4	97.5
15	819	761	2.1	97.0
20	788	728	2.8	96.5

Notes

- P90 derived from resource dataset uncertainty combined with plant-level performance risk
- Dashboard is delivered as a live workbook alongside the static PDF summary

What happens in this step

1. Translate Step 01 resource/load outputs into candidate technical configurations (solar:wind:BESS ratios, power-to-energy ratios)
2. Run BESS power/duration optimisation across tariff, ancillary and contract structures to find the least-cost MW/MWh combination
3. Build 8760-hour hybrid RTC/FDRE dispatch model incorporating curtailment, forecasting error and peak-shortfall penalties
4. Layer in degradation curves (solar, wind, cell) and RTE fade over project life to test 25-year energy delivery
5. Stress-test the configuration against low-RTE, high-degradation, and adverse-weather-year scenarios
6. Benchmark augmentation strategies (capacity top-up years, replacement cost timing) against contract penalty exposure
7. Issue sizing recommendation with sensitivity grid, LCOE/LCOS and compliance-probability outputs for investment decision

Outcomes

- A financially optimised BESS power/duration and hybrid capacity mix, backed by scenario and sensitivity analysis
- Quantified RTC/FDRE compliance probability and penalty-risk exposure ahead of PPA signing or financial close
- A degradation- and RTE-tested 25-year energy delivery profile accepted by lenders and internal investment committees
- A clear, costed augmentation roadmap that protects contracted output without over-sizing capex upfront

Want this for your project? Write to info@growthifye.com or use the Contact page — we will scope the real deliverable set for your capacity, state and lender requirements.