Deploy ⋮

📊 **Hourly Operation Examples** 🔗

This page provides detailed hour-by-hour simulation tables demonstrating various dispatch strategies. All scenarios are computed dynamically using the app's implemented logic.

⚡ Dispatch & Charging Logic   📋 All Simulation Scenarios   ☑️ Summary Comparison

Dispatch & Charging Rules

> **Configuration:** 40 MWh BESS | 27 MW DG | 25 MW Load | SOC Limits: 10%-90% | Efficiency: 85%
>
> Each template below defines a different dispatch strategy with specific rules for when DG runs, how load is served, and how BESS is charged.

T0: Solar + BESS Only   T1: Green Priority   T2: DG Night Charge   T3: DG Blackout   T4: DG Emergency   T5: DG Day Charge   T6: DG Night SoC

T0: Solar + BESS Only

No DG - Pure renewable operation

> Pure green system with no DG. BESS provides backup when solar insufficient.

Merit Order: `Solar → BESS → Unserved`

Dispatch Rules

- 1. Solar serves load first (direct priority)
- 2. BESS discharges to cover remaining load after solar
- 3. If BESS depleted (SoC ≤ 10%), load goes unserved
- 4. No DG available in this topology

Charging Rules

- 1. BESS charges ONLY from excess solar (after load served)
- 2. Charge rate limited by BESS power (10 MW)
- 3. Charge efficiency: 92.2% one-way
- 4. If BESS full (SoC = 90%), excess solar is curtailed

> **Constraints:** SoC bounded: 10% (min) to 90% (max) | No DG backup

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Data Source: Computed dynamically using June 15-16 solar data from Inputs/Solar Profile.csv

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