GREEN PPAS · STEP 04 · CONTRACT & CONNECT · DRAWING

# Interconnection Single-Line Diagram (Compliance Copy)

As-approved SLD showing metering points, protection relays and interconnection voltage level as cleared by the DISCOM/STU for commissioning.

**Worked example (anonymised):** 30 MW Open-Access Solar Project for an Industrial Offtaker Group · 30 MWac / 40 MWp, group captive structure · Southern India, 33 kV DISCOM network. Illustrative project: solar IPP supplying five industrial offtakers under a group-captive PPA, requiring simultaneous open-access approval and DISCOM interconnection sign-off ahead of a Q1 commissioning window.

## Sample excerpt · SLD Equipment Schedule (Extract)

| Equipment | Rating | Location | Approval Ref |
|---|---|---|---|
| Interconnection transformer | 33/11 kV, 32 MVA | Substation bay 2 | STU-Conn-0417 |
| Main metering unit | Class 0.2S, bidirectional | Metering kiosk | DISCOM-Met-0912 |
| Protection relay set | Numerical, IEC 61850 | Control room panel | STU-Prot-0221 |
| Communication link | OPGW/RTU | Grid interface point | STU-Comm-0118 |

## Notes

- Drawing aligned with EPC as-built documentation
- Used as reference during joint commissioning walkdown

## What happens in this step

1. Review and redline the PPA, connection agreement and any O&M;/energy-storage services agreement against term sheet and regulatory templates
2. Negotiate tariff structuring, curtailment/deviation clauses, change-in-law protections, termination payments and step-in rights with legal counsel
3. Prepare and file open-access applications (long-term/medium-term/short-term as applicable) with the nodal agency, STU and DISCOM, tracking approval timelines
4. Coordinate connectivity studies, metering scheme approval and protection-coordination sign-off with the transmission utility
5. Align commissioning test schedules (grid interconnection, reliability run, PPA effective date) across developer, EPC, utility and offtaker
6. Monitor conditions-precedent checklist for PPA effectiveness and financial closure triggers
7. Support first-bill reconciliation and handover of the executed contract package to the client's asset-management team

## Outcomes

- Fully executed, bankable PPA with negotiated risk allocation acceptable to both developer and offtaker
- Open-access and connectivity approvals secured within the project's construction timeline
- Coordinated commissioning avoiding revenue-start delays and grid non-compliance penalties
- Clean handover package (contracts, approvals, SLDs) ready for asset management and lender due diligence

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.