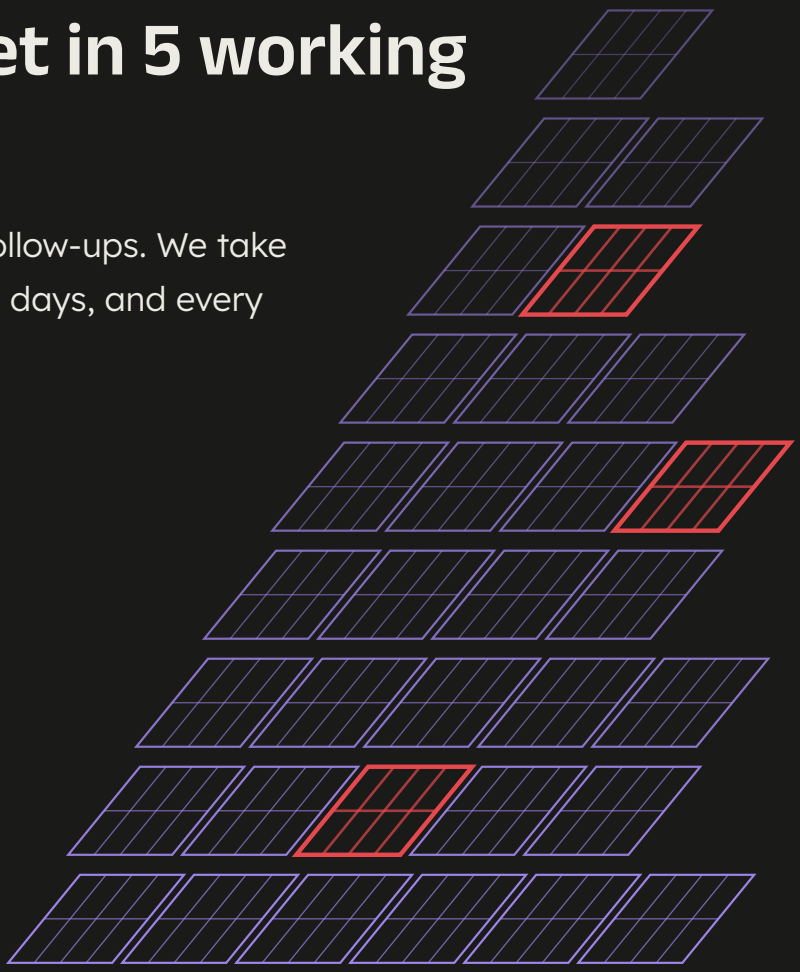
renevik
ENGINEERING

DRAWING SETS · DESIGN CHECKS

Renevik Engineering

Your full drawing set in 5 working days.

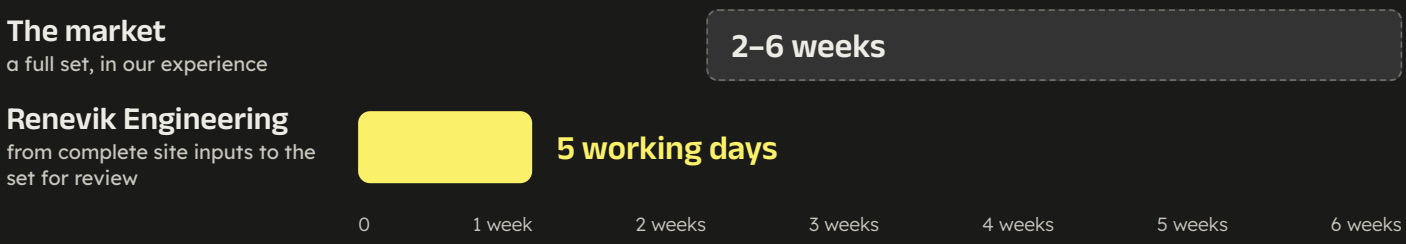
Most design work takes 2–6 weeks of follow-ups. We take one brief, one contact and five working days, and every sheet is checked before it reaches you.



Every sheet, checked.

01 Fast, and easy to work with.

An EPC loses weeks waiting for drawings: chasing a consultant, sending the same inputs twice, waiting for each revision. Every week a set waits is a week the build cannot start. Renevik Engineering is built to remove that wait.



One brief

We list every input we need once, up front. You never send the same paper twice.

One contact

One person answers for your set from the brief to the last revision.

Every change on the sheet

Each revision goes into the sheet's revision table with its reason, so nobody asks what changed.

02 What you get

A full set, not a part set

Layouts, single line diagrams, cable, earthing and structure drawings, the electrical studies and the handover pack: up to 45 sheets, in print (A3) and screen editions.

Found on paper, not on site

Shade, cable losses, string voltages, earthing and fault duty checked at design stage, when a change costs a line, not a trench. Each sheet names the standard behind it.

Rs 50,000 per MW

More than a typical consultant and half the top fee on our record. One avoided voltage mismatch pays the difference back within 3 months.

Start free

Send one existing design. In 5 working days we send two pages back: what we would change, why, and the standard behind each point.

03 How we compare

What we found when we reviewed real plant designs, beside how Renevik Engineering draws a set.

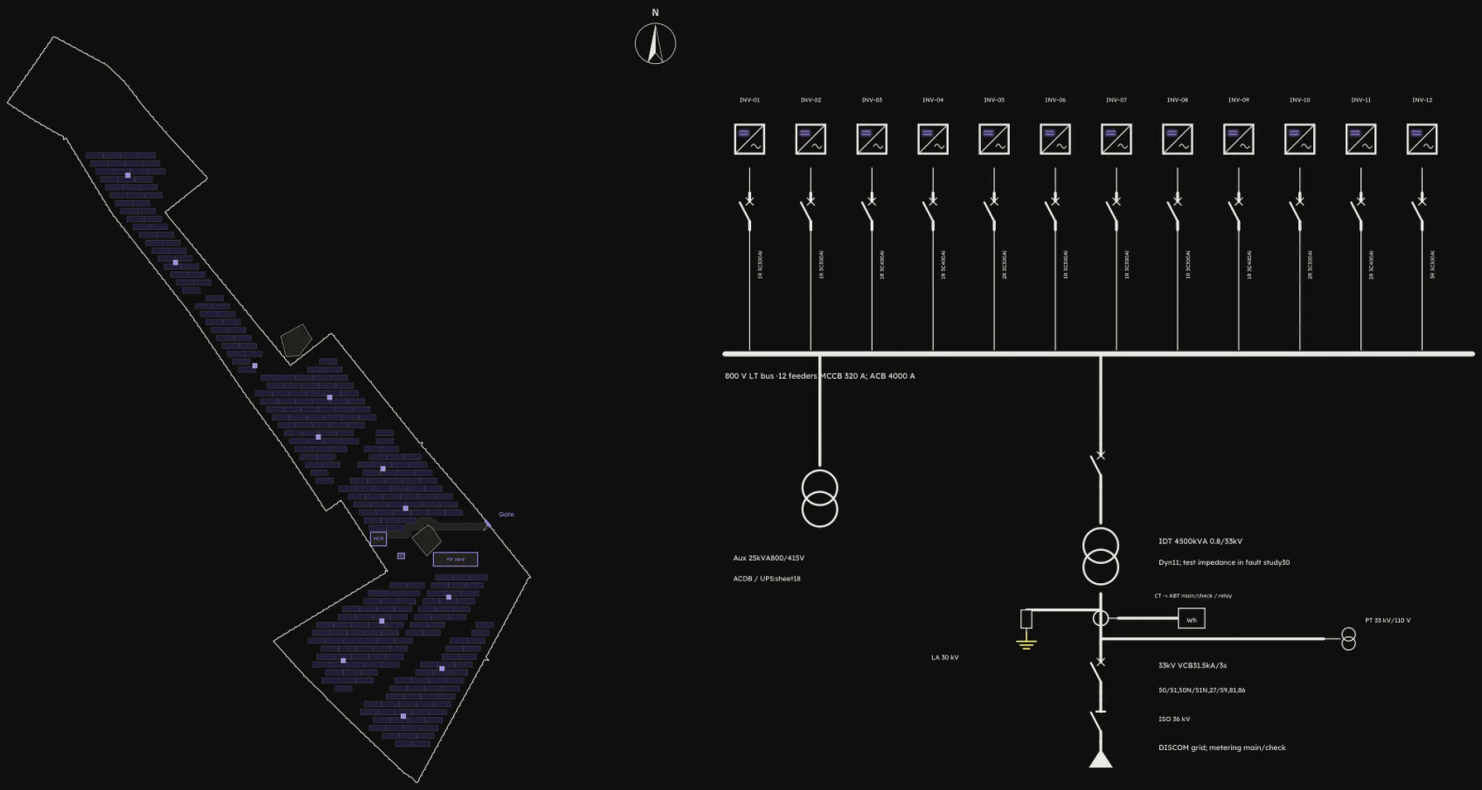
	Typical engineer the weaker sets we have read	Good engineer a top designer	Renevik Engineering every set we draw
Turnaround a full drawing set	✗ 2–6 weeks	– 2–6 weeks	✓ **5 working days** from complete inputs
Working with them from brief to last revision	✗ Many follow-ups for each input and each revision	– Good work, slow to revise	✓ One brief, one contact; every change logged on the sheet with its reason
The set what the owner gets	– Layouts and the single line diagram; switchyard, structure or studies often missing	✓ A full drawing set	✓ Up to 45 sheets, studies and handover pack included
Site tests soil, earth resistivity, pile load	✗ No test reports with the set	– Soil and resistivity read; no pile load test	✓ Asked first; each sheet says NOT MEASURED until its test arrives
Strings and inverter do they match?	✗ String voltage falls below the inverter's working range: power lost every day	– Matched, but string fuses left off	✓ Every string checked against the inverter and every rating; a missing maker value is flagged, not guessed
Losses shade and cables	✗ Cable losses over 2% on some runs	– Rows shade each other on winter afternoons	✓ Winter shade and every cable run's loss shown on the sheet
Studies earthing, lightning, short circuit, relays, structure	✗ Layouts only, no studies; no structure calculation for the mounts	– Done, but the earth strip is marginal and the structure check unsigned	✓ All five drawn in the set; each names the site input it still waits for
Papers agree from one sheet to the next	✗ They do not: a different weather site, transformer size or string count from paper to paper	– Mostly; the module count differs between papers	✓ One source: every sheet reads from the same calculation, checked by code
Who checks it before it is issued	✗ The person who drew it	– The structure check left unfactored and unsigned	✓ Code, then our engineers; nothing is issued for construction until a licensed engineer stamps it
Energy lost to the design, every year	✗ 1.7–2.9% of the plant's energy	– About 0.3%, estimated	✓ Each loss found and priced on paper, before the build
Over 25 years per MW, at Rs 3 a unit	✗ Rs 0.20–0.35 crore of power lost	– About Rs 0.04 crore, estimated	✓ Our extra Rs 20,000 over a typical fee is back within 3 months, from the mismatch alone
Design fee Rs per MW	About Rs 30,000	Up to Rs 1,00,000	✓ **Rs 50,000**: half the top fee on our record

✓ done – partly ✗ a fault

Based on solar plant designs we have reviewed. Worked for 1 MW of panels making 1,600 units per kW a year, at Rs 3 a unit. The 1.7–2.9% is what the designers' own energy models lose to the voltage mismatch; the 0.3% is our check's estimate of a top designer's shade and cable choices. No degradation or discounting applied. Market fees are figures on our record, not quotes.

04 Real sheets, from a set we drew.

Two sheets from our set for a 3.6 MW AC ground-mounted plant, as drawn. The client, the site and the plant ID are hidden.



Plant layout and AC single line diagram · screen edition
294 tables on the traced site boundary, the control room, the HV yard and the gate; twelve inverter feeders, the LT bus, the 4,500 kVA transformer to 33 kV, protection and metering. Every sheet also comes in a print edition (A3, white).

05 Every number traced to a calculation

294 strings of 26
string length sized from the module data sheet

1,461.7 V
string voltage at the coldest cell, inside the 1,500 V rating

12 inverters
each on a 320 A breaker; a 4,000 A incomer on the LT bus

4,500 kVA
transformer to 33 kV, with its impedance carried into the fault study

25 A
string fuses, rated for 1,500 V DC, in both poles

2 editions
of every sheet: print (A3, white) and screen (dark)

Every figure on a sheet comes from a calculation filed with the set. Where a site input is still awaited, the sheet says so and prints the value as assumed. Standards named on the sheets include CEA Safety Regulations 2023, IEC 62548-1, IEC 62446-1, IEC 60364-7-712, IS 3043 and IEC 60909.

06 How a set is made

VIKAS Intelligence Platform calculates and draws every sheet from your site data. Our engineers check it, and no sheet is issued for construction until a licensed engineer stamps it.

1 **One brief**
Boundary, survey, soil, equipment and grid inputs, asked once.

2 **Calculate**
Strings, cables, faults, earthing and loads.

3 **Draw**
Every sheet, in print and screen editions.

4 **Check by code**
Each number re-checked across the whole set.

5 **Review**
Sheet by sheet, against its standard.

6 **Stamp**
A licensed engineer, before construction.

07 It learns faster than any one engineer

An engineer learns from the plants they work on, a few a year, and the lessons stay in one head. VIKAS learns from every plant it reads, every paper and every correction, and turns each lesson into a check it runs on every set.

One engineer

plant 1 — a year — plant 2 — a year — plant 3 — in one head

A lesson learnt on one plant may not reach the next drawing, or the next engineer.

VIKAS



A correction made today is checked on every sheet of every set tomorrow.

273
engineering sources catalogued in two days, 62 of them read in full: standards, textbooks and field studies

62
design rules, each tied to its source; the checks built from them run by code on every set

350 MWp
of solar assets read by VIKAS, so the rules meet real plants

08 What we need from you, once

- The site boundary and the contour survey
- Module, inverter and transformer data sheets
- The load, tariff and connection route
- Soil investigation and earth resistivity
- The grid fault level at the connection point
- A pile load test, before piles are approved

Until an input arrives, the sheet that needs it says so. Nothing is filled in by guesswork.

09

What we offer

Full plant set

Up to 45 sheets for a ground-mounted or rooftop plant in 5 working days. Rs 50,000 per MW.

Design check

Your existing design read against its standards in 5 working days. The first one is free.

Single studies

Earthing, lightning risk, short circuit, relay coordination or structure, on their own.

Cost review

Savings looked for at design stage, each one shown with its calculation.

As-built and handover

As-built drawings, inspection checklist and the O&M handover pack.

Owner's Engineer

Renevik checks the plant for its owner, during construction and in operation.

FOR
EPCs and developers, ground-mounted and rooftop

FEE
Rs 50,000 per MW

10

Start with a free design check

1 Send one design

2 We read it in 5 working days

3 Two pages back

Send the single line diagram, the layout and the PVsyst report for a free check: a review opinion, not a stamped design; your engineer stays engineer of record; your files are kept confidential and deleted on request. 5 working days from complete inputs. Sheets shown are from a set we drew, with the client and site hidden; every sheet is for review until a licensed engineer stamps it.

CONTACT

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Own your power.

Everything we do Own · Engineer · Build · Oversee, during construction and in operation · Lender's Engineer · all read every day by VIKAS Intelligence Platform: VIKAS Generation Dashboard (VGD) for running plants, VIKAS EPC Dashboard (VED) for plants being built