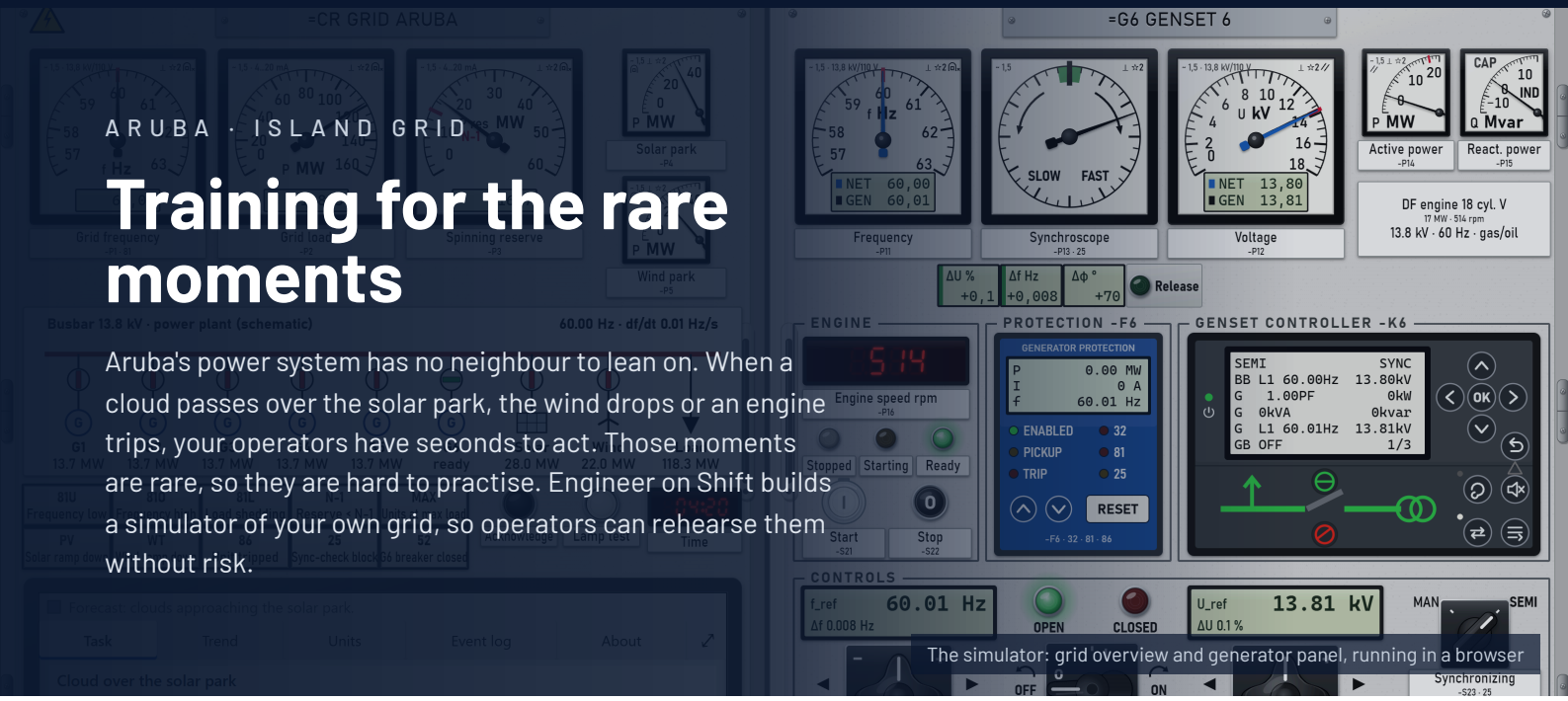
ENGINEER ON Shift | Operator training & simulation
part of Engineer On

Operator training & simulation
for island power grids



The simulator: grid overview and generator panel, running in a browser

ARUBA · ISLAND GRID

Training for the rare moments

Aruba's power system has no neighbour to lean on. When a cloud passes over the solar park, the wind drops or an engine trips, your operators have seconds to act. Those moments are rare, so they are hard to practise. Engineer on Shift builds a simulator of your own grid, so operators can rehearse them without risk.

Built around your operators

Every simulator starts with a needs assessment in your own control room.

STEP 1
Needs assessment
Interviews and observation in your control room: what operators handle well and where things go wrong.

STEP 2
Configure
Your units, settings and scenarios, with exercises and tests that measure what operators can do.

STEP 3
Pilot
One module for 15 to 20 operators over three months, measured before and after.

STEP 4
Roll out
Only after a good pilot: more scenarios and modules, at your pace.

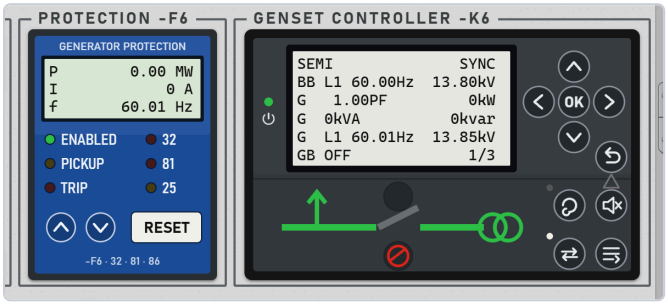
Choose the building blocks

Each block can be added or left out.

- **Grid model** — your units, solar, wind and load shedding
- **Scenarios** — taken from the needs assessment
- **Training programme** — lessons, assessment, a record per operator
- **Look and feel** — your equipment, your screens
- **Languages** — English · Nederlands · Papiamento
- **Optional** — black start, fuel changeover and more

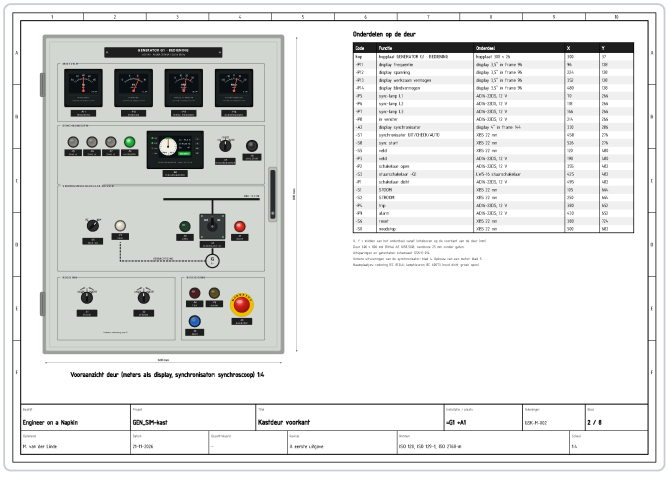
It looks like your control room

Meters, synchroscope, generator controller and protection relay are drawn after the equipment your operators work with every day. What they practise on the simulator carries over to the real panel.



Digital, or a real cabinet

The simulator runs in a browser on any laptop, with nothing to install. If you want real switches and meters, I design the cabinet and document it, from wiring diagrams to door layout. A local panel builder builds it here on Aruba.



DESIGNED AND DOCUMENTED

BUILT ON ARUBA

The same approach for water

Reverse osmosis plants have their own rare and critical moments, such as a trip of a high-pressure pump or a membrane problem. They get their own modules, built on the same kind of assessment.



Michel van der Linde

I started my career in power production on Aruba and later worked across the energy chain in the Netherlands, on grids, heat networks, hydrogen and industry. Today I teach electrical engineering and design training programmes. Engineer on Shift is where those two meet.

Start small: one pilot, one scenario, three months.

Then you decide whether to continue. Hardware is always a separate decision.

Let's talk
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