STEALTH POWER SYSTEMS

Where power becomes decision

INDEPENDENT ELECTRICAL ENGINEERING · EGYPT

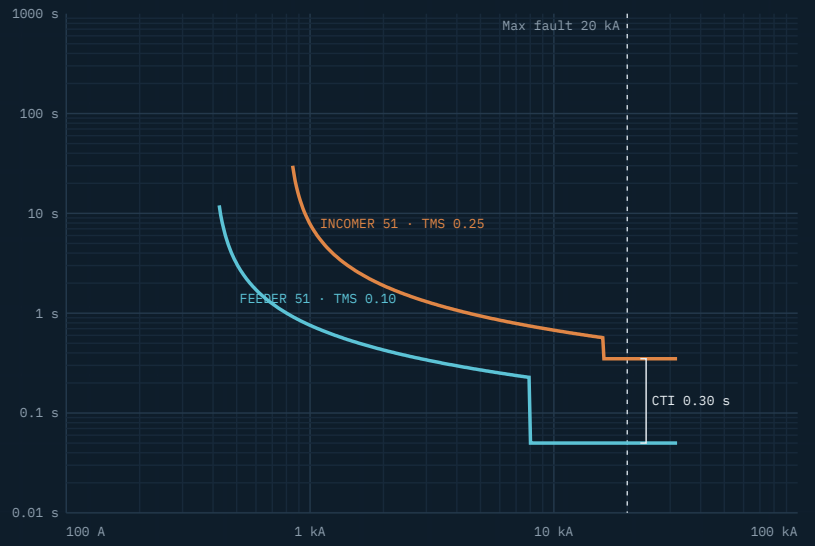
Power systems that run silently behind the scenes.

We make the engineering decisions behind reliable, cost-optimized power: from load flow and short-circuit studies to protection coordination, design and equipment selection for mission-critical facilities and heavy industry.

PROTECTION COORDINATION · TCC

11 KV INCOMER VS. OUTGOING FEEDER

● SELECTIVE



MAX FAULT	FEEDER TRIPS	INCOMER TRIPS	MARGIN
20.0 kA	0.05 s	0.35 s	0.30 s

What this shows: at the worst-case 20 kA fault, the feeder relay clears first and the incomer waits 0.30 s more, so only the faulted section loses power. Getting this margin right is what our studies deliver.

01	02	03	04
Power-system studies	Protection coordination	Design & equipment decisions	Energy efficiency

ABOUT US

The name is the promise: a power system you never have to think about.

Our expertise follows the client's journey, so the right technical and cost-benefit decision is made at every stage, across generation, transmission, distribution and energy efficiency.

Engineering decisions you can defend, on paper and on site.

Every recommendation we make is backed by calculation, modelled on your real operating conditions, and free of any link to an equipment supplier. You get the right system for the job, at the right cost.

15+	100%	MV · LV
years of hands-on industrial experience	vendor-independent advice	generation to distribution

01 Independent decisions

We don't sell equipment, so our advice answers only to your project's technical and commercial interest.

02 Mission-critical reliability

Designs built around continuity of supply, where an outage is measured in lost revenue or lost safety.

03 15+ years in industry

Hands-on experience across heavy industry, data centers and high-value developments.

04 Lower CAPEX and OPEX

Right-sized transformers, switchgear and generation, without giving up reliability.

05 Built on your real conditions

Load nature, power quality and process needs drive the design, not generic rules of thumb.

06 Long-term continuity

Systems planned for expansion and maintenance, with support that continues after energization.

Engineering delivered for

SELECTED CLIENTS · PROJECTS COMPLETED

NESSTRA EGYPT

ELSEWEDY DIGITAL

MEMICO Since 1984

OUR MISSION

Engineering consultancy that delivers reliability, operating continuity, optimized cost and lower risk, based on solid calculations and studies, so power systems run smoothly behind the scenes with little to no disruption.

OUR VISION

Expand our capacity to deliver reliable and sustainable power systems, serve a wider range of industries, and implement practical, cost-effective designs that meet each client's specific requirements.

02

POWER-SYSTEM STUDIES

Calculated, documented, decision-ready.

Each study ends in a structured report: assumptions, results, limits and recommendations your team can act on.

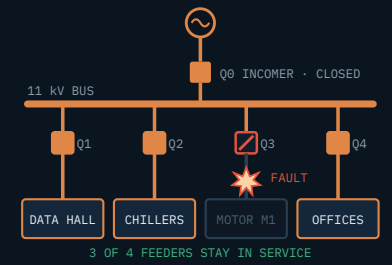
The calculations behind every decision.

A robust decision starts with accurate studies. Each one answers a specific question about your system.

REF.	STUDY	THE QUESTION IT ANSWERS
ST-01	**Load flow**	Are voltages, loading and losses within limits in every operating case, including contingencies?
ST-02	**Short circuit**	What fault levels will each bus see, and are switchgear and cables rated to withstand them?
ST-03	**Motor starting**	Can large motors start without unacceptable voltage dips on the rest of the plant?
ST-04	**Protection coordination & TCC**	Will the nearest device clear a fault first, so only the faulted section loses power?
ST-05	**Protective device review**	Are existing relay settings and device characteristics still correct for today's system?
ST-06	**Load analysis & power quality**	What does the load really demand, and what continuity and quality does the process need?

SELECTIVITY IN ONE PICTURE

One cable fault. Only one breaker trips.



With coordinated settings, feeder F3 clears its own fault and the rest of the plant keeps running. Poor settings trip the incomer and black out everything.

TRY IT LIVE

Inject faults in our interactive simulator at stealth-eng.com

03

SERVICES

We follow the client's journey through every stage of the project.

Designs comply with international standards and Egyptian practice.

One engineering partner, from first discussion to long-term support.

A DEFINE

Consultation & needs assessment
Scope, objectives and the studies required by international standards and Egyptian practice.

Viability studies
Technical, economic and environmental viability, based on accurate studies.

Load analysis & planning
Load nature, power quality and continuity level balanced against cost.

B DESIGN

Custom power-system design
Designs from scratch with optimized layout and equipment selection.

Protection system performance
Philosophy and settings that keep critical loads running and people safe.

Equipment procurement decisions
Transformers, generators, switchgear and protective devices specified.

Compliance & permitting
Code-compliant designs and support with construction and operating approvals.

C DELIVER

Project management
Schedule, budget and quality managed start to finish, one point of contact.

Training & documentation
O&M training, operating instructions and as-built drawings.

D SUSTAIN

Post-implementation support
Ongoing support and regular performance reviews in service.

Energy-efficiency optimization
Better power quality and equipment duty, automation that cuts cost.

Upgrades & expansion
Low-risk plans to integrate new technology and scale critical systems.

WHAT YOU RECEIVE

R1
Calculation reports
Assumptions, inputs, results and limits, clearly documented.

R2
TCC curves & settings
Coordination plots and relay setting tables ready to apply.

R3
Equipment rating checks
Switchgear, cables and devices verified against fault levels.

R4
Single-line diagrams
Marked-up SLDs that match the system as studied.

R5
Recommendations
A prioritized action list for the next project decision.

04

INDUSTRIES & PROJECTS

Where reliability matters most.

Clear scope. Rigorous analysis. Decision-ready deliverables.

Sectors where a power failure is never small.

Mission-critical facilities

Redundant, selective systems where every second of continuity counts.

- Data centers
- Hotels & hospitality
- Critical infrastructure

Heavy industries

Large motors, high fault levels and processes that cannot stop.

- Oil & gas
- Iron & steel
- Petrochemical
- Manufacturing facilities

High-value electrical systems

Systems where the right decision protects a large investment.

- Commercial developments
- Industrial facilities
- Special power applications

SELECTED ENGAGEMENTS

Project experience, described by the engineering delivered.

DELIVERED FOR NESSTRA EGYPT · ELSEWEDY DIGITAL

PRJ / DATA CENTER

Data center power-system study

Short-circuit calculations and protection-coordination analysis to confirm fault levels, device coordination and relay settings.

Short circuit · TCC · Engineering report

PRJ / RAILWAY

Railway electrical engineering study

Electrical analysis and technical documentation, developed against the project requirements and available system data.

System analysis · Documentation

PRJ / INDUSTRIAL

Industrial protection & coordination review

System data and protective-device characteristics reviewed, with documented coordination findings and recommendations.

Device review · Selectivity · Recommendations

TRY OUR ENGINEERING TOOLS ONLINE

Simplified versions of the studies we run, free on our website.

01 **Switchgear check**
Is your main board rated for the worst-case fault?

02 **Right-sizing savings**
What does an oversized transformer really cost you?

03 **Data center redundancy**
Does your N, N+1 or 2N design survive a failure?

05

HOW WE WORK

You always know what was assessed, and what it means.

STEP 1

Define the scope

System boundary, objectives, input data, assumptions and outputs confirmed.

STEP 2

Analyze the system

Agreed calculations run and checked against relevant criteria and standards.

STEP 3

Document the findings

Results, limits and recommendations in a structured technical report.

STEP 4

Support the decision

We walk your team through the findings so the next decision is the right one.

Experience the journey with Stealth, where power becomes a decision.

PHONE & WHATSAPP	+20 121 058 9032
EMAIL	info@stealth-eng.com
WEB	www.stealth-eng.com
OFFICE	Izar Plaza, Palm Hills, First 6th of October, Giza 12566, Egypt

SCAN · 1 MINUTE

Find the study you need

Answer five questions on our website and send us your indicative scope on WhatsApp.

SCAN · SAVE CONTACT

Add Stealth to your phone

Point your camera here to save our phone, email and website.

STEALTH POWER SYSTEMS

Where power becomes decision