

Georgios Tsimplidis

Lead Power Systems Engineer | Engineering Team Leader

Power Conversion • Electrical Infrastructure • Power Plants • Renewables & Hydrogen



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Website



LinkedIn

15+

Years in power engineering

> €800M

EPC plants handed over

~750 MW

H2 projects led in sales

410 MW

CCGT plant EC&I lead

Up to 15

People led on site



PROFESSIONAL SUMMARY

Results-oriented **Electrical Power Engineer and Solution Architect** with **15+ years** across the complete asset lifecycle: commissioning, operation & maintenance, engineering design, **R&D / product development** and **technical sales**. Deep expertise in **power conversion, power system studies and grid compliance** for **power plants, electrical infrastructure, renewables (Solar PV, BESS) and green hydrogen**.

At **ABB** since 2018, currently Global Customer Solution Manager for projects up to **~750 MW**. Proven leader of on-site multidisciplinary teams and indirect lead of **remote engineering teams around the world**, formally **nominated for ABB's leadership career path**. Ready to lead engineering teams in **electrical engineering, data centers, DC loads, electrical infrastructure, power generation, oil & gas and renewables**.

Target roles: *Engineering Manager • Head of Electrical Engineering • Electrical Engineering Team Lead*



KEY ACHIEVEMENTS

> €800M handed over

Warranty & Handover Project Manager for turnkey EPC power plants.

New product: Unirec H2

Technical lead from specification to HW/SW for ABB's hydrogen power converter.

~750 MW hydrogen

Technical sales lead in customer meetings, offers and cost models.

China ramp-up

Led the remote team and the know-how transfer to ABB China.

Engineering tools

Developed custom sizing and calculation tools; built a sales configurator.

Leadership path

Selected by ABB for the leadership career path (DDI assessment).



LEADERSHIP PROFILE

People Leadership

Led up to 15 people and 5+ contractors on site; led a remote engineering team in China; trains and develops engineers.

Structured Execution

Prioritizes systematically, allocates resources deliberately and delivers on tight deadlines.

Customer & Business Focus

Turns customer and grid requirements into technical solutions, offers and assessed/defined target costs.

Communication & Culture

Builds trust, open feedback and cross-cultural collaboration; mediates constructively.



CORE COMPETENCIES

Power Systems & Grid

Power System Studies · Grid Code Compliance · Harmonics & Filters · Power Factor · Stability & PSS

Power Conversion

Power Electronics · Rectifiers · Excitation · LCI / SFC · MV Drives · Transformers · Switchgear

Renewables & Hydrogen

Green Hydrogen / Electrolysis · Solar PV · BESS · Containerized Solutions

Simulation & Digital

MATLAB / Simulink · PLECS · DigSILENT PowerFactory · PSCAD · Digital Twin · ML / AI

Commercial & Product

Technical & Solution Sales · Tendering · Full Cost Models · Product Roadmap · R&D

Leadership & Management

Team Leadership · Engineering & Project Management · EPC · Risk · Mentoring



PROFESSIONAL EXPERIENCE



Global Customer Solution Manager – Renewables

06/2023 – Present

Hydrogen, Solar PV & BESS

ABB Switzerland Ltd | Motion High Power, Business Line Renewables | Turgi, Switzerland

Scope: Global HQ role • Hydrogen, Solar PV & BESS • Projects up to ~750 MW • Interfaces: Sales, R&D, PM, Procurement, Manufacturing, ABB China

- **Technical Sales Lead** in customer meetings and tenders for green hydrogen projects up to ~750 MW; own solution design, technical and commercial offers and **full cost models**.
- Lead **grid-compliance simulations** (power factor, harmonics, grid code) at rectifier and plant level, supporting customers towards grid authorities.
- Solution architect for power-supply packages: **transformers, power converters, busbar systems and containerized plug-and-play solutions**.
- **Technical lead of the know-how transfer to ABB China** for hydrogen and power-supply systems; supported the local team ramp-up.
- Extended scope to **Solar PV and BESS** technical sales and application engineering (Proteus PV / PCS) after ABB acquired Gamesa Electric's power-electronics business.
- Global reference for hydrogen topics, supporting regional sales teams and colleagues worldwide.
- Coordinate offer preparation with the team and work with manufacturing units on packaging and delivery solutions.
- **Nominated for ABB's leadership career path**; completed the DDI Talent Development Assessment.

Technologies: MATLAB / Simulink, PLECS, DigSILENT PowerFactory, PSCAD • IGBT & thyristor rectifiers, transformers, busbars, Proteus PV / PCS / BESS



Product Specialist & R&D Technical Lead

01/2022 – 05/2023

Product Management & Development – Unirec H2

ABB Switzerland Ltd | Hydrogen Power Supply | Turgi, Switzerland

Scope: New product introduction • Hardware & software • Digital twin • Remote team in China

- **Technical lead for R&D of Unirec H2**, ABB's new power-converter system for hydrogen electrolysis, from requirements to **hardware and software**.
- Defined the **product roadmap**, product specifications and technical requirements together with Product Management.
- Built **digital twins** to verify specifications and to support sales with product simulations.
- HW & SW lead for a small-scale **test simulator** used to develop and validate special control functions.
- **Led a remote team in China** for application engineering and system design.

- Created a **sales configuration tool** for solution design and component dimensioning; aligned suppliers on component specifications.

Technologies: Unirec H2 • MATLAB / Simulink, PLECS • Digital twin • Small-scale test simulator



Senior Project Engineer

09/2018 – 12/2021

Lead Electrical Engineer, Excitation Systems

ABB Switzerland Ltd | *Excitation Systems Engineering* | Turgi, Switzerland

Scope: Nuclear, CCGT, coal & hydro power plants • Greenfield, brownfield & upgrades • Customers worldwide

- Delivered **>50 excitation, synchronizing and static starting systems** for **nuclear, combined-cycle, coal and hydro power plants** worldwide.
- Specialist for **MEGATROL** (excitation plus LCI / SFC gas-turbine starters); owned and improved the **MATLAB-based LCI dimensioning tool**.
- Performed **PSS and grid-code compliance studies** for delivered systems.
- Cross-department engineering with **MV Drives** (soft starters, MV drives, GT starters) and Drives Product Management.
- Early simulation work for Unirec Hydrogen in MATLAB / Simulink, PLECS and DlgSILENT PowerFactory.

Technologies: UNITROL, MEGATROL, SYNCHROTACT • LCI / SFC starters • REF/REG 610/615 • MATLAB / Simulink, PLECS, DlgSILENT



Lead Electrical, Control & Instrumentation Engineer

02/2016 – 08/2018

Operation & Maintenance

Elpedison SA (Enerwave SA) | *Thisvi Combined Cycle Power Plant* | Thisvi, Greece

Scope: 410 MW CCGT • EC&I maintenance • Planned & unplanned outages • Contractors • SAP

- EC&I lead for a **410 MW CCGT power plant**: maintenance and troubleshooting of HV/MV/LV switchgear, protection, generators, transformers, motors, UPS and batteries.
- Responsible for DCS, turbine controls, **HIMA safety PLCs**, field instrumentation, valves and vibration monitoring.
- Planned contractors and **outage activities**; trained and led new team members with a strong **safety and reliability** focus.
- Led improvement projects and engineering studies; managed GT / ST LTA activities, spare parts and **SAP** purchasing.

Technologies: Siemens S7 DCS • ABB GT / ST controls • Siemens & HIMA safety PLCs • SAP



Lead Electrical, Control & Instrumentation Engineer

08/2011 – 03/2015

Commissioning

METKA SA (METLEN Energy & Metals) | *EPC Power Projects* | Greece & Turkey

Scope: 3 turnkey EPC plants • CCGT & hydro • Projects above €800M • Up to 15 people on site

- Lead commissioning engineer for **3 turnkey EPC power plants** (CCGT and hydro: Loutraki, OMV Samsun CCGT, PPC Ilarion HPP).
- Commissioned electrical, control and instrumentation systems; hands-on with the majority of plant equipment.
- **Led up to 15 people (indirect) and 5+ contractors**; planned and supervised daily commissioning work.
- **Promoted to Warranty Manager and Handover Project Manager** for projects above €800M.
- Managed handover to the end client, warranty cases and supplementary engineering studies.

Technologies: GE Mark VIe • Metso DCS • Siemens PLC • HIMA



Team Leader – Light Anti-Aircraft Artillery

10/2010 – 07/2011

Military Service

Hellenic Army | Alexandroupoli, Greece

- Team leader and main operator of Rheinmetall light anti-aircraft artillery.



INDUSTRY FIT – TRANSFERABLE EXPERTISE

Data Centers & AI Infrastructure

MV/LV distribution, UPS and batteries, BESS, AC/DC conversion and high-power rectifiers (relevant to 800 VDC architectures), power quality and grid connection.

Electrical Infrastructure & Grid

HV/MV/LV switchgear, power transformers, protection, grid-code compliance and power system studies.

Power Plants

CCGT, hydro, nuclear and coal: commissioning, O&M, excitation and static starting, generators, turbine controls.

Oil & Gas / Process Industry

MV drives and soft starters, large motors, DCS / PLC / safety systems, instrumentation, outage management.

Renewables & Energy Transition

Green hydrogen power supplies, Solar PV inverters, BESS power conversion, containerized skids.

Industrial Automation

DCS, PLC and safety PLC systems, field instrumentation, control cabinets and digital simulation.



EDUCATION



MSc Engineering & Construction Project Management

Hellenic Open University, Greece | 2013 – 2017

Completed while working full-time. Grade 7.5/10.



MEng Electrical & Computer Engineering

Aristotle University of Thessaloniki, Greece | 2003 – 2010

5-year integrated master. Electronics, Automation & Energy. Grade 7.24/10.



CERTIFICATIONS & TRAINING

Stanford ONLINE	Machine Learning Specialization – Stanford Online & DeepLearning.AI	2022
Stanford ONLINE	Machine Learning – Stanford Online (Coursera)	2019
ABB	DDI Talent Development Assessment – ABB leadership pipeline	ABB



LANGUAGES

Greek	English	German	French
Native	C1 – Proficient	B1 – Independent	A2 – Basic



TECHNICAL TOOLS

Simulation: MATLAB, Simulink, Simscape, PLECS, DigSILENT PowerFactory, PSCAD **Design:** EPLAN, Zuken E3 **Business:** SAP ERP, MS Project, Microsoft 365



VOLUNTEERING



Finance Officer, Management Board

09/2023 – Present

Parents' Association, Greek HSK School Bungertwies | Zürich

- Elected board member responsible for finances, budgeting and organization of school and association activities.



THE THREE PILLARS

Professional

15+ years of round electrical engineering. Customer-oriented, agile, team-oriented and hands-on when needed.

Academic

Two master's degrees and continuous learning in machine learning and AI; always seeking feedback.

Personal

Greek, in Switzerland since 2018. Family, travel, gym and home automation.



SKILLS KEYWORDS

Electrical & Power

Electrical Power Systems · Power Generation · Thermal Power · Turbo Generators · Power Transformers · Switchgears · Power Distribution · Power System Protection · Power System Dynamics · Power Systems Control · Harmonic Analysis · Power Factor Correction · AC & DC Power Systems · Power Supply Design · Power Electronics Design · Rectifiers

Energy & Engineering

Renewable Energy · Hydrogen Production · Electrolysis · Hybrid Power Systems · Nuclear Power Generation · Industrial Automation · Systems Engineering · Engineering Simulation · Simulation Development · Digital Solutions · Design Thinking · Industrial Engineering

Customer & Sales

Solution Architecture · Solution Engineering · Application Engineering · Technical Sales · Solution Selling · Value Selling · Customer Value Proposition · Customer Centricity · Pre-Sales Support · International Sales

Management & Leadership

New Product Development · Product Management · Project Management · EPC Project Management · Project Risk Assessment · Negotiation · Mentoring · Team Development · Prioritization · Problem Solving · Diversity and Inclusion