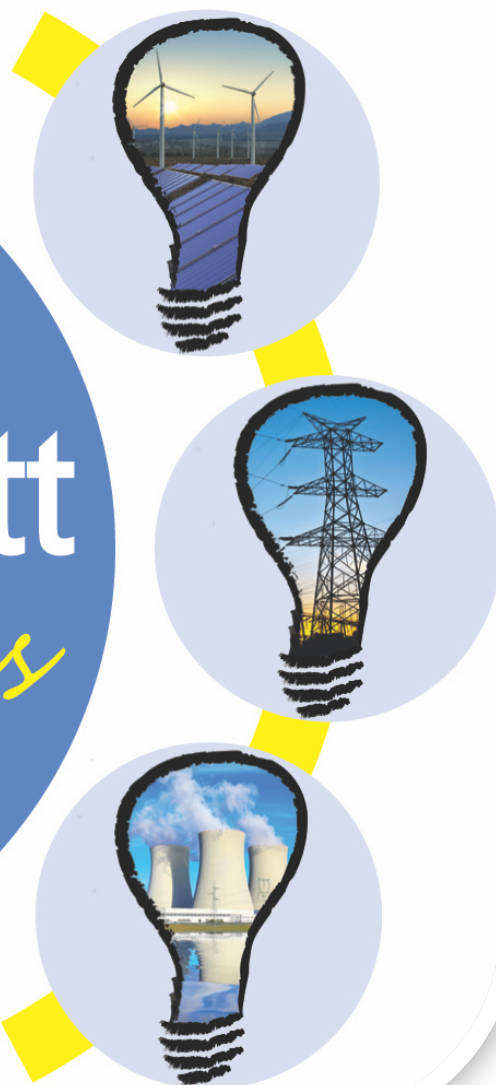


MegaWatt *Solutions*



MegaWatt Solutions (Pty) Ltd

Company Profile

MegaWatt Solutions (Pty) Ltd

Company Profile

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Corporate Information

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|----------------------|------------------------------|
| Name of Business | Megawatt Solutions (PTY) Ltd |
| Format of Business | Private Company |
| Business Reg. no | 2012/024247/07 |
| Date of Registration | March 2012 |
| SARS Income Tax No | 9054234225 |
| VAT Registration No | 4080263884 |
| SDL Registration No | L050781873 |
| PAYE Registration No | 7050781873 |
| UIF Registration No | U050781873 |



| | |
|----------------------------|--|
| Contact Information | |
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| Email: | info@megawatt-s.co.za |
| Website | www.megawattsolutions.co.za |

| | |
|----------------------|--|
| Director/s | |
| Jacobus S Theunissen | MSAIEE, B. Tech. (Elec Eng) |
| Mobile | + 27 82 498 0161 |
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Company Overview

Company Information

Megawatt Solution's core focus is to offer qualified engineering skills to the Power System business in the energy sector.

The directorship's more than 27 years of combined industry experience in the power system business, delivering various projects, products, and training, equip us to deliver efficient and reliable protection and control engineering solutions for primary and secondary power systems.

Vision

Megawatt Solutions (Pty) Ltd. want to be a World Class role player with sustainability and ongoing growth in all fields that we serve, to provide top-ranked knowledge, products, and services to all customer needs

Mission

To meet our Vision, we shall:

- Always conduct our business with honesty, integrity, and loyalty to all roll players.
- Continually improve and upgrade our professional knowledge and skills.
- Understand and agree to client's requirements with awareness and in full detail.
- Supply customers with the best-suited quality products and consulting services.
- Be strict and timeous on delivery schedules.
- Add value to Industry and its needs.

B-BBEE Status

Megawatt Solutions (Pty) Ltd. is a level 4 contributor in South Africa.

Business Overview

Megawatt Solutions offer the following services:

Engineering Solutions for new or refurbishment projects:

- System studies and related protection settings
- Substation audits and recommendations
- Specifications for primary and secondary plant equipment
- Official project documents related to Protection, automation, and control schemes / systems.
(Specifications, functional descriptions, Factory and Site acceptance documents, etc.)
- Protection, automation and control Scheme / System designs and engineering for voltage levels 400kV to 765kV
- Specialized testing and maintenance test routines
- Implementation of IEC61850
- Refurbishment projects for existing systems
- MV switchgear projects. (Specifications, designs, logics, commissioning, etc)
- GIS Projects

- Commissioning Services
- Solar Solutions to private, commercial, and industrial markets

Renewable energy projects

We have been active in small and large-scale renewable generation projects. Our strategy is to join business partners with different strengths and assets to ultimately offer an all-inclusive generation solution to complement utilities and industrial markets.

Maintenance Solutions

Through experience, we found that this is one of the key issues today for all large power users. Megawatt Solutions offers an extensive and unique "**protection maintenance**" solution. The combination of our skills and products will provide the key resources in a company/utility instantly with the correct, up-to-date, information on each IED in a substation.

Please enquire about this service.

Training

We have been training people since 1998 on all the areas of Power System protection.

We have an extensive "up to date" training program, which covers products, theories, and design principles applicable to Power System Protection including IEC61850

Please enquire about these programs.



Geographical footprint

Megawatt Solutions target to be a leading service provider throughout Africa.



SHEQ Management (Safety, Health, Environment)

Health and Safety

It is the policy of Megawatt Solutions (Pty) Ltd to do all that is reasonably practical to safeguard the health and safety of its employees and others that may be affected by its acts, to prevent accidents and ill health at work arising from work activities, and to prevent damage to Company property.

Megawatt Solutions (Pty) Ltd aim for continual improvement of its health and safety management system.



Environment

Megawatt Solutions (Pty) Ltd believe businesses are responsible for achieving good environmental practice and operating sustainably.

We are therefore committed to reducing our environmental impact and continually improving our environmental performance as an integral and fundamental part of our business strategy and operating methods.

It is our priority to encourage our customers, suppliers, and all business associates to do the same.

Not only is this sound commercial sense for all; it is also a matter of delivering on our duty of care towards future generations.

Quality

We aim to achieve excellence through our delivery process that is safe, meets quality requirements, and is cost-effective and innovative. To achieve this aim, it is our policy to apply and maintain an effective management system complying with the requirements of ISO9001.

The objectives of our management system are:

- To meet the requirements of clients and applicable regulatory standards in a cost-effective and timely manner by effectively planning all projects through all phases of delivery and by appropriately verifying and approving outputs.
- To empower and train our staff to meet the objectives of our business principles to achieve ethical conduct and good governance.
- To safeguard our clients' goodwill and Megawatt Solutions (Pty) Ltd reputation by striving to achieve certification with relevant bodies.


We recognize that this policy requires a clear commitment by management to the application and continual improvement of the quality system and an appreciation by our staff that adherence to the system is everyone's business.



References



Projects

- control the 765kV transmission network of South Africa. (2012 – 2016)
 - Writing technical manuals for the first phase 5 breaker and a half protection and control schemes. The manuals describe the logic utilized in the 765kV breaker and half project. (2012-2013)
 - Design, Configuration, and testing of the prototype schemes for Siemens on the Corp3158 Eskom Transmission contract. The applications cover 29 different commodities, used for breaker and half and double busbar substation configurations. The IEC 61850 standard is used extensively in this project. This project introduces the Junction Box IED (PIU) in the HV yard which interface with the various protection IED's via GOOSE. (2016 – 2019)
 - Development of Omicron Test Universe CMC Test routines for Alectrix. These routines will be used on the Eskom Transmission Contract to test the Siemens Siprotec 5 Protection IEDs.
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- Various new/ refurbished protection and control system designs/ logic/ project management for the following customers:
 - SASOL
 - Eskom Transmission (132kV – 765kV)
 - Eskom Distribution (44-132kV)
 - Eskom Generation
 - Trans Africa Projects (Protection Commissioning for Eskom).
 - City Councils (City of Cape Town, City of Tshwane, and City Power)
 - Nampower
 - Various busbar protection systems (REB500, REB670, REB101 / 103, High impedance systems)
 - EPCM on Pebble bed modular reactor project through Murray and Roberts.
 - Alectrix (Development of Omicron Test Routines for Siemens Siprotec 5 IEDs)
 - Commissioning of various protection systems. We focus on the IEDs during the commissioning phase. (Settings, primary plant, and test routines). We offer a turnkey solution for commissioning through our network of experienced contractors.
 - Design and commissioning of the REB500 busbar protection system implemented at Ressano Garsia – Mozambique. One busbar protection system is used to protect the busbars and feeders of five IPP suppliers plus the connected transmission substation.
 - Megawatt Solutions where a part of the breaker and a half development which was initiated in 2006. We were part of the team that successfully commissioned the first seven breakers and a half station, build to protect, and
 - Megawatt Solutions consulted Conco in their development of Copr3158 protection and control schemes.
 - Megawatt Solutions, Siemens, and Trans African Projects successfully implement and commissioned the first implementation of Corp 3158 schemes at Pinotage Substation. This is a breaker and a half bulk supply station of Eskom in the Somerset West Area. (2017 – 2019)
 - Megawatt Solutions successfully consulted and commissioned the protection and control additions for Conco at Kappa Substation. The additions connect the Perdekraal Windfarm to the 765kV transmission grid. This included a new diameter on the 400kV side and a new 132kV collector substation. (2019 – 2020)
 - Megawatt Solutions provided consulting and commissioning services through trans-African Projects to the newly build Komsberg MTS. This includes design reviews, applications, test routines, settings, and commissioning. (2020 – 2021)
 - Megawatt Solutions is responsible for the training of Eskom personnel on Corp 3158 protection and control commodities through Siemens. (2021-ongoing). This includes Technical, Operator and Application Training.

