

## JULIAN SWARTZ

Consulting Engineer

e/ [jswartz@hmac.com.au](mailto:jswartz@hmac.com.au)

p/ +61 (0)7 32364244

f/ +61 (0)7 3236 4266

Julian Swartz joined Hill Michael in November 2008 and is a qualified electrical engineer with experience in power system analysis, operation and control. He previously worked as a system operations engineer, where he was responsible for contingency planning, fault level studies, optimizing the network configuration and providing real-time support to power system control centre staff.

Julian has graduate research experience in the application of HVDC and superconductor technology to power systems. He has also trained engineers in power systems while employed as a university lecturer. His diverse experience as a graduate student, academic and electrical engineer has enabled him to translate theory into practical applications while effectively communicating these ideas to others.

### Specialist Areas

- Power system modeling and analysis
- Load flow studies, fault studies and transient stability studies
- Transmission and distribution network operation and planning
- Power system dynamic simulation
- Network losses computation and analysis
- Application of HVDC and superconductors to power systems

### Significant Projects

- Houhoek – Lourensriver 132 kV line upgrade, South Africa.
- Regional sub-transmission energy loss analysis, Eskom, South Africa.
- Analysis of transformer inrush current due to switching during load shedding.
- Risk analysis due to induction on parallel lines during outages.
- System studies for sub-transmission outages and contingency analysis.
- Studies to determine settings for new distribution feeder voltage regulator.

### Qualifications, Professional Membership & Industry Involvement

- B.Sc.(Eng)(Electrical), University of Cape Town, South Africa
- M.Sc.(Eng), University of KwaZulu-Natal, South Africa
- Ph.D. (Engineering Science), University of Oxford, U.K.
- Member, IEEE (USA)



[www.hmac.com.au](http://www.hmac.com.au)

Head Office:  
Level 3, Bowman House  
276 Edward St, Brisbane Qld 4000  
GPO Box 3195, Brisbane Qld 4001  
Australia

p/ +61 (0) 7 3236 4244  
f/ +61 (0) 7 3236 4266

HILL MICHAEL

- Cairns
- Brisbane
- Melbourne
- Townsville
- Canberra
- Launceston

*Hill Michael is a specialist electrical networks and strategic engineering firm. Focused on the application of engineering expertise in the context of organisational and project strategy, Hill Michael is a leading advisor to owners of electricity supply networks and those wishing to connect to them. Established 1987.*