**JOSEPH T. THOMAS** *Permanent resident of Australia since December, 2011*

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**Summary**

A dynamic Electrical Engineer with more than eight years of experience. The different areas of my expertise include Water and Wastewater Industry Systems, Asset Management, PLC/RTUs, SCADA systems, Electrical Installation, Design and Maintenance, Client and Stakeholder liaising, proven communication and Technical writing skills. A Member of the Institute of Engineers Australia, I look forward to being a lasting Electrical professional to the Water and Wastewater Industry.

**Profile Highlights**

* I possess more than 8 years of Electrical Engineering and Control Systems experience in Queensland, Australia and Bahrain.
* My in-depth knowledge of configuration, setup, maintenance and troubleshooting of systems used in Water and Wastewater Industry, Various Pump controllers and advanced caliber for Liaising with Stakeholders, Project Managers and Contractors alike, allowed me a fulfilling career in Electrical Systems with MultiTrode (Xylem Water Solutions Australia Pty. Ltd.).
* Supervision and coordination of Electrical Engineering works with technicians, field maintenance teams and contractors, Asset management inclusive of evaluation, maintenance strategies, planning, scheduling and coordinating supervision, commissioning, budgeting and estimations can easily show my thorough technical, management and time / cost mitigation skills.
* Full-fledged experience with SCADA systems like VTS SCADA, ClearSCADA, Vijeo Citect has proven myself as an effective professional in the Water/wastewater industry.
* My detailed understanding of Electrical Design has been demonstrated by use of software for Control Drawings, Project Proposals, Asset appraisals etc.
* Development of strategies for optimized testing procedures and evaluation methodologies for the economic and fast paced Client / Stakeholder programs concerning rollout of new controller version software used in assets like pump stations and water plants.
* Hardware and Software testing for Xylem PLC / Controller / Firmware Product Development helped me nurture risk identification and time management skills.
* Assessment of Electrical hardware, Controller specifications, support infrastructures and control mechanisms with relation to pump stations, booster plants and Water Treatment Centers for the study and analysis of Maintenance and Refurbishment requirements of the respective assets has helped me develop a keen sense of asset resource and time management within the Water industry I was employed in.
* My Technical writing skills are easily proven in well written Specifications, Manuals, Test Schedules, Process Instructions and Asset management reports.

**Education**

* **Training at** *Skillstech, Acacia Ridge Tafe campus* for**Electrical Installation and Design**
* **Assessed to be a Professional Engineer as per Australian Standards** by Engineers Australia (Contact ID: 3678183). Assessed as comparable to the Education level of an **Australian Bachelor Degree by Australian Education International – National Office of Overseas Skills Recognition (AEI – NOOSR)**
* **Bachelor of Electrical and Electronics Engineering, 2003** LBS College of Engineering, Kannur University, Kasaragod, Kerala, India

**Experience**

* design of electrical systems (builDing services) ⦁ 22ND april 2015 – 15th august 2015 ⦁ RCA Consulting pty ltd. (temp contracts)
* Electrical Design of power, lighting, security, fire alarm layout using AutoCAD 2014.
* Discussion and talks with head consultant and mechanical engineer regarding cable sizing, single line diagram ratings, air conditioning power requirements, Australian Standards etc.
* Reference to Australian Wiring Codes and Standards.

**ACCOMPLISHMENTS:** *Electrical AutoCAD design / rework / drafting for Medical Centre in North Lakes, Queensland.*

*Electrical AutoCAD design / rework / drafting for Hosanna Community Centre, Brisbane, Queensland.*

*Electrical AutoCAD design / rework / drafting for Coral sea Function Centers in, Brisbane, Queensland.*

*Electrical AutoCAD design / rework / drafting for Indooropilly State High School Admin Block in, Indooroopilly, Queensland.*

* Applications Engineer ⦁ 29th October 2012 – 2nd March 2015 ⦁ multitrode (now a part of Xylem Water Solutions Australia Pty. Ltd.)
* Pump Controller Asset Management at 240 Pump Stations sites in New South Wales. Coordination with Stakeholders and supervision of commissioning and management activities with Contractors and Technicians. Identification of Strategies for management of resources for the maintenance of related assets.
* Extensive work on the Flygt controllers, including but not limited to Configuration (using the LCD HMI and the Configurator software utility), Advanced Programming (Logic Engine and ISaGRAF), Communication setup, SCADA systems – VTS SCADA, ClearSCADA, AquaView and VijeoCitect .
* Maintenance of Pump Station Assets in VTS SCADA and ClearSCADA systems including design of Graphic and Control functionality for new and existing maintenance.
* Work on the Vijeo Designer HMI software to assist in the management of Water Treatment assets within Yarrabbee mine, New South Wales.
* Pump Station Control and Supervision system using Flygt Pump Controllers – MultiSmart, MT2PC, MTDPC, MTIC, APP, FMC, FGC, MAS711 etc.
* Work on PLC, RTU, relays, Input / Output Modules, Control and Signal Cables.
* Testing Electrical components using Multimeters, Oscillators and other electrical instruments.
* ISaGRAF Logic code programming in the MultiSmart for custom client requirement – using the Functional Block Diagram. Growing knowledge of Ladder Logic PLC programming.
* Modem Testing and Configuration to suit with the Controllers and SCADA systems.
* Electrical Equipment and Control Panel Testing and Commissioning for better Asset management.
* Technical Reports and Documentation with respect to Project Proposals, Asset Maintenance reports, Product manuals etc.
* Technical Support (Telephone and Email) - troubleshooting, risk identification and resolutions for Clients, Stakeholders and customers. Use of various computer programs for provision of Engineering and technical services.
* Product and Methods Training to Customers and Internal staff.
* ClearSCADA 2013 Training from Schneider Electric, 4-8 November 2013.

**ACCOMPLISHMENTS:**

1. *Setup & Commissioning Hargrave Street Pump Station, in City of Port Adelaide, Enfield*

The Pump Station at Hargrave Street in the City of Port Adelaide had various additional requirements and specifications which needed to be separately addressed and configured in the MultiSmart Pump controller. SCADA was configured in the controller with online access.

1. *Setup, testing & configuration for interim functionality of the Kilcoy Water Treatment plant.*

The Kilcoy Water Treatment plant communication philosophy was configured, tested and fine-tuned for interim parameters (pumping functions to transfer from Somerset WTP to Kilcoy WTP), with SEQWater official – Mr. Graham Norman.

*Accomplishments continued…..*

1. *MiniSmart Pressure Sewer Controller Commissioning and related* ***Asset management****.*

The Pressure Sewer Controller installed in 240 sites was commissioned and put into operation. This involved the intial testing and confirmation regarding functioning of the MiniSmart Controller firmware, testing of the onboard Trio Radio firmware and extensive site visits. Also various sites needed extra assessment towards the performance of the respective asset and related recommendations.

1. *Configurator advanced setup for Queensland Urban Utilities.*

The advanced features required in the QUU called for the use of the MultiSmart Configurator Tool with added

Functionalities. This was achieved by creating custom forms within the configurator to follow the additional requirements.

1. *SCADA / Controller Design and configuration for Cobar Water Filtration Plant in NSW.*

The configuration and setup of the MultiSmart RTU for data and control of Cobar Water Filtration Plant parameters coupled with integration to VTS SCADA systems with Remote Monitoring and Access using the Maxon DataMax 3G router.

1. *Design, setup and maintenance for all Australian Pumpstations online SCADA.*

The graphic design, control & data configuration and maintenance of Pumpview 3 - a VTS SCADA application providing 24 hours monitoring and control functionality for over 100 Pump station sites across Australia was a chief responsibility undertaken in the two years of work at MultiTrode Xylem Inc.

1. *SCADA / Controller Design and configuration for Delgany Water Plant in NSW*

The Water Treatment Plant in Delgany, similar to an earlier project had updated design to include various new functionalities like level monitoring and pump control which was easily available in the VTS SCADA interfaces.

* Electrical Asset Engineer ⦁ 1st November 2010 – 15th October 2012 ⦁ Ministry of Interior, Bahrain
* Supervision and Control of all Electrical Installation and construction Work in the Ministry of Interior, Kingdom of Bahrain.
* Management of MOI Assets like the Police HQ Electrical Systems, Coast Guard HQ Generator systems and supervision, coordination and recommendation for improvement and maintenance of systems
* All project responsibilities including Scope of Work, Bill of Quantities, Costings, Tendering, Site Visits, Pre Tender Queries, Reviewing and Selection of Contractors, Approvals and Certificates etc.
* Discussions and meetings with Stakeholders from MOI offices for management of respective asset reliability risks, recommendations thereof and developed strategies for the mitigation of risks.
* Site visits to various MOI assets for determining requirements of maintenance, refurbishments and replacements.
* Site meetings and coordination with different contractors and Project Managers.
* Deliberation and liaising with Engineering Manager and various Ministry Engineering Bodies regarding Risk Management and Government Construction Project Safety.

**ACCOMPLISHEMENTS:** *Electrical Design, Coordination, Commissioning and Maintenance of the Police HQ at Manama, Bahrain*

* Installation Electrical Engineer ⦁ 15th May 2009 – 15th October 2010 ⦁ Modern Mechanical Electrical and Transport Company W.L.L., Bahrain
* Installation, maintenance and refurbishment of Electricity Directorate Asset equipment.
* Maintenance of Electrical Power and Lighting systems.
* Research and Development into product installation.
* Financial forecasting of works done with the Ministry of Electricity, Bahrain.

**ACCOMPLISHEMENTS:** *Installation,**Maintenance and repair of Street lighting and HV equipment assets of the Electricity Directorate, Government of Bahrain.*

*Experience …… continued*

* Site Based Electrical Engineer ⦁ 1st July 2008 – 19th February 2009 ⦁ Mercury Middle-East W.L.L., Bahrain
* Supervision & oversee of Electrical Installation of construction work in the AL SALAM RESORT site
* Preparation of Electrical Work Shop Drawings.
* Discussions and client meetings with WSP (The Consultant), Sama Dubai (The Clients).
* Procurement of Materials.
* Quality assurance of electrical installation work at site.

**ACCOMPLISHEMENTS:** *Electrical Erection at the Al Salam Resort ⦁ MERCURY MIDDLE EAST W.L.L.*

* Consulting Electrical Engineer ⦁ 1st October 2006 – 31st May 2008 ⦁ Bahrain Engineering Bureau, Bahrain
* Complete Design and Analysis of the Electrical Power system in all projects undertaken with inclusions of High-Rise buildings, Luxury Villas, Shopping Malls etc right from concept to delivery.
* Calculations and Preparation of all Governmental and Ministerial Building Approvals concerning Electric Load, Thermal Insulation of Buildings etc.
* Preparation of Detailed Electrical Drawings using AutoCAD 2006 in conjunction with the Draftsmen.
* Preparation of all MEP Project Tendering documents.
* Checking and Approval of all Electrical Working-Shop-Drawings and Material Approval Certificates submitted by contractors.
* Inspection and supervision of all Electrical Works at Construction sites and Quality assurance as per Local Standards and Client requirement.
* Weekly and Monthly meetings and liaising with clients, contractors, project managers and suppliers.

**ACCOMPLISHEMENTS:** *Electrical Design and Supervision of work for Bahrain Engineering Bureau.*

**Academic Accomplishments**

* **Construction of Servo controlled Voltage Stabilizer** ⦁ **Engineering Degree Project**
* **Inductive Charging of Electric Vehicles ⦁ Engineering Degree Seminar**
* **Superconducting Magnetic Energy Storage (SMES) ⦁ Technical Symposium**

**Non-Technical Skillset**

* Proficient oral and written communication. ⦁ Proven ability to work with strict deadlines
* Demonstrable Teamwork and Leadership ⦁ Highly organized and improvement oriented
* Multitasking abilities ⦁ Customer interaction and satisfaction.
* Interpersonal and interdisciplinary skills. ⦁ Risk assessment and troubleshooting.

**References**

*Available on Request*