

Joint Electrical Engineering Institutions' Lecture Program, 2013

## Mechanics of an Iconic Electrical Project

**Carl Butcher, Senior Electrical Engineer, Aurecon**

DATE/ TIME: **Thursday 22 August 2013** 5:30 for 6:00pm Start

VENUE: Engineers Australia Auditorium,  
Ground Floor, 8, Thomas Street, Chatswood

Aurecon Hatch were the Principal Contractors for the multi-billion dollar Coal Export Terminal project in Newcastle. They were engaged to provide total engineering design, procurement and construction management (EPCM) services to NCIG. The Electrical and Control systems design included the engineering services for the entire electrical and control systems, function specifications for PLC & SCADA configuration, technical specifications, scope documents, contract documentation, construction support, factory testing, site commissioning, performance testing and operator training.

This presentation is an explanatory case study into this project and will outline the principals and mechanics of delivery, challenges, failures and successes, metrics, and lessons learnt over the 4-5 year design cycle. It will tackle the differences between Electrical design progress and the traditional S curve engineering progress. It will also cover successes and failures, complex and strained relationships and the effect this has on actual and perceived success, the importance of building and maintaining key relationships, and the eventual successful delivery of the design component of a major infrastructure project.

Carl Butcher is a Chartered Professional Engineer who has worked as an Electrical, Control and Instrumentation Engineer for the past 10 years in various industries such as coal, ports, oil and gas, water and process. For the past 3 years Carl was a design team member of the NCIG Coal Export Terminal Expansion Project in Newcastle and as the EIC & IT design lead in its last stage. Prior to being involved in heavy industry, Carl worked in the Royal New Zealand Air Force as an avionics technician, commissioned Rail rolling stock in the UK and played professional rugby in France.

**NOTE: Attendance may be credited towards Engineers Australia's Continuing Professional Development (CPD) points. Engineers Australia members are required to undertake a minimum of 150 hours CPD every three (3) years & are responsible for recording CPD for audit.**

For further information, please contact [Upali Mahaliyana - umahaliyana@gmail.com](mailto:Umahaliyana@Gmail.com)



ENGINEERS  
AUSTRALIA  
Sydney Division



The Knowledge Network

