A 2-Day Professional Development Seminar on

Uprating & Upgrading of Overhead Power Lines

by Gary Brennan, a recognised expert in conductors & overhead line design

“Learn how to uprate existing lines by up to 200%”

“An excellent seminar for practitioners who are involved in uprating or improving line performance”

SYDNEY
12-13 September 2019
Novotel Sydney Central

ADELAIDE
16-17 September 2019
Rydges Adelaide

9.00am - 5.00pm
Seminar Overview

For the foreseeable future many Transmission and Distribution utilities are confronted with three coinciding critical issues. Firstly, much of the electricity network infrastructure was constructed in the fifties and the sixties, which result in the age of the assets being over 50 years. Secondly, the design life of much of the infrastructure is in many cases about 50 years and has matured beyond the engineering serviceability and or economic life and requires some form of life extension. Thirdly, the need to increase capacity of the existing infrastructure places extraordinary demands on utilities to establish strategies to uprate and in many cases improve reliability of existing infrastructure rather than undertake new construction.

A range of practical common and unique options for uprating and upgrading existing lines are explored by providing an understanding of the fundamentals of line design and planning and then linked to a number of Australian case studies. The presented material includes the planning and decision making considerations for line uprating and upgrading.

Seminar Leader’s Profile

Gary Brennan has been in the electrical supply industry for over 40 years, involved with CIGRE and overhead lines for over 20 years and is currently an Endeavour Energy’s Transmission Manager and has previously worked with TransGrid (ECNSW) and AusGrid (Sydney County Council).

His career includes over 20 years’ experience in transmission line planning, environmental assessment, optimization, design, construction, maintenance and operation. His experience has spanned from 500 to 11 kV lines and incorporates lattice steel towers, concrete and wood poles. He is a recognised industry expert in the area of bare overhead conductors completing a Master of Engineering by thesis on “Methodology for the Assessment of the Serviceability of Aged Transmission Line Conductors.”

Gary has a Master Degree in Engineering (Honours) Mechanical, Bachelor of Engineering (Honours) Electrical and a Graduate Diploma in Management. He is a Chartered Professional Engineer and a Fellow of Engineers Australia.

He was a past Convenor of the CIGRE Australian Panel on Overhead Transmission Lines, the Australian member to the CIGRE Study Committee B2 Overhead Lines and was the international Task Force Leader for the CIGRE publication of Technical Brochure 353 “Guidelines for increased utilization of existing overhead transmission lines” which primarily focuses on uprating and upgrading existing overhead lines.

Gary chairs the Standards Australian technical committee on Conductors and is a member of technical committees for Insulators, Aerial Marking of Overhead Lines and Overhead Line Design. He has had a long standing commitment to continuing education and has published an eleven part short article series on “overhead conductors” and a four part series on “uprating and upgrading of overhead lines.” Gary has lectured at ESI residential schools, at both an undergraduate and post graduate level at the University of Wollongong and at a para-professional level for the NSW Technical and Further Education Department.

WHERE DO MANY UTILITIES FIND THEMSELVES TODAY OR IN THE NEAR FUTURE?

- Much of the infrastructure was constructed in the 50’s and 60’s
- Age of many lines about 50 & 60 years
- Design life of many of the lines was 40 to 50 years has been reached
- Some have already adopted strategies to extend asset functionality and life
- Lines may have matured beyond the serviceability and or economic life
- Lines may require some form of life extension
- Embedded generation may require local line upratings
- May need to increase capacity of existing lines by uprating
- Some lines may require upgrading to improve line performance
- Difficulties or delays in obtaining approvals for construction of new lines
- Opportunities for third party utilisation such as telecommunications

Participants who attended Gary’s seminar said these..

“As a Network planner, great learnings, presented many practical Australian examples of uprating lines coupled with great sharing of information and experiences”, senior TNSP planner

“I just learnt so much about practical applications and how to go about uprating existing lines” Consultant

“Excellent content and delivery, best two day investment for my personal development and for my company”; TNSP line designer

“The collation of the presentation material and the added bonus of the provided reference material was a real surprise, and I now have a real understanding of the design of overhead lines and how to go about uprating lines”, DNSP planner

“A great understanding and application of AS 7000 and presented as a balance between theoretical and practical information on uprating and upgrading lines”
Who Should Attend?

This seminar will be valuable to those who are responsible for planning, operating or designing overhead power lines, such as line designers, consultants, network planners, managers, decision makers and practitioners.

CPD Recognition

This seminar program is designed to meet the Continuing Professional Development (CPD) needs of participants. A Certificate of Attendance will be awarded at the end of the program. This serves as evidence of your personal and professional commitment to your career.
HOW TO REGISTER?

Step 1 - Email completed form to register@cpdint.com.au
A Confirmation of Booking together with a Tax Invoice will be sent to you (via email or fax) upon receipt of registration form.

Step 2 - MAKE APPROPRIATE PAYMENT, AFTER RECEIPT OF INVOICE, BY:

☐ CHEQUE attached - payable to CPD International Pty Ltd. Mail it together with the completed registration form to us.

OR ☐ EFT (Electronic Funds Transfer) to

Account Name: CPD International Pty Ltd
BSB No.: 182-222
Account No.: 1210 77176,
Bank: Macquarie Bank
Reference: please quote our invoice no.

COURSE FEES & DETAILS

Course Registration Fee:
Register before 1 August 2019:
AUD1,280.00 + AUD128.00 (GST) = AUD1,408.00 per delegate
Register after 1 August 2019:
AUD1,380.00 + AUD138.00 (GST) = AUD1,518.00 per delegate
Register 3 or more delegates at the same time for this course:
AUD1,242.00 + AUD124.20 (GST) = AUD1,366.20 per delegate

Accommodation: Arrangements for accommodation are the responsibility of participants and costs are not included in the course fee. Accommodation is available at the venue/close by and information can be made available to interested registrants.

Note: The organizer reserves the right to make changes to the event schedule, contents and venue. The views expressed in the event are not necessarily those of CPD International Pty Ltd.

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