



2018.06.05

離岸風場專案開發風險實務及 型式測試與認證介紹

Time	Topic	Brief description	Speaker
9.30 - 10.00	UL Project Service General Introduction	介紹 UL 在 Project Service line 下面的業務，具體包括：盡職調查、風資源軟體及資料分析、資產管理、電網解決方案等	UL 大中華區 風能事業部工程經理 Bo Jiao 焦渤
10.00 - 11.00	Risk in Wind Farm M&A/development 專案開發及並購中的風險及 盡職調查的必要性	Introduce risks in different stage of wind farm development/M&A and counter measures. 介紹在風電場開發及並購過程中在不同階段面臨的風險以及建設性解決方案	UL 大中華區 風能事業部工程經理 Bo Jiao 焦渤
11.00 - 11.20		休息	
11.20 - 11.50	Wind Farm Assets Management and LTE of Wind Turbine 風電場資產管理和機組壽命評估	Introduce the Assets Management Measures (optimization, RCA, LTE) 介紹風電場優化方法、事故原因分析以及風電機組定壽/延壽技術	UL 大中華區 風能事業部工程經理 Bo Jiao 焦渤
11.50 - 13.00		午餐	
13.00 - 14.00	Prototype Certification & Component Certification 風機整機及零部件型式認證	Orientation of Certification, Process, documentation requirement and evaluation sheet. 介紹 UL 旗下 DEWI 及 DEWI-OCC 提供風機的整機及零部件型式測試及認證解決方案。	UL 大中華區 風能事業部商務發展經理 Mao Zhou 周毛
14.00 - 14.30	Project Certification 項目認證	Introduction of PC, scope of PC, Design basis evaluation, design evaluation, manufacturing surveillance, transportation and installation surveillance, commissioning surveillance 介紹項目認證，服務內容，零部件設計評估內容，設計評估，工廠審查及安裝，運輸，調試監督。	UL 大中華區 風能事業部商務發展經理 Mao Zhou 周毛
14.30 - 14.45		休息	
14.45 - 15.00	Power Quality & LVRT measurement Acoustic measurement 電網特性測試	Introduction of Power characteristic measurement, Grid code compliance, ED 2.1 and Ed 3 Acoustic measurement. 介紹電網特性測試中電能質量， 低電壓穿越及電網 GCC 認證的相關內容。	UL 大中華區 風能事業部商務發展經理 Mao Zhou 周毛
15.00 - 16.00	Mechanical Load Power Performance and Verification 機械載荷及功率曲線測試	Introduction of Mechanical load ed 2005 and ed 2015, Field installation and reporting. Introduction of Power performance ed 1 and ed 2, field installation and reporting. Site calibration and numerical calibration. Complex terrain site power curve verification. 介紹 IEC 61400 系列不同版本的功率曲線及機械載荷標準，介紹 IEC 標準所需要場地標定及數字化場地標定。複雜地形下的功率曲線驗證等。	UL 大中華區 風能事業部商務發展經理 Mao Zhou 周毛

報名日期：即日起至 2018 年 6 月 3 日止

課程費用：新台幣 1000 元/名

課程地點：台北市區內(開課時通知)

課程網址：<https://goo.gl/RA2MBX>

聯絡窗口：03-4839090#2503 傅小姐



主辦單位



中華民國檢驗證協會

協辦單位



優力安全認證股份有限公司

Bo Jiao

Engineering Manager, Project Service, China

PROFESSIONAL PROFILE

Mr. Jiao has over 9 years of experience in renewables including offshore/onshore wind energy. To date Bo has been involved in renewable energy projects with a combined total of nearly 5GW of installed capacity and an investment value of more than US\$7 billion. He is responsible for due diligence activities as well as wind power service projects in UL. Prior to joining UL, Mr. Jiao held positions with Senior Renewable Energy Consultant and Wind Turbine Test Engineer working on projects around the world. He has led project development, lidar service and M&A teams as well as negotiated with project owners, lenders, utilities, regulatory agencies, and advisors to close project development, acquisitions and sales of multiple wind energy projects. Bo is fluent in English and is basic in German. He has a master degree in Engineering Mechanics.

REPRESENTATIVE PROJECTS

Northland Power Acquisition Portfolio, Canada/Germany/Netherlands, 2.6GW – for confidential client in China, acted as the Project Manager, leading the due diligence. The role included coordination with 3 internal offices in 3 different time zones, the vendor, FA and the client to undertake the technical due diligence task. The assets include onshore/offshore wind, solar, thermal and biomass. Accompanying the client to attend the board meeting in Canada.

Confidential Portfolio, Spain/Mexico/Canada, 806MW – for confidential client in China – Project Manager leading coordination with internal office, FA and the client to undertake the technical due diligence task

Wind Farm Portfolio Acquisition Due Diligence, China, 550MW – for Macquarie – Project Manager leading the portfolio acquisition due diligence of 3 operational wind farms in China. Responsible for site visit, WTG technology review, suitability review.

Meerwind Offshore Wind Farm Acquisition Due Diligence, Germany, 288MW – for Shanghai Electric Power – Project Manager leading the portfolio acquisition due diligence of 288MW operational wind farm in Germany.

Wind Farm Acquisition Due Diligence, China, 200MW – for SunEdison – Project Manager leading the acquisition due diligence. Responsible for site visit, WTG technology review, suitability review.

EXPERTISE

Technical Due Diligence
WTG Technology Review
Suitability Review

YEARS OF EXPERIENCE

UL: Since 2017

Wind Industry: 9 Years

PROFESSIONAL EXPERIENCE

2017-Present

Engineering Manager, Project Service
UL

2015-2017

Senior Renewable Energy Consultant,
SgurrEnergy Ltd

2009-2017

Test Engineer
China Electric Power Research Institute
State Grid Corporation of China

2010-2011

Trainee
GIZ, Germany

EDUCATION

Master Degree, Engineering Mechanics
Beijing University of Aeronautics and Astronautics

Bachelor Degree, Engineering Mechanics
Beijing University of Aeronautics and Astronautics

Curriculum Vitae



Company Name: UL-CCIC Company Limited
Employee Name: Mao Zhou
Profession: Great China Business Development Manager
Entry in the firm: Since Mar, 2014

Key Qualifications

- PROTOTPE TESTING & CERTIFICATION
- O&M REVIEW AND ON-SITE SUPERVISION
- TECHNICAL DUE DILIGECE
- WIND FARM OPERATIONAL MANAGEMENT

Professional Experience

Since 03/2014	Employer :	UL-CCIC Company Limited
	Position Held:	Account Manager
07/2013 - 03/2014	Employer:	Campellsci China Limited
	Position Held:	Branch Manager
05/2008 – 07/2013	Employer:	GE Energy Limited
	Position Held:	Sales Manager
07/2006 – 05/2008	Employer:	701 Institute of CSIC
	Position Held:	Technical Manager

Education:

2002-2006	Institution:	MinZu University of China
2006	Degree:	Bachelor of Applied Physics
2009-2012	Institution:	RenMin University of China
2012	Degree:	Master of Business Administration
2013-Now	Institution:	Tsinghua University
2014	Degree:	Ph. D candidate of Quantitative Economics