



## Summary

Over thirty (33) years of experience performing investigations of the root cause of major and complex incidents involving electrical power equipment and installations in different occupancies including healthcare, education, commercial buildings, industrial plants, power generation, transmission and distribution in addition to others.

Instructed as an expert witness to prepare expert reports and give evidence in court rooms, depositions (USA) and arbitration proceedings in numerous jurisdictions around the world.

Evaluated design, manufacturing and installation of different types of equipment and systems including electromechanical systems (power distribution, heating, ventilation, air conditioning, boilers, heat pumps, refrigeration systems, turbines, compressors...etc), power generation, transmission and distribution, manufacturing, and other.

Authored several articles published in leading industry periodicals such as Claims Magazine, NASP - Subrogator, PLRB – Frontline and CILA - Claims Focus newsletter. Also been a frequent lecturer on a variety of topics to different organizations such as the PLRB (Property Loss and Research Bureau), NASP (National Association of Subrogation Professionals), IAAI (International Association of Arson Investigators), IASIU (International Association of Special Investigation Units), NGLCA (Natural Gas Litigation and Claims Association), EEI (Edison Electric Institute – Claims Committee), CILA (Chartered Institute of Loss Adjusters) among others.

## Education

- **Bachelor of Science in Electrical Engineering** | KWT University, Kuwait- 1986
- **Fire Inspector/Investigator** Hennepin Technical College Minneapolis, MN, USA- 1996
- **Master of Business Administration (MBA)** | Lake Forest Graduate School of Business, IL, USA- 2008
- **Expert Witness Courses**, Bond Solon Wimington Legal – UK
- **International Certificate in Enterprise Risk Management**, IRM - UK

## Professional Associations

- **Chartered Engineer (Registration No. 593908)**, Engineering Council, United Kingdom
- **Professional Engineer (Registration No. 26809)**, Board of Architecture, State of Minnesota, USA in addition to registration in multiple states

## Languages

- English: Fluent
- Arabic: Native Language

## Contact Details

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## Experience

### CEERISK Consulting Limited – London, UK

#### Managing Director / Principal Engineer

- Conduct forensic investigations of the root cause and liability following catastrophic losses such as fires, explosions, machinery breakdown and workplace accidents.
- Perform engineering analysis of design, specifications, drawings, and installations of various types of electromechanical equipment to determine the root cause of failures and opine on defects (design, manufacturing or installation).
- Prepare expert reports in relation to disputes involving the use and application of electrical and mechanical equipment and systems in numerous applications including central district cooling and heating, power generation (conventional and renewable), transmission and distribution, infrastructure, large industrial and commercial buildings.
- Act as an expert witness preparing giving evidence in compliance with rules of evidence in different jurisdictions and the ICC
- Provide engineering consultation on loss mitigation and prevention to utilities (public and private), contractors, manufacturers, large corporation and government agencies and municipalities in matters related to engineering risks.
- Conduct engineering risk assessment of electrical and mechanical systems in various types of properties, including schools, hospitals, power plants, commercial and industrial buildings.

### LWG Consulting UK Limited – London, UK Director of

#### Engineering

- Investigate complex losses with emphasis on cause and origin of incidents.
- Perform failure analysis and damage assessment of equipment.
- Investigate nature and extent of damage to large machinery and complex equipment including turbines, medical equipment, printing systems, large power systems and other types of equipment.

### LWG Consulting – Chicago, USA

#### Director of Engineering

In addition to engineering responsibilities, responsible for management of engineering research and analysis techniques; providing educational seminars to personnel of insurance companies and legal firms; supervising of client services and providing expert technical consultation to the engineering staff;

## Expert Engineering Services

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[www.CEERISK.com](http://www.CEERISK.com)

### Examples of Expert Witness and Engineering Investigations

- Acted as an expert witness in ICC arbitration proceeding in DIFC courts concerning a construction dispute involving the design, accreditation and installation of switchgear and MCC assemblies at a district cooling plant in Abu Dhabi, UAE.
- Investigated the root cause of an explosion and fire in a thermal power plant in Cairo, Egypt where a Hydrogen explosion was caused by blade liberation in a steam turbine. Expert report was prepared and used by the London Insurance market to determine policy liability
- Investigated fire and explosion in a 374-MVA power transformer in a transmission substation in California, USA. The investigation involved forensic testing and examination of HV bushing in Germany and tear down of the transformer in San Diego, California, USA.
- Investigated an explosion in a 345-kV (EHV) bushing in a generation substation in Connecticut, USA. Following a 2-year investigation of damaged components, I prepared an expert report and testified in deposition for over two days presenting opinions related to the incident.

- Investigated and prepared expert opinions related to design, manufacturing and installation defects in a number of products and systems including: refrigeration units, HVAC units, power products and others.
- Investigated and prepared expert report regarding a steam turbine failure at a geothermal power plant in Jakarta, Indonesia
- Acting as an expert providing expert reports in relation to a dispute involving the supply of towers to a wind turbine farm in West Australia
- Prepared expert report regarding an electrical failure in a switchgear assembly at a TV production facility in Leeds, England.
- Investigated prepared an expert report related to electrical failure in a utility's substation in a high-rise building in Chicago, USA
- Investigated the root cause of a fire in a VAR-Compensator used at a solar power plant in south Jordan to improve power quality before connection to the EHV transmission substation

### Sample Speaking Engagements

- Combined Cycle Power Plants; IMIA Annual Conference, Merida, Mexico 2015 – Chaired and presented findings of a workgroup on the design, installation and engineering risks at combined cycle power plants
- Root Cause Investigation of Engineering Claims Xchanging Learn at lunch Series, London, UK - June 2013
- Investigating Gas Turbine Losses Construction, Engineering and Energy SIG – CILA Lloyd's Old Library, London, UK - April 2012
- Investigating Power Line Incidents Edison Electric Institute – Claims Conference, Alabama, USA 2008
- Investigation of Industrial Fires International Association of Arson Investigators, 58th Annual Training Conference, Vancouver – Canada 30/4 – 4/5, 2007
- Investigating Stray Voltage Claims Natural Gas Claims & Litigation Association Conference, San Diego, CA – March 26-29, 2006
- Engineering Losses: An Analysis of the response of Manufacturers' Guarantee vs. an EAR Policy's Maintenance Period CILA Construction Energy and Engineering Special Interest Group, London, UK – October 2014
- Investigating Warranty Reinstatement CILA Annual Claims Conference, Manchester, UK – September 2014
- Challenges of Investigating Turbine Losses CILA Annual Claims Conference, London UK – September 2013
- Root Cause Investigation of Engineering Claims Xchanging Learn at lunch Series, London, UK - June 2013
- Root Cause Investigation of Transformer Failures CEERISK Consulting Engineering Webinars, London, UK
- Electrical Failures not related to Weather Conditions; IMIA Annual Conference, Singapore 2018 – Chaired and presented findings on investigation and risk assessment of electrical failures.

### Expert Engineering Services