

# Power & Utility Surveys

# Charles Taylor technical



Fossil fuel plant in Scandinavia

## Power and Utility Surveys

Power Stations and utilities are the backbone of any developed society. Failures in supply can cause huge disruption and large losses. Utilities employ large sophisticated items of plant often operating under extreme conditions. Careful risk management is vital to minimise breakdowns and damage. Networks can vary widely throughout the world from large National and Internationally integrated systems to small independent systems and producers. The environments they operate in vary from extreme cold in the arctic to extreme heat in desert areas. Operating practices and the markets that plants operate in also vary and require careful analysis if a meaningful risk assessment is to be undertaken. The recent trend towards asset life extension and increasingly complex revenue models must be taken into account if risks are to be adequately considered.

Charles Taylor technical has worked in this sector for many years and has experience with almost all of the technology used. This includes gas turbines, steam turbines, heat recovery steam generators, geothermal power plants, hydroelectric plants, diesel, oil and coal fired power plants, transmission and distribution systems, wind turbines both onshore and offshore, water supply, sewage infrastructure and pipelines.



Hydro-electric plant in Nepal

## Services



### Corporate Bespoke Surveys

A number of client power producers and utility suppliers, recognising the limitations of most insurance surveys (which only cover insured perils) have commissioned CTt to perform comprehensive reviews of exposures ranging including property, machinery breakdown business and contingent business interruption and liability exposures.

Not only do such studies assist insurance procurement for power companies and utilities but they also assist the company concerned to develop a broader risk management strategy, going beyond purely the use of insurance for risk transfer.

### Transmission and Distribution Networks

CTt has considerable experience in assessing the risks associated with Transmission and Distribution Networks in particular, "Lead Assets" such as Power transformers, Over Head Lines (OHL), cables and circuit breakers. Networks often extend over large areas and failures may have an impact on Transmission and overall Frequency Stability as well as equipment damage and loss of supply. Costing models for Transmission Networks can also be very complex and involve a variety of contractual arrangements crossings National Boundaries.



### Asset Management

In recent years there has been a move towards extending the life of major Utility assets to defer the need for costly capital replacement. Many schemes involve extensive refurbishment of components and changes in operating procedures which all have a bearing on residual risk. CTt continues to monitor these trends and up skill in our understanding of the risks to ensure that we are able to give the most up to date assessments of risk

The technical team within Charles Taylor provides risk focussed technical expertise. Services include Technical investigations of failures, Risk Research, Risk Surveys, Loss Estimation and Benchmarking.

A worldwide capability is available drawing on the resources of the CTC Group.

For more information contact:



Eur Ing **Richard Radevsky**  
BSc CEng CSci CEnv PEng FICE  
FCIWEM MIFireE MEI FCI Arb  
Tel: +44(0) 7860 482741

E-Mail: Richard.Radevsky@ctcplc.com



**Jeff Ashman**  
B Eng Hons, C Eng, MIEE  
Tel: +44(0) 7917 461 787  
E-mail: Jeff.Ashman@ctcplc.com



Eur Ing **Doug Scott**  
BTech CEng CSci, FICHEM MEI  
Tel: +44(0) 7760 173819  
E-Mail: Doug.Scott@ctcplc.com

Phone: +44 (0) 20 7015 2067

Fax: +44 (0) 20 7623 1817



Key Risk Rating Indicator System  
Risk Focussed Technical Expertise  
[www.cttechnical.com](http://www.cttechnical.com)