

Power System Reliability Assessment and Cost / Benefit Evaluation

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This presentation will discuss the fundamental concepts of power system reliability all levels, namely generating capacity, generation and transmission combined capacity, as well as distribution systems. The use of quantitative stochastic reliability indices as opposed to deterministic “rule-of-thumb” indices will also be discussed.

The talk will also cover aspects of customer interruption costs for cost-benefit analyses to support decisions on investments and maintenance for enhancing supply reliability. The overall thrust of the presentation is on the fact that probabilistic methods are as important and critical today as they were a few decades ago, particularly in the light of increased pressure for economic justifications and the need to manage our assets effectively, efficiently and reliably.