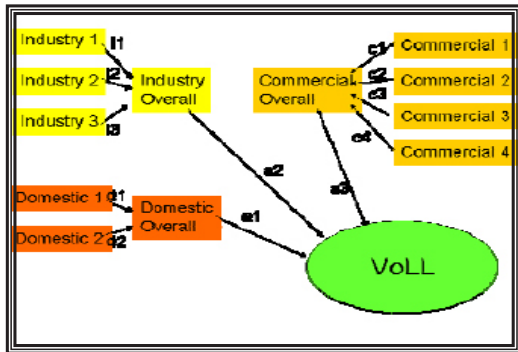
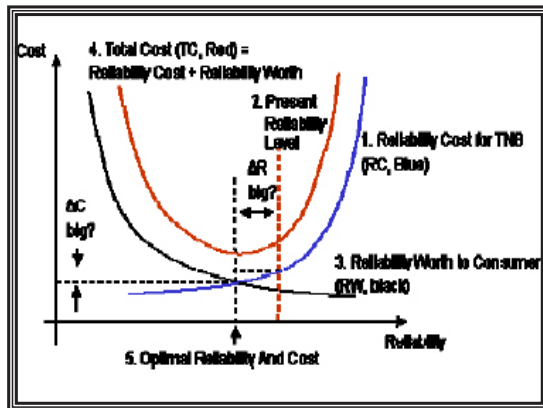


## R&D Fund Project

### Determining The Value of Lost Load in The Malaysian Electricity Supply Industry



Method to compute the composite VoLL



Utility asset investment: Balancing Reliability Cost and Reliability Worth

### Project Overview

This project is carried out in order to determine the value of load loss in the Malaysian Electric Supply Industry. This is done by grouping the electricity consumers based on their TNB business code, tariff structure, monthly energy demand or a combination

of these grouping. This includes stratification of customers to facilitate accurate data collection. The customers weighting is determined in the final VoLL calculation based on the percentage consumption of a particular stratum in comparison to the total consumption. The individual outage cost of customers of the identified groups was computed and this was accomplished by collecting sample data through the questionnaires that were developed to gauge the customers' perception of the direct and indirect costs of various outage scenarios. The formulation which enables the calculation of the VoLL was developed where it allows the individual stratum VoLL values to be combined to form a composite VoLL value.

### Deliverables

- A complete methodology on determining the VoLL
- Grouping of consumers based on their energy demand
- A questionnaire which allows TNB to quickly assess the outage cost to the consumer
- Data on the outage costs over the range of consumers investigated

### Benefits

- To compute the Malaysian VoLL
- To determine the perceived customer outage costs
- To determine weightings of each customer class
- VoLL is useful :
  - o As a component for calculating compensation for outage losses of customers should this be required by the Energy Commission
  - o Determining system reliability level and future system investment