



Who, What, Why

# ALCAG – A SUPPLEMENT TO THE AMG

# ASSET LIFE CYCLE ANALYSIS GROUP

- ✘ To improve power system asset life cycle analysis, with a view to improving investment decision-making within the electricity supply industry
- ✘ We will achieve this through sharing our practical experiences in undertaking asset life cycle analysis, investigating best practice approaches, developing a common understanding of relevant regulatory frameworks and developing communal methods if and where applicable
- ✘ We are a knowledge sharing and learning group

# POTENTIAL TOPICS

---

- × How the demand curve is changing;
- × Demand forecasting;
- × Whole-of-life costing approaches;
- × End-of-life decision-making;
- × Evaluating programmes of work v individual investments;
- × Capex-opex trade-offs;
- × Which costs and benefits to evaluate;
- × Using unquantified benefits;
- × Investment decision-making criteria;
- × Considering investments with implications for both transmission and distribution;
- × Using sensitivity analysis;
- × Economic analysis parameters eg time period, discount rate, Value of Lost Load;
- × High Impact Low Probability analysis.

# PRIORITY TOPICS

---

- ✘ Asset end-of-life decision-making.
- ✘ Compare whole-of-life costing approaches.
- ✘ Cultivate a common understanding of relevant regulatory frameworks.
- ✘ Compare approaches for evaluating programmes of work v individual investments.
- ✘ Are there others we should be prioritising?



# ASSET END-OF-LIFE DECISION-MAKING

- ✗ An extension of the Asset Health Indicator guide
- ✗ Asset criticality
- ✗ Understand how to move from a known quantified position (AHI is a snapshot of asset health) to a replacement decision?
- ✗ Understand the economic consequences of asset replacement vs no replacement
- ✗ Determine best practice approaches for end-of-life decision-making which reflect asset health and criticality and other approaches (simple approaches through to the use of CBRM) including more economic-based approaches
- ✗ Describe how different approaches can be used for both individual and fleets of assets
- ✗ Will utilise Treasury's Better Business Case (BBC) framework to make end-of-life decisions
- ✗ Use of unquantified benefits
- ✗ Safety - investigate both quantitative and qualitative approaches for valuing investment in safety
- ✗ Are there other issues we should particularly focus on?

# MEMBERS TO DATE

---

- × Brian Baier – Northpower
- × Jonathon Battson – Transpower
- × Dave Brannigan – Orion
- × Paul Christie – Alpine Energy
- × Glenn Coates – Orion
- × Karen Frew – Powerco
- × Neil Gregory – Meridian Energy
- × Josh Lloyd – Unison
- × Mike Parker – Transpower
- × Tod Trotman – Network Waitaki
- × plus
- × Paul Sutton – Project Results
  
- × More members are welcome