

Conductor Condition Assessment

Working Group
Dan Tomblison, LineTech Consulting



Background

The EEA Asset Management Group (AMG):

- Had concerns that **Conductor Condition** is poorly understood
- Conducted a survey in 2015 on conductor types, failure modes, replacement plans, and conductor inspection / testing techniques employed
- Would like to provide general guidance to industry



Working Group

Name	Organisation
Dan Tombleson (Chair)	LineTech Consulting
Ken Pattie	Powerco
Natalie Mitchell-Lowe	Transpower
Merv McKay	Orion
Shaun Brown	Northpower
Scott Muspratt	Vector
Juliet Clendon	EEA

We're currently looking for another member from a Lines company

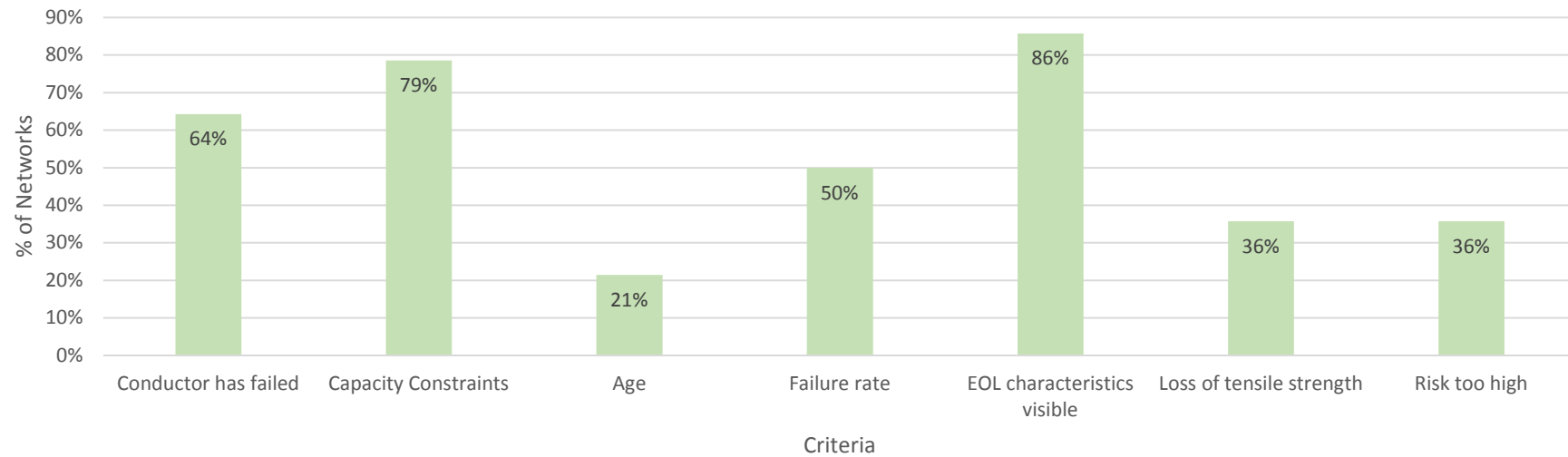


Annual Replacement of Conductor (km/year)





Criteria for Replacing Overhead Conductor (past 5 years)



Topic Areas

- Asset data availability
- Bare and covered conductors
- Failure mechanisms/modes
- Service life experiences
- Condition assessment tools/techniques
- Laboratory assessment methods
- Conductor testing in the field



Stage 1

- Analyse the results of the 2015 survey
- Report on conductor CA technologies and techniques
- Investigate atmospheric corrosivity maps for NZ
- Summarise existing conductor life experience data
- Report to industry



Stage 2

- If the group finds that there is enough knowledge and interest from industry, we may proceed.
- Development of a decision framework for conductor end of life
- Summary of expected life for various conductor / environmental combinations
- Develop a standard scope for conductor laboratory testing



Further work

- Subsequent investigations may continue after Stage 2
- Conductor Asset Health Indices



Questions, comments and feedback?

Contact

Dan Tombleson, LineTech Consulting
dan.tombleson@linetech.co.nz

