High Voltage Live Line Working

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UK Power Networks
High Voltage Live Line Working

- What is Live Line working
- Long stick
- Short stick
- Hot Glove
- Bare Hand
  - Tower Access
  - Helicopter Access
  - MEWP Access
History

• How many years ago did we as an industry start a live working group?

• Industry Interest?

• ACE Report 1967 and 1974
Our Team

- Peter Coyle
- Chris Land
- Sven Hoffman
- Paul Minter
- Richard Hembling
- Stuart Jones
- Cathal Donnelly
- Damien Gardiner
- Chris Bingham
- Mick Emsley
- Tom Stirrup
SHEC 009 - Notes of Guidance on the Principles of High Voltage Overhead Line Live Working
What we can do?

- Automation programmes
  - Reclosers etc.
- Tree Trimming
- Transformer Installation
- Pole changes
- Maintenance
- Tower fitting replacement
- Sectionalise the network
- Faults
- Vermin protection
Barehand Techniques

Helicopter Access

- In operation since 1995
- Two access methods
  - Two man basket
  - One man trolley
- Carry out maintenance and fitting mid span
Barehand Techniques

Tower Access

• First carried out in 1992

• Combination of Hot Stick and Barehand

• Carry out tower furniture replacement
Barehand Techniques

MEWP Access

- Currently carrying out feasibility study
- Carry out maintenance midspan
- Carry out tower furniture replacement
Benefits

• Customer Value

• Job Cancellation

• Compare Live with dead working

• Completed live line procedures

• Minimising Outage Size

• Reduce constraint costs
Current Issues

- Rubber Gloves/Sleeves
- Reviewing 33 kV Hot Glove
- European Standards
- ICOLIM - Attendance
- Cross Arm Leakage (DSR 5.10.1)
- Roblon High Voltage Rope
Our Future?
Summary

• Although the activity is of a high risk

• Constant Monitoring

• Regular Site Inspections/Audits

• Review Risk Assessments and Procedures

• Refresher Training

• Live Line working using the principles of SHEC 009 have proved to be a safe and effective method of working providing benefits to both Customer and Electricity Industry.
Thank You