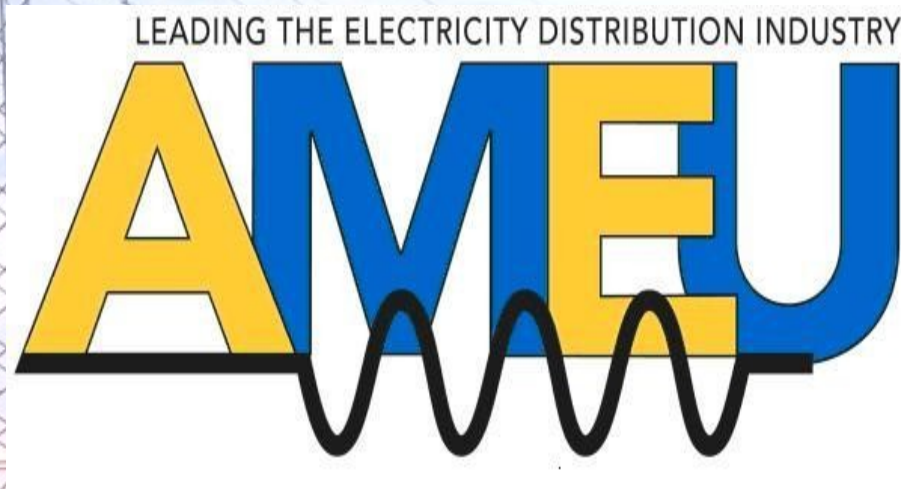


# Safety

Can it be Regulated???



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# Introduction

- South Africa is one of the most regulated countries in terms of Safety.
- The OHS Act is a comprehensive collection of Laws and Regulations
- Controls How, What, When, Who and Where one implements safety



# Introduction

- With regulations in place, far less accidents should occur.
- Why do accidents still occur?
- The usual reasoning stated is:  
*“It should be remembered that our present work force is uneducated, ill trained and poorly skilled”*
- Involved with a number of internal investigations.
- Conducted research into recent accidents.

# Introduction

- In the electrical industry accidents are a major concern:
  - They usually lead to injury or death
  - Cause damage to equipment
  - Can cause loss of income to consumers and suppliers
- Some of the causes leading to the specific accidents are:
  - Incorrect switching
  - Barricading
  - Hot Line Tapping





# Accident 1 (Incorrect switching)

- Two workers were performing switching.
- Normal switching procedures not followed
- Closed two breakers simultaneously
- One of the breakers failed
- Causing extensive damaged to the equipment
- Major injuries to one of the operator

# Contributing Factors

- Short cut taken: to reduce the outage time to consumers
- High load being switched
- Ignoring the safety procedures

## Personnel and the Act

- The staff involved in this incident were both well qualified (Engineer and a senior electrician)
- At least 20 years experience in the field
- Act Clause 14
- Regulations that apply GMR 3.1,4.1 and 4.5
- Operating Regulations



# Accident 2 (Barricading)

- Maintenance of a 66 kV switch yard.
- Area was correctly isolated and barricaded
- Worker left the barricaded area
- Returned and climbed over the barricading
- Climbed a live structure and made contact
- The supervising electrician was not aware as he was occupied with other work.

# Contributing Factors

- Lack of proper supervision
- Disregard for the barricading
- Not following correct procedures

## Personnel and the Act

- Labourer with many years experience (20years)
- Electrician (over 10 years)
- Act clause 14. (a) (c)
- Regulations GMR 3.1

# Accident 3 (Hot Line Tapping)

- Contractor Building line
- During hand over dampers found to be missing
- Contractor installed dampers
- Line had been energized using hot line tapping



# Contributing Factors

- Contractor had not completed work
- Incorrect Energizing procedure took place
- Correct procedure not followed when installing dampers

## Personnel and the Act

- All the Electricians involved with this incident were well qualified (over 15 years)
- Act clause 14. (a) (c) (d)
- Regulations GMR 3.1
- Network control regulations

# Conclusion

*“It should be remembered that our present work force is uneducated, ill trained and poorly skilled”*

- Safety is:
  - Time
  - Work ethics
  - Need to return to old time values (Knowledge, skill, attitude and pride )
  - Safety cannot be regulated it has to be inherent to workers
  - A way of life



**THANK YOU**

**QUESTIONS  
OR  
COMMENTS**