



Industry &
Investment

I.P. Surveying in NSW

Safety & Legal Implications

OVERVIEW

Electrical Safety Issues for IP Surveying

Legislation Issues for IP Surveying

Questions

Electrical Safety Issues for IP Surveying

- The Good News
- The Not So Good News
- The Bad News
- The Big Issues
- The Way Forward ?

Electrical Safety Issues for IP Surveying

The Good News

No Fatalities!

Despite “Possible Death” identified on all RA’s reviewed!

Electrical Safety Issues for IP Surveying

The Not So Good News

- Large diversity of equipment & procedures
- Large diversity of user types.. small exploration companies
-> large mining operations
- The understanding of the electrical hazards involved is also “diverse”
- There is a wide-spread dependence on soft / procedural systems for personal safety – road rules cw building lift
- There seems to be a lack of understanding re electric shock protocols within the industry

Electrical Safety Issues for IP Surveying

The Bad News

- Non-compliance with AS/NZS 3000 & AS3007
- Poor electrical Isolation Control
- Poor understanding of touch and step potentials
- Poor insulating techniques for joining broken transmitter lines
- Lack of electrical protection on transmitter equipment
- High reliance on PPE eg boots and gloves

Electrical Safety Issues for IP Surveying

The Main Issues

- Effective electrical isolation
- Touch and Step potentials
- Transmitter cable joining & re-insulation
- Compliance with AS/NZS 3000 & AS3007
- Safe earth electrodes
 - the effect of soil layering & moisture
- Electrical Protection – transmitter and cables

Electrical Safety Issues for IP Surveying

The Way Forward ?

- National Code of Practice – generic to address all safety issues
 - defines minimum fit for purpose equipment safety requirements
 - gives guidelines re voltage and power limitations
 - Improved earthing systems with minimum acceptable standards
 - gives guideline for safe working procedures, particularly in the area of isolation control etc
 - should incorporate words re electric shock protocol
- Separate National Code of Practice – HV (ie > 1,500 Vdc)
 - Compliance with AS/NZS 3000 & AS 3007 one way forward

OVERVIEW

Electrical Safety Issues for IP Surveying

Legislation Issues for IP Surveying

Questions

Legislative Issues for IP Surveying

- The Good News
- The Not So Good News
- The Bad News
- The Big Issues
- The Way Forward ?

Legislative Issues for IP Surveying

The Good News

No Fatalities!

Has enabled the Regulator to use discretionary powers

Legislative Issues for IP Surveying

The Not So Good News

- Legislation varies between states
- Legislation for mines not framed for IP exploration
- All exploration sites in NSW are “mine sites” since Sept 2007
 - the source of our current legal dilemma
- Failure to comply with NSW State Legislation
 - failure to use licensed electrical tradesmen
 - failure to notify inspectorate of introduction of electrical power to a mine site
 - failure to carry out quality risk assessments

Legislative Issues for IP Surveying

The Bad News

- Failure to fully apply hierarchy of risk controls
- Failure to comply with AS/NZS 3000 & AS 3007 which are mandatory standards in mining legislation
- Exposure to prosecution
- Potential for Regulator to impose strict interpretation of the law and Australian Standards should any incident trigger such an action
- Failure to report incidents ?

Legislative Issues for IP Surveying

The Way Forward ?

- National Code of Practice – generic to address all safety issues
 - Separate National Code of Practice – HV (ie > 1,500 Vdc)
- Request by industry for exemptions from some “non-core requirements” of AS/NZS 3000 and AS3007 based on use of accepted “National Code of Practice”. Exemptions required may include:
 - cable installation standards not to AS/NZS 3000
 - hard barriers to dangerous voltage sources not to AS 3007
 - use of non-licensed electricians working on electrical installations
- Should outline legal requirements re statutory reporting requirements to I & I
- **NOTE: Exemptions are not issued lightly, or as a matter of form, a sound case will need to be presented!**

OVERVIEW

Electrical Safety Issues for IP Surveying

Legislative Issues for IP Surveying

Questions

Questions ?