

Numeralla Countegany Volunteer Bush fire Brigade

Muster 9 March 2014 – Guest Presenter - Bede Nichols Electricity impacts & information in the event of a fire

Attendees

Numeralla- Countegany Brigade	Jerangle Brigade
Bruce English	Mark Saunders
Ian Jauncey	Vicki Saunders
Regina Roach	Jane Ferguson
Chris Rutherford	Bill Boate
Wes Stott	Helen Boate
Paul Sullivan	Steven Boate
Geoff Ferguson	
Peter Jackson	
Jim Wharton	

Electrical terms explained using a water analogy	Voltage (pressure), Current (AMPS/WATTS – litres per metre) Resistance (Friction)
Resistance	Rubber boots, wooden ladder, distance
Power distribution	660,000 Volts (V) from power station. Substation breaks down to 220,000V. Cooma to Bega 160,000V. Cooma to local substations 11,000V before substation poles reduce to 240V for domestic. Hence when dealing with country lines & bushfires away from Homes it is highly likely dealing with 11,000V. On the wooden power poles with two rows of wires, it is likely that the top row will have 11,000V.
Country poles with one wire	Sometime in the country there is one pole with one wire. These still run 11,000V. This will kill you. At 4 Mile Cooma, there was an MVA and pole hit. Wire fell on fence and 5klm away a horse and 4 cows were electrocuted when they touched the fence.
Parking Fire Truck	Always park at least 30 metres from a power pole.
House fire issues	First critical issue to be noted should always be where is the power supply? Be aware and do not park truck under it and get power off.
Best way to turn off power to house (this method also disconnects any solar power unit – when solar panels are installed there are two sources of power ie from power pole & from solar panels to inverter and excess power	Pull out black service fuse/s on top row in power box. (If 3 phase power there will be 3 service fuses, for 2 phase there will be 2 and for single phase there will be 1.) There may be a wire or council seal on these...just reef them out. Note that power will still be live

back to grid. Pulling out service fuse stops all sources of power)	from where the power line comes from the street to the connection at the fuse box. (The house internal electricity will be all disconnected)
Power line to house	Issue with some houses is that the power line into the house from the street is on opposite end of house to the fuse box. This means that the power is live until the fuse box for a greater distance and potentially through the roof even when the service fuses are pulled out.
Power line on car & fire	Try to get back 30 metres & spray water on car to put out fire. Do not use foam as foam conducts electricity better than water.
Power pole on fire	Get back 30 metres and spray water in a broken stream on to top of pole & let water run down. Spray water so that integrity of the pole is maintained. A fallen pole can cause more damage. (How to spray a power pole was demonstrated)
Power line on person	Use wooden handled rake hoe and wear dry leather gloves to remove the power wire.
Transformers on fire	Some old transformers have PCB oil in them. The oil is used as an insulator. The smoke is pitch black and the fumes off the oil is toxic.
Bush fire fighting	Must be aware of power wires, particularly at night. Heat can make lines droop. If in a truck and hit a line on the ground, then drive off it. If truck catches fire and you can't drive off power line, get out but jump as far as possible. Keep feet together, less chance of being electrocuted.

Bede Nichols was thanked for his excellent and informative presentation and demonstration.