

Work scope

Run of the mill overhead construction project:

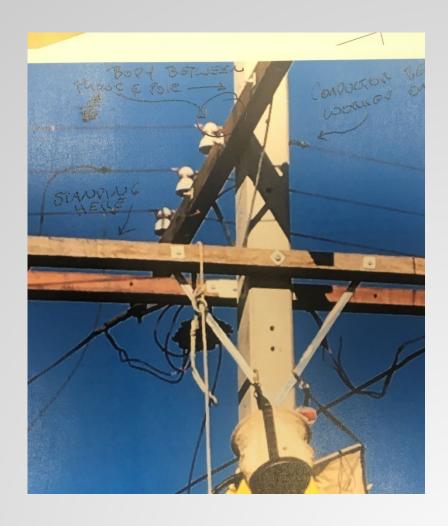
- 3 crews
- 3 poles, 3 arms, DDO installation, other OPEX work
- Work area isolated by 2 x ABS's and AP issued on HV.
- Positive isolation HV and LV.
- Several ICP connections within the work area
- DDO's at transformer within work zone were removed
- HV complete and working on LV





The incident

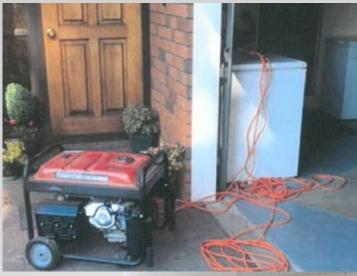
- Line Mechanic working aloft connecting LV jumpers for service fuses.
- Standing on LV arm with tested boots and class 1 gloves.
- Leaned between pole and LV conductor
- Minor electric shock on his chest
- Taken for precautionary check and returned to work.





Onsite findings

- Tested LV and found 230V on all three phases (0V between phases).
- Found generator running at adjacent property.
- Turned off and disconnected service main
- Tested and resumed work



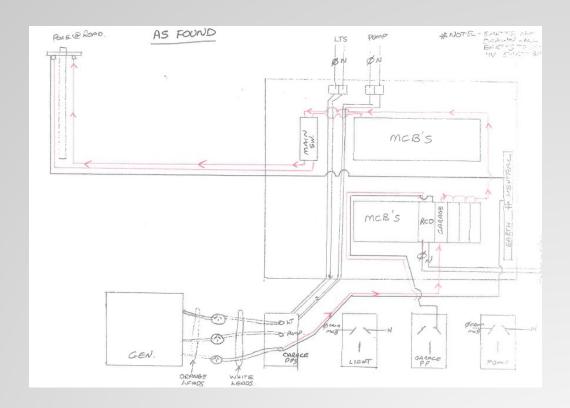






Incorrect wiring

- Generation connection point installed by resident's son-Electrician
- Designed to be separate from main supply however incorrect.
- With main switch on it allowed back feed to service main.
- Main switch was faulty so even when off current flowed through service main.
- Main switch was in the 'On' position when found.
- Corrected, tested and livened upon completion of works.
 Notified Work Safe.





Immediate actions-Unison Contracting

- Mirror HV earthing requirements on LV. Bond and earth either side of worksite with one set within 5m.
- U/G cables to be earthed at point of isolation.
- And either;
 - Use cover up to maintain a single point of contact, or
 - Remove service fuses within the isolation area.
- Where not practicable 'Live Techniques' to be used. Requires SOP- these were in development.
- ABC conductor to be treated as Live at all times as earthing at worksite is impracticable.
- Developed live LV SOP's and Live work manual for LV and undertook training.
- Process developed for notification of generation.
- Planning controls to be considered for further mitigation of risk.



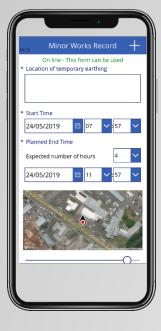


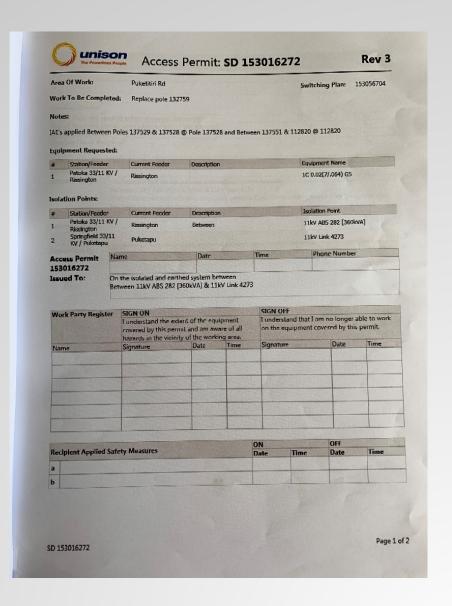


Going forward

- LV permit process to mirror HV
- Minor works- self issue through app.
- Interim measure for LV permits- Work authority issued through NOC via radio captured in WSP









Questions?

