National Live Work Practice Forum



Update 2019

National Live Work Practices Forum – EESA and new charter.

What are we currently doing?

AS5804 review – nearly completed

Live LV standard development – on hold pending incident

Industry trends

Incident info

EESA – and new charter

Forum now accepted and run the banner of EESA

Draft charter accepted at last meeting

- Focus on HV and LV live work practice and management
- Information sharing to drive consistency and continuous improvement across Australia and New Zealand
- Key group for SME / peer review of proposed new practices and input training requirements.

What are we working on?

- Stick Testing Guidelines
- Guideline for Live Low Voltage
- Reviewing Australian Work
 Standard AS5804: 1-4
- International Partnerships



Industry trends / challenges

Transmission live work growing across Aus

LV live work – recent fatality in NSW Industry reviewing practices for many utilities, (but far from all)

In NSW live work LV either paused or restricted, with retraining and other activities continuing, working towards recommencing live work.

HV live work also paused in Ausgrid.

Industry trends / challenges cont'

QLD full review of Live LV work with some additional restrictions with the main focus being restricting task that put the workers body position between. More tasks can now only be performed from and EWP.

Recent Incidents

- Live LV Fatality NSW
- Helicopter stringing crash fatality.
- LV shock when earthing.
- Lots of switching errors, operators and sheet writing. General reduction in switching discipline.
- LL Glove and Barrier, outer gloves in poor condition, incorrect use of wire brush, punctured insulating glove, felt a tingle (positive it was reported)
- Vegetation worker fatality in Vic (attitude towards SO and lack of industry knowledge to perform rescue in timely manner

Number of committee meetings over the past 12 months

- Adelaide
- Hobart
- Melbourne

Nearly completed draft to submit to Standards Australia, with most of the work now transferred into word documents.

Some minor work to be completed around clearance calculation examples and fixes errors in the clearance tables, and MAD for insulators.

New items where changes are proposed

- Combination / transition of work method requirements (HVLW and Access Permit)
 - An example where this has been common practice in some untilities but would not comply with the current wording is for a pole replacement where there is multiple circuits on the pole eg 66kV and 11kV. Access on 66kV and Live work authority on the 11kV. The key point the committee agreed is the need to have a clear transition between work methods. Although for the pole stand task the AP or WA need to be held by the SO at the same time to complete the task.

After review of CP46 – decided to adopt the requirement to note the clearance to be worked to on the pre job hazard assessment.

Removed reference to specific temperatures for different types of equipment and pointed towards entities ensuring they get info form manufacturers or preform own assessment. Numbers stated may have been appropriate for one particular brand of equipment but didn't allow new / different technology / equipment.

- Aligned PPE arc flash rating requirements with NEN09 (min 4 cal/m),
 The majority of Aus utilities already have standard PPE with arc flash ratings higher than this. Raising the standard to current practice rather than cotton.
- Updated live work rope testing requirements (no direct contact with live conductors)
 - AST1701 (acceptance test)
 - In field rope testers over it's entire length
 - Removed the reference to completing routine tests to AST1701
 - Put onus on inspection and in field testing.

- Removed requirement to wipe insulating rope with silicon cloth (may remove wax) and put onus of information form manufacturer.
- Updated barehand rescue rope requirements to allow for new technologies with equivalent or better properties than polyester kernmantle to be used.
- Change to insulating ladder monitoring (barehand) to algin with EPRI guide, essentially pre test and when conditions change rather than continuous monitoring. Proposed change due to operational concerns with constantly causing test set issues.

- General rewrite of some sections to get consistency, some info that was in parts 2 – 4 was not in part 1 but was relevant to all methods.
- Change to requirements to use electrical shunt / static earth lead to requiring companies to manage the hazard of the capacitive charge present on a disc insulator rather than specifying a particular control. Some companies had deemed the use of the static earth lead and introducing additional hazards.
- Continuing to work on either adding info to the standard or drafting a industry guide around UG cable and bushings and appropriate clearances for Live workers (generally only becomes and issue at higher voltages)

Questions?