# SUPERVISION OF ELECTRICAL APPRENTICES Proposed new regulations & guidelines



Presented by
Peter Mattner
Building and Energy

## REASONS FOR REVIEW

- Number of reported shocks in WA increasing
- Several apprentice fatalities in other states – new safety campaigns



- Observed standard of apprentice supervision by some WA companies is inadequate
- WA has just been lucky and doing nothing was not an option for Energy Safety
- Update of Safety Guidelines overdue

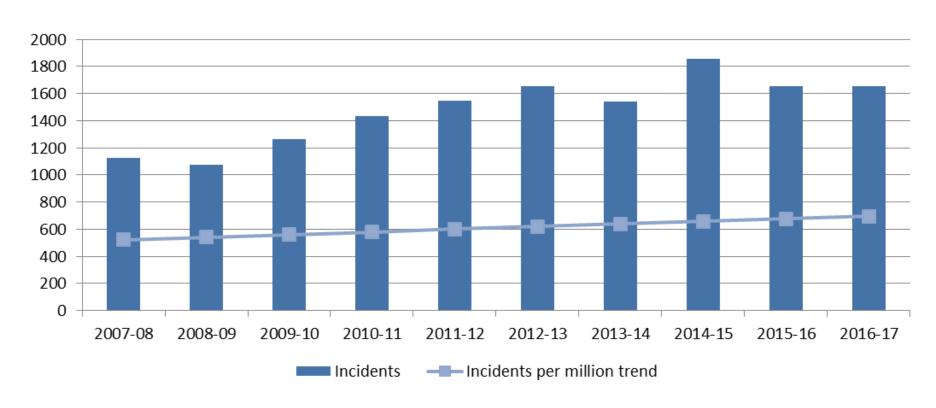
## 2016/17 SAFETY REPORT CARD

| Incident type       | Number |
|---------------------|--------|
| Electrical fatality | 0      |
| Electrical accident | 17     |
| Electric shock      | 1,639  |
| Total               | 1,656  |

Accident - means hospitalisation or medical treatment (other than ECG check)

## REPORTED INCIDENT TREND

#### Electrical incidents in WA – 2007-08 to 2016-17



## **APPRENTICE INCIDENTS 2016/17**

| Cause                            | Mining | Commercial | Residential | Total |
|----------------------------------|--------|------------|-------------|-------|
| Isolation procedure not followed | 2      | 3          | -           | 5     |
| Did not test before touching     | -      | 2          | -           | 2     |
| Faulty equipment                 | 2      | -          | 1           | 3     |
| Incorrect PPE                    |        | 1          |             | 1     |
| Total                            | 4      | 6          | 1           | 11    |

## INDUSTRY CONSULTATION

- February 2017 comments invited on proposed Regs changes
- April 2017 comments invited on proposed new safety guidelines
- Received range of views on supervision
- July 2017 issued discussion paper on supervision issues and invited further submissions
- Late 2017 finalised new supervision requirements
- Drafting of Regs amendments almost complete
- New guidelines publication imminent

## CHANGES TO REGULATIONS

New key requirements (proposed)

- 1. 3 levels of supervision defined direct/general/broad
- 2. Appropriate level to be determined by supervisor
- 3. Employer must be satisfied supervisor has necessary supervisory skills
- 4. Limits on number of apprentices being supervised
  - If one requires "direct" no more than two (total)
  - Never more than 4 (total)
- 5. Strong restrictions on apprentices working on or near energised equipment

## DIRECT / GENERAL / BROAD

### In summary:

(Detailed definitions in Regulation 50)

#### (1) Direct supervision

"Direct" supervision applies where the apprentice requires constant guidance and monitoring by the supervising electrical worker to ensure the work task is carried out safely and correctly.

The supervising electrical worker must remain on the same work site as, and in close proximity to, the apprentice.

#### (2) General supervision

"General" supervision applies where the apprentice requires periodic guidance and monitoring to ensure the work task is carried out safely and correctly.

The supervising electrical worker must remain on the same work site as the apprentice and be readily available to provide guidance and assistance.

#### (3) Broad supervision

"Broad" supervision applies where the apprentice does not require ongoing guidance and monitoring while performing familiar tasks.

The supervising electrical worker does not need to remain on the same site as the apprentice but must, as a minimum, attend the work daily to provide initial instruction and to verify the electrical work has been carried out safely and correctly.

## RESTRICTIONS ON LIVE WORK

The regulation changes will permit an electrical apprentice to carry out isolation, testing and fault finding on energised equipment in the following strictly limited circumstances, **in combination**:

- only in the final year of training;
- only if assessed by the supervising electrical worker as being competent to perform the task safely; and
- **only** under **direct supervision**, with the supervising electrical worker in close proximity to the apprentice for the duration of the task.

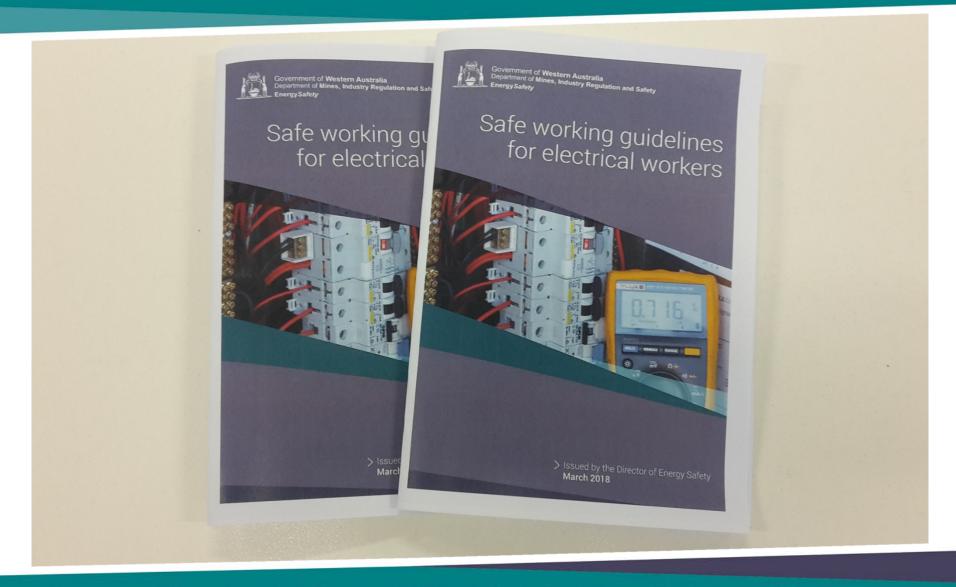


## **OUTCOMES**

- Improved apprentice safety through improved standards of supervision
- Supported by further detailed information in Safe Working Guidelines (not mandatory)
- Discretion of employer and supervisor will be retained
- No detriment to companies already managing apprentices effectively
- Consistency with other jurisdictions



## NEW GUIDELINES



## SUPERVISION GUIDELINES (1)

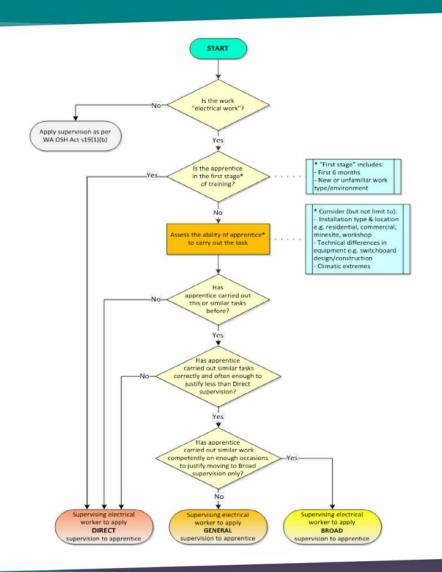
Recommended levels of supervision



| Type of work<br>( <u>de-energised</u> only)   | Apprentice<br>training<br>year    | Recommended<br>minimum<br>supervision level |
|---|-----------------------------------|---|
| New electrical installations<br>(not connected to electricity supply)   | 1st<br>2nd<br>3rd<br>4th or final | General<br>General<br>Broad<br>Broad        |
| Maintenance, alterations and additions<br>to existing electrical installations<br>(isolated and proven de-energised by<br>supervising electrical worker)                                      | 1st<br>2nd<br>3rd<br>4th or final | Direct<br>General<br>General<br>Broad       |
| Workshop assembly and maintenance<br>of electrical equipment<br>(not connected to electricity supply)   | 1st<br>2nd<br>3rd<br>4th or final | General<br>General<br>Broad<br>Broad        |
| Tag and lockout procedure on de-<br>energised installations and equipment<br>(isolated and proven de-energised by<br>supervising electrical worker)   | 1st<br>2nd<br>3rd<br>4th or final | Direct<br>General<br>General<br>Broad       |
| Testing and fault-finding on de-<br>energised installations and equipment<br>(not connected to electricity supply or<br>isolated and proven de-energised by<br>supervising electrical worker) | 1st<br>2nd<br>3rd<br>4th or final | Direct<br>Direct<br>General<br>General      |

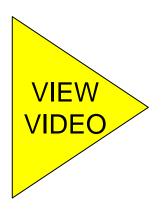
# SUPERVISION GUIDELINES (2)

Assessing appropriate level of supervision



## SAFETY VIDEOS

- 2 safety "videos" to support guidelines
  - Apprentices
  - Supervisors of apprentices
- Based on productions by EnergySafe Victoria



# Thank you for your attention

## **QUESTIONS??**