EXPLANATORY NOTES TO ASSIST IN INTERPRETING
COAL MINE HEALTH AND SAFETY REGULATION 2006

Provision of electrical and mechanical safeguards
with appropriate safety integrity

Clause 13 Additional components of health and safety management system
(1) …
(e) an electrical engineering management plan covering the life cycle of electrical
plant and installations, and electrical engineering practices, at the coal operation, that
is developed, implemented and periodically reviewed through consultation with a
qualified electrical engineer, to control risks as follows:
…
(iv) to prevent unintended operation of plant,
(v) to provide electrical safeguards for electrical and non-electrical hazards,
with a probability of failure appropriate to the degree of risk posed by the
hazard,

(f) a mechanical engineering management plan covering the life cycle of
mechanical plant and installations, and mechanical engineering practices, at the coal
operation, that is developed, implemented and periodically reviewed through
consultation with a qualified mechanical engineer, to control risks as follows:
…
(iii) to provide safeguards to prevent the release of uncontrolled mechanical
energy and to prevent unintended operation of mechanical plant,
…
(viii) to provide safeguards for mechanical plant and installations, with a
probability of failure appropriate to the degree of risk posed by any
mechanical plant or installation,

Clarifying points:
The intent of these provisions is that:
• electrical and mechanical control systems are designed in accordance with
established functional safety and machinery safeguarding concepts. Refer:
AS 61508, AS 62061 and AS 4024
• electrical and mechanical safeguards are to have the appropriate safety
integrity as defined in AS 61508, or category as defined in AS 4024.

References:
AS 61508 Functional safety of electrical/electronic/programmable electronic safety-
related systems
AS 62061 Safety of machinery - Functional safety of safety-related electrical,
electronic and programmable electronic control systems
AS 4024 Safety of Machinery

Guidance Notes, presentations and other support documentation is available on the
NSW DPI website at:

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