



Australian Government

RIIERR312 Respond to incidents involving energy storage systems

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Modification History

Release	Comments
1	This unit of competency was first released in RII Resources and Infrastructure Industry Training Package Release 11.0.

Application

This unit describes the skills and knowledge required to respond to incidents involving energy storage systems or battery electric equipment used in fixed and mobile plant, including managing electrical energy or battery-related risks.

It involves identifying and assessing hazards, implementing controls, preparing and responding to incidents according to identified risks, and completing workplace processes and documentation.

It applies to individuals working in site-based roles who are required to implement controls and respond to incidents involving energy storage systems as part of emergency response or safety responsibilities.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite unit(s)

No prerequisite units.

Competency field(s)

Emergency Response

Unit sector(s)

Coal mining

Metalliferous mining

Mining Electrification

Underground Mining

Work Health & Safety (WHS)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for incident response involving energy storage systems	1.1 Identify indicators of incidents involving energy storage systems 1.2 Access and interpret energy storage systems emergency response documentation and workplace policies and procedures 1.3 Obtain, interpret, clarify and confirm work requirements 1.4 Identify hazards and environmental issues, assess risks, and implement control measures according to workplace policies and procedures
2. Assess situation	2.1 Identify impacts that may limit response options according to identified risks 2.2 Determine priorities to respond to incident according to workplace policies and procedures and manufacturer's procedures 2.3 Determine incident objectives and communicate internally and externally, according to work requirements
3. Respond to incident	3.1 Locate, select and wear personal protective equipment required for work activities 3.2 Identify and select required tools and equipment and confirm their application appropriate to the energy source involved and manufacturer's procedures 3.3 Apply isolation and evacuation procedures, according to identified hazards, environmental issues and workplace policies and procedures 3.4 Monitor conditions in incident area from an exclusion area and modify response to reduce impact of identified potential hazards 3.5 Continuously monitor the situation and adjust response actions in accordance with changing conditions and workplace policies and procedures
4. Complete incident response	4.1 Secure and monitor the site until relieved or deemed safe 4.2 Clean, inspect and store equipment according to site procedures

	4.3 Report, record and process equipment for maintenance or repair 4.4 Participate in debriefing and complete required reports and documentation, according to work requirements
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Foundation Skills

Skill	Description
Learning	- locate required sources of information - access and interpret updated information about energy storage systems
Oral communication	- listen to workplace instructions and ask questions to clarify job requirements - accurately relay hazard details - communicate clearly with team members and emergency services personnel
Numeracy	interprets data relating to weather and atmospheric conditions

Range of conditions

No conditions apply to this unit of competency at the time of publication.

Unit Mapping Information

Current Code and Title	Previous Code and Title	Comments	Equivalence
RIIERR312 Respond to incidents involving energy storage systems		This unit has been created to address a skill or task required by industry that is not covered by an existing unit of competency	Newly created

Assessment Requirements for RIIERR312 Respond to incidents involving energy storage systems

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- respond to 2 separate incidents involving energy storage systems, including:
 - accurately identifying the type and characteristics of the incident
 - determining the incident response appropriate to the energy source involved, workplace policies and procedures and manufacturer's procedures
 - implementing control measures, isolation and evacuation procedures, according to identified risks
 - continuously monitoring the site and incident conditions until relieved or deemed safe

In the course of the above work, the candidate must also:

- locate, select, and wear appropriate personal protective equipment
- communicate with response teams, which include team members and emergency services personnel
- meet written and verbal reporting requirements and procedures associated with responding to an incident involving energy storage systems

Knowledge Evidence

The candidate must demonstrate the following knowledge to effectively complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- types of energy storage systems and associated hazards, including:
 - lithium-based batteries
 - associated equipment
- causes of lithium-based batteries or electrical equipment to fail
- equipment or installation-specific risks and control measures

- indicators, causes of and response to thermal runaway
- indicators of incidents involving energy storage systems
- isolation and shutdown procedures for energy storage systems, according to identified risks and manufacturer's procedures
- workplace emergency response documentation, policies and procedures associated with incidents involving energy storage systems
- responses to incidents and hazards involving lithium-based batteries or electrical equipment during failure
- environmental impacts of incidents involving energised sources
- applicable PPE requirements for incidents involving energy storage systems
- storage and maintenance of equipment, according to workplace procedures

Assessment Conditions

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in a simulated workplace operational situation that reflects workplace conditions.

The assessment must include access to:

- workplace and manufacturer's procedures
- personal protective equipment required for the activities described in the performance evidence
- be conducted in a safe environment
- be assessed in the context of this sector's work environment
- be assessed in compliance with relevant legislation and regulations and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed
- confirm consistent performance can be applied in a range of relevant workplace circumstances

Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated work environment* provided it is realistic and sufficiently rigorous to cover all aspects of this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.

*Guidance on simulated environments has been stipulated in the RII Companion Volume Implementation Guide.

Industry Experts

An industry expert engaged by an RTO to wholly or partially conduct assessment, independently or together with another assessor, or be involved in an assessment judgement, must also satisfy the assessor requirements in applicable vocational education and training legislation, frameworks and/or standards.

In addition to the requirements in applicable vocational education and training legislation, frameworks and/or standards, **assessors and industry experts** must also have:

- A minimum of two (2) years industry experience, directly relevant to the training and assessment being provided
- Where the training and assessment is delivered in an emergency response context, the industry experience in total must be directly relevant to an emergency responder role

Link

Companion volumes, including implementation guides, are found on the national training register - <https://training.gov.au/training/details/RII>.