

Environmental Liability Management

INTRODUCTION

The *Hydrogen and Renewable Energy Act 2023* (the Act) facilitates and regulates large-scale hydrogen and renewable energy projects across South Australia.

The Act ensures a fair and transparent pathway for companies that want to develop hydrogen or renewable energy projects in South Australia while ensuring leading practice licensing and regulatory approaches.

The Department for Energy and Mining (the department) is responsible for managing the state's risk in licensing these projects. The State must ensure that adequate financial security is held over the lifecycle of hydrogen and renewable energy projects to ensure that licensees meet their environmental commitments under the Act.

Licensees are responsible for conducting operations in accordance with all legislative requirements and licence conditions, including the statement of environmental objectives and operational management plan.

This policy has been developed having regard to established financial assurance principles that are applied to the state's existing resources sectors. It has also been informed by a targeted further analysis of leading industry practice for decommissioning requirements relevant to the hydrogen and renewable energy sectors, as part of an independent interjurisdictional review commissioned by the department. The review considered Australian and international financial assurance frameworks, case studies for the renewables, mining, and oil and gas sectors and consultation with project developers and industry advocates.

PURPOSE

This document outlines the department's policy for managing risk related to environmental rehabilitation liability that may arise from activities licenced under the Act.

The objective of this document is to:

- outline the legislative framework for the provision of bonds and security under the Act;
- explain the department's policy position on bonds;
- identify when a bond may be required, varied or discharged;
- describe the form of security that will generally be required for the satisfaction of the bond;
- inform how the department will calculate the amounts required as security under a bond; and
- describe the roles and responsibilities of the department and licensees under this policy.

SCOPE

This policy applies to all authorised hydrogen and renewable energy activities undertaken on designated land in South Australia under the Act.

The policy also applies to projects on non-designated land if the licensee does not have a decommissioning agreement with the landowner that is satisfactory to the department. Guidance on key matters which may be considered in such an agreement is available on the [department's website](#).

This policy does not apply to projects captured under the transitional provisions in Schedule 1 to the Act or where a licence has already been granted.

REGULATORY PRINCIPLES

The policy is based on regulatory principles that are consistent with the department's management of a broad and diverse portfolio of environmental liabilities, including across the *Energy Resources Act 2000* and the *Mining Act 1971*. These principles include:



- recognising the differences in the inherent risk characteristics of decommissioning hydrogen and renewable energy infrastructure, compared with resource projects administered under the *Energy Resources Act 2000* and *Mining Act 1971*;
- minimising liability and financial exposure for both government and the community;
- applying a whole-of-life asset approach throughout the access, feasibility, generation and decommissioning phases of a project;
- applying a risk-based approach to determining the quantum and timing of impacts that must be managed, and the extent of financial security required by the department to manage and mitigate these impacts; and
- clear accountability for the licensee to achieve community and government expectations throughout the life and upon closure of operations.

FINANCIAL ASSURANCE FRAMEWORK

The department's objective is to ensure that authorised activities are operated, rehabilitated and decommissioned in a sustainable manner, consistent with required environmental and rehabilitation outcomes, and without unacceptable liability to the State.

To meet this objective, section 43 of the Act introduces a financial assurance mechanism and permits the Minister to require a licence applicant or licensee to enter into a bond (or bonds) in such sum, on such terms and conditions and with such security for its satisfaction as determined by the Minister.

The setting of a bond is a foundational mechanism of financial assurance. The purpose is to assist licensees' compliance with rehabilitation and/or decommissioning obligations and to ensure that such obligations of an area disturbed by authorised operations can still be undertaken even in the event of a licensee defaulting or otherwise failing to meet those obligations.

BOND AND SECURITY

The conditions and terms of the bond(s) (including the amount and type of financial security acceptable to be held in satisfaction of the bond) will be determined by

the Minister and informed by the rehabilitation liability estimate, as set out below.

The Minister will communicate in writing to a licence applicant or licensee that they are required to enter a bond and advise them of:

- the terms and conditions of the bond;
- the requirement to provide security for the satisfaction of the bond; and
- the amount and form of that security.

This will take place:

- before the commencement of authorised operations, no later than the point at which a licensee gives notice of commencement of operations under section 44 of the Act; or
- before a licence is transferred (in the case of an existing licence transfer to a new entity); or
- at any other time the Minister determines that a bond is required following a bond review.

The bond will be a legally binding agreement in the form of a Deed Poll, however tailored bonds may be prepared for licensees with complex structures or arrangements.

The legal obligation to comply with the Act and the conditions of a licence remains with the licensee regardless of whether there is a bond. The bond is in place to support compliance with those obligations and to ensure that rehabilitation can be undertaken by the department should the licensee be unable to meet their obligations. A bond does not in any way relieve the licensee from meeting rehabilitation and decommissioning obligations under the Act.

If a licensee fails to comply with a requirement under section 43 of the Act, the Minister may refuse a licence application or authorised operations may be suspended or cancelled (as relevant).

BOND CALCULATION

The department applies a risk-based approach to rehabilitation liability management to ensure an adequate level of security is held for the satisfaction of the bond over the lifecycle of authorised operations.

The level of security required will be a proportion/percentage of the rehabilitation liability estimate (see *Rehabilitation Liability Estimate*).



This percentage will be determined by applying a departmental financial security requirement matrix that assesses the project's risk rating for two key factors:

- 1. Financial rating – an independent, standardised assessment of operational, solvency and liquidity metrics of the licence applicant or licensee. Assessment may take into account the presence or absence of a parent guarantee and/or a third-party indemnity agreement; and
- 2. Project life cycle – financial security will be required in a staged approach over the lifecycle of the project, recognising industry upfront capital costs and change in liability risk composition.

The risk rating assessment is illustrated in the financial security requirement matrix below.

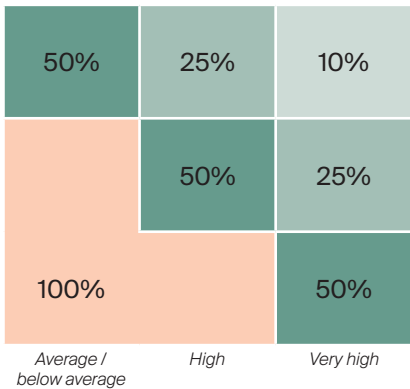
Financial security requirement matrix

Project life cycle

Construction

1/3 operating life

2/3 operating life



Financial rating

An example case study that shows how the policy may apply to a licence applicant or licensee is provided in [Appendix 1](#).

REHABILITATION LIABILITY ESTIMATE

The rehabilitation liability estimate (RLE) calculator is the recommended method for assessing rehabilitation liability. The RLE calculator has been developed by independent, industry experts to provide a consistent approach to assessing the potential rehabilitation liability for hydrogen and renewable energy projects and to inform the value of a bond. The RLE may consider the salvage value of the infrastructure being constructed.

The RLE calculator is available on the department's website for a licence applicant or licensee to estimate the rehabilitation liability for a project. The RLE shall reflect activities associated with the rehabilitation of land adversely affected by authorised operations in line with an approved statement of environmental objectives, as well as the proposed operational management plan. The RLE is to be submitted to the department at the time of seeking operational management plan approval for a project.

The department will review the RLE prior to setting the final bond amount and communicate to the licence applicant or licensee during the approval of a project, the terms of the bond agreement, bond amount, bond terms and conditions and type of financial security required.

The RLE calculator will be reviewed from time to time to reflect industry rates, inflation rates and other updates where applicable.

TYPES OF SECURITY

The acceptable form of financial security to be held for the satisfaction of a bond will be determined by the Minister and may include one or more of the following:

- cash; or
- an irrevocable unconditional bank guarantee with no end date, or
- an irrevocable unconditional insurance bond with no end date; or
- any other form of security acceptable to the Minister.

Licensees can lodge a bank guarantee or insurance bond to meet the bond requirement provided that the issuer of security is an Australian Prudential Regulation Authority regulated entity that maintains a S&P Global or equivalent credit rating of 'A-' or above.

BOND REVIEW

The purpose of a rehabilitation bond review is to ensure that the financial security remains at an appropriate level. Periodic assessment of the bond against the rehabilitation liability estimate provides incentive for the licensee to minimise environmental impacts and undertake progressive rehabilitation where possible.



For both the initial bond and bond reviews, the rehabilitation liability will be calculated in the same way and by using the RLE.

Bonds will be reviewed over the lifecycle of authorised operations and when:

- a change to a licensee's financial rating occurs;
- prior to a licence being transferred; or
- when requested by the licensee.

Bonds may also be reviewed when there is:

- a change in the size and value of infrastructure over time;
- a work program variation approved; or
- a significant change in market conditions.

If the Minister determines that there is a requirement for a change to the amount of security held for the satisfaction of the bond, the Minister will provide the licensee with information explaining how the amount was calculated, along with the terms and conditions of the varied bond.

BOND USE

Any portion of a bond(s) held can be called upon or expended by the Minister to:

- complete any unmet present and future rehabilitation obligations in an area disturbed by authorised operations; or
- in rehabilitating any area disturbed by authorised operations.

The Minister will advise the licensee in writing of any intention to call upon any bond held under the Act.

BOND DISCHARGE

Bonds will be returned when the department is satisfied that all closure, rehabilitation and completion outcomes, as detailed in the licence conditions, statement of environmental objectives and approved operational management plan, have been achieved.

Licensees may request a reduction in the bond if the rehabilitation liability of the site has been significantly reduced. In such circumstances, the department may

accept a revised rehabilitation liability estimate for consideration.

Where a licensee defaults on their rehabilitation obligations and the department must undertake rehabilitation works on a licensed area, the amount of bond returned will be the remaining monies after all costs for the work have been deducted.

ROLES AND RESPONSIBILITIES

Licensees are responsible for:

- calculating the RLE (standard calculator available) and reporting this to the department;
- executing a bond agreement with the Minister and compliance with any terms and conditions of a bond;
- payment of financial security in accordance with this policy;
- applying to the department of any material change, such as a change in operations or ownership, to determine any required adjustments to the RLE and financial security;
- carrying out decommissioning and rehabilitation activities in accordance with conditions of the licence and the approved statement of environmental objectives and operational management plan;
- compliance with all regulatory obligations under the Act.

The Department for Energy and Mining is responsible for:

- determining financial security requirements for satisfaction of the bond and notifying this amount to the licensee;
- undertaking bond reviews to determine any required adjustments to the RLE and financial security;
- assessing applications for changes in ownership of a licence or licensee to determine any required adjustments to the RLE and financial security;
- assessing changes in a licensee's financial rating on an annual basis;



- providing tools/support to enable calculation of RLE and reporting to the department;
- assessing decommissioning and rehabilitation plans under an approved operational management plan;
- verifying the completion of decommissioning and rehabilitation.

MONITORING, EVALUATION AND REVIEW

This policy will be reviewed within 2 years from the date of publication.

RELEVANT DOCUMENTS AND WEB LINKS

Key documents which relate to this policy include:

- [Hydrogen and Renewable Energy Act 2023](#)
- [Hydrogen and Renewable Energy Regulations 2024](#)

FEEDBACK

To provide feedback on this document email
DEM.ERDadmin@sa.gov.au



APPENDIX 1. EXAMPLE CASE STUDY

ZYX ENERGY PTY LTD
(as at 30 June 2025)

Project: 1.4 giga-watt (GW) wind farm on designated land

Infrastructure: 200 x 7 megawatt (MW) turbines and associated transmission, roads etc.

Project life: 30 years

Average RLE per turbine: \$500,000.00 (after consideration of salvage value)

Total RLE: \$100 million

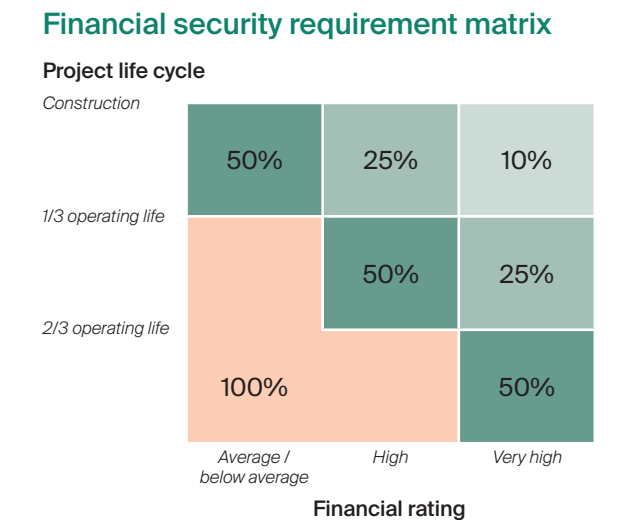
Financial rating: Very high

Financial Security Calculation

Zyx Energy holds a Renewable Energy Infrastructure (REIL) licence for a wind farm project within designated land in South Australia. At the time of seeking approval for the project’s operational management plan, Zyx Energy, using the RLE calculator available on the department’s website, calculated a RLE for their project to the amount of \$100 million.

This estimate was provided to the department at the time of project operational management plan approval which has been subsequently verified and accepted by the department.

The department undertakes a standardised assessment of operational, solvency and liquidity measures of Zyx Energy and determines them to be of a “Very high” financial rating per the Financial Security Requirement Matrix below.



The security requirement for Zyx Energy’s project for the satisfaction of the bond to the Minister is outlined in the following table:

Project Stage	Security requirement as a percentage of the RLE	Security requirement
Prior to construction commencement	10%	\$10m
Once 1/3 operating life is reached (10 years)	25%	\$25m
Once 2/3 operating life is reached (20 years)	50%	\$50m

Prior to construction commencement, Zyx Energy enters into an agreement in the form of a Deed Poll for \$10 million as security for the satisfaction of the bond. The security requirement is payable in the form of an irrevocable and unconditional bank guarantee or insurance bond with no end date, cash, or other form acceptable to the Minister.

When the project reaches 10 years, Zyx Energy enters into a further bond for \$15 million (in addition to the existing bond), bringing the total bond amount to \$25 million.

When the project reaches 20 years, Zyx Energy enters into a further bond for \$25 million (in addition to the existing bonds), bringing the total bond amount to \$50 million.

Prior to any change in operations during the project life, Zyx Energy will be required to review the RLE and advise the Minister, in writing, of any changes which may require an update to the bond held by the Minister.

Additionally, the department may require a review of the bond and rehabilitation requirements in the event of a change in ownership of a license, changes in a licensee’s financial rating, a significant change in operations, or a significant change in market conditions.



ACKNOWLEDGEMENT OF COUNTRY

As guests here on Kaurna land, the Department for Energy and Mining (DEM) acknowledges everything this department does impacts on Aboriginal country, the sea, the sky, its people, and the spiritual and cultural connections which have existed since the first sunrise. Our responsibility is to share our collective knowledge, recognise a difficult history, respect the relationships made over time, and create a stronger future.

We are ready to walk, learn and work together.

FURTHER INFORMATION

Department for Energy and Mining

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**Government
of South Australia**

Department for
Energy and Mining