

Energy Infrastructure Safety Case Guidelines

Submitting or revising safety cases under
Victoria's energy safety laws

December 2024

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1 Summary

Major electricity companies, gas companies and pipeline licensees (collectively referred to in these guidelines as **energy infrastructure companies**) have mandatory obligations to submit safety cases to Energy Safe Victoria under Victoria's energy safety laws. This includes:

- Electricity safety management schemes (**ESMS**) under the *Electricity Safety Act 1998* (Vic) for supply networks
- Gas safety cases (**GSC**) under the *Gas Safety Act 1997* (Vic) for facilities, and
- Safety management plans (**SMP**) under the *Pipelines Act 2005* (Vic) for pipeline operations.

These guidelines are to assist energy infrastructure companies to understand and comply with their safety case obligations and our general expectations. It provides information and guidance about:

- the safety framework as it applies to energy infrastructure companies
- the concept of minimising hazards and risks as far as practicable (**AFAP**) or as far as is reasonably practicable (**AFAIRP**)
- the process for submission and assessment of safety cases
- the structure and content of safety cases, and
- the consequences of non-compliance.

They should be read in conjunction with other policies and guidance materials that Energy Safe may publish from time to time. These other materials may provide more detailed information about the matters covered in these guidelines or address issues relating to particular types of safety cases or energy infrastructure companies.

Please note, gas retail facilities are excluded from the scope of these guidelines. While gas retail safety cases share some content requirements with other gas safety cases, the infrastructure and systems involved differ significantly from those used in transmission, distribution, or storage operations. Separate guidance will be provided specifically for gas retail safety cases.

1.1 The safety framework

A key objective of Victoria's energy safety laws as it applies to energy infrastructure companies is to protect the community from the risks arising from electricity and gas supply networks, gas facilities and licensed pipelines. Such risks include (but are not limited to) injury or death caused by electrocution or bushfires started from electrical infrastructure, gas exposure or explosion because of loss of containment from facilities or pipeline operations.

Energy infrastructure companies have general duties under Victoria's energy safety laws to minimise the hazards and risks to the safety of people and damage to property, as well as bushfire danger, arising from electricity and gas supply networks, gas facilities and licensed pipelines (generally referred to in these guidelines as **infrastructure**). Major electricity companies also have a duty to minimise bushfire danger arising from their infrastructure. Energy infrastructure companies are also required to submit safety cases to demonstrate to Energy Safe how they will meet their general duties (see Box 1.1). We test and challenge the energy infrastructure companies' commitments to meeting their general duties, monitor their compliance and take enforcement action where appropriate to hold them to account.

Box 1.1: Definition of a safety case

A **safety case** is a document or suite of documents produced by the energy infrastructure company and provided to Energy Safe as the body of evidence to demonstrate how it will ensure that the hazards and risks arising from its infrastructure will be eliminated or minimised AFAP.

1.2 Concept of minimising hazards and risks

Energy infrastructure companies must identify all foreseeable hazards and risks arising from their infrastructure and the available controls (see Box 1.2) and:

- implement the most effective control, or combination of controls, to eliminate each safety risk where that is practicable, or
- where it is not practicable to eliminate a safety risk, implement all practicable controls that contribute to the minimisation of the safety risk.

This means doing more than simply implementing controls to reduce safety risks to a level deemed acceptable or tolerable by the energy infrastructure company – it means implementing controls until there are no additional controls that would further contribute to the reduction of safety risks, or it would not be practicable to implement the additional controls in the circumstances.

Box 1.2: Definition of hazards, risks and controls

A **hazard** is anything (e.g., a thing, material, substance, situation, practice, behaviour) that has the potential to cause harm including death or injury, damage to property, damage to the environment or a combination of these.

A **risk** is the possibility that harm (e.g., death, injury, property damage) may occur from exposure to a hazard. The level of risk reflects:

- the likelihood of exposure to a hazard, and
- the potential consequences.

Controls are the measures (e.g., engineering, administrative) put in place to eliminate or minimise risks. They can:

- prevent or reduce the likelihood of exposure to a hazard, and/or
- reduce the severity of the potential consequences.

1.3 Safety case submission and assessment

Energy Safe's assessment process for a safety case depends on the circumstances, characteristics and complexity in each case. However, the general stages of our assessment are outlined in Box 1.3.

We will discuss the assessment process with the energy infrastructure company during pre-submission discussions, including whether a formal presentation to Energy Safe's Commissioners is expected. Energy infrastructure companies should therefore engage with us early to understand the process in their case and allow sufficient time to obtain acceptance by the required date.

We will only accept a safety case if we are satisfied that it is appropriate for the infrastructure to which it applies. To be capable of acceptance a safety case must, at a minimum:

- Clearly and correctly identify the legal entity submitting the safety case and the infrastructure to which it applies.
- Be well-structured and demonstrate a robust assessment of hazards, risks and controls.
- Be unambiguous concerning the risk control measures that will be implemented and the performance standards or key performance indicators that the energy infrastructure company commits to achieve at a minimum.
- Contain sufficient detail to demonstrate how the energy infrastructure company will meet its general duties without the need to refer to other documents external to the safety case.
- Comply with the prescribed requirements in the relevant Acts and regulations.
- Clearly identify which documents form part of the safety case (**incorporated documents**) and which documents are supporting submissions only.

Box 1.3: General stages of safety case assessment process

Our assessment of safety case submissions can involve multiple stages, which may include:

- pre-submission discussions
- formal submission
- assessment (e.g., consultation, audits and inspections, preliminary feedback and re-submission where necessary or appropriate)
- formal presentation
- final decision.

1.4 Structure and content of safety cases

Energy Safe generally expects all safety cases submitted for assessment to contain the elements outlined in Table 1.1, which should also be used as a guide for structuring a safety case.

A safety case needs to contain sufficient detail to demonstrate that the energy infrastructure company has arrangements in place that will ensure hazards and risks are systematically and continuously identified, assessed and eliminated or minimised. However, energy infrastructure companies need to be careful to draft their safety cases in such a way that they do not require frequent revisions and therefore re-submission to Energy Safe for assessment and acceptance.

Table 1.1: Key elements of all safety cases submitted to Energy Safe

Element	Description
Preliminary	Details about the legal entity submitting the safety case, the Act(s) and regulations pursuant to which it is submitted, version number and revision history (if applicable), and the person(s) who have developed and approved the safety case for submission.
Introduction	An overview of the company, scope and objectives of the safety case and important information to aid navigation and interpretation of the safety case.
Infrastructure description	A detailed description of the supply network, facility or pipeline operation to which the safety case relates, including information about location, configuration, design and construction materials. Also, other contextual information that influence hazards and risks such as age of assets and environmental factors.
Formal safety assessment	An outline of the risk assessment methodology used by the energy infrastructure company, the outcomes of the risk assessment including details of identified hazards, risks and controls, and demonstration of risk minimisation AFAP or AFAIRP as applicable.
Safety management system	An outline of the arrangements in place to ensure controls are effectively implemented. Includes performance standards/key performance indicators that the energy infrastructure company commits to achieve at a minimum.
Emergency response plan	An outline of the arrangements in place to ensure the energy infrastructure company is ready to respond to, manage and recover from all reasonably foreseeable emergencies.

1.5 Non-compliance with an accepted safety case

Where Energy Safe considers an energy infrastructure company has not complied with their accepted safety case, we can take a range of actions to remedy the non-compliance and hold the company to account.

We will assess and determine our response in the circumstances based on the available action that is proportionate to the nature of the offence in accordance with our Compliance and Enforcement Policy.

2 The safety framework

This chapter provides an overview of the legislative framework regarding the general duties and safety case obligations of energy infrastructure companies under Victoria's energy safety laws. It also provides information about the legislative amendments in the *Energy Legislation Amendment (Energy Safety) Act 2023* (Vic), which came into effect on 16 May 2024.

2.1 The safety framework

Energy infrastructure companies have general duties under the Electricity Safety Act, the Gas Safety Act and the Pipelines Act to minimise AFAP or AFAIRP the hazards and risks to people and property that arise from their infrastructure and bushfire danger in the case of electricity supply networks. How an energy infrastructure company intends to meet its general duties is required to be demonstrated in a safety case, which is submitted to Energy Safe for assessment and acceptance if appropriate.

2.1.1 Major electricity companies

Under section 98 of the Electricity Safety Act, major electricity companies (**MEC**) have general duties to design, construct, operate, maintain and decommission their supply networks to minimise AFAP:

- the hazards and risks to the safety of any person arising from the supply network
- the hazards and risks of damage to the property of any person arising from the supply network
- the bushfire danger arising from the supply network.

Energy Safe can prosecute a MEC for a breach of its general duties, with maximum penalties of up to 9000 penalty units for a body corporate.

MECs must prepare ESMSs and bushfire mitigation plans (**BMP**) (noting a BMP must be submitted as part of an ESMS) to demonstrate how they will meet their general duties.

ESMS

Under section 99 of the Electricity Safety Act, a MEC must prepare and submit an ESMS to Energy Safe for each of its supply networks.

The ESMS must:

- be in writing and include the prescribed fee
- specify, in accordance with the regulations, the safety management system being followed, or to be followed by the MEC:
 - to comply with its general duties
 - and outline any other matters relating to the safe design, construction, operation, maintenance and decommissioning of the supply network that are prescribed
- include a plan for the mitigation of bushfire danger (see next section, 'BMP' for further information).

A MEC must not commence to commission, or operate, a supply network unless an ESMS for that supply network has been accepted or provisionally accepted by Energy Safe.

Energy Safe can prosecute a MEC for non-compliance with an accepted or provisionally accepted ESMS, with maximum penalties of up to 6000 penalty units for a body corporate.

Under section 113 of the Electricity Safety Act, compliance with an accepted or provisionally accepted ESMS is a defence to a prosecution for a breach of the general duties.

BMP

Under section 113A of the Electricity Safety Act, a MEC must also submit a BMP to Energy Safe for each of its supply networks. A BMP is a plan for the MEC's proposals for mitigation of bushfire and forms part of its ESMS.

A MEC must not commence to commission, or operate, a supply network during the specified bushfire risk period unless a BMP for that supply network has been accepted or provisionally accepted by Energy Safe.

Energy Safe can prosecute a MEC for non-compliance with an accepted or provisionally accepted BMP, with maximum penalties of up to 6000 penalty units for a body corporate.

Under section 113 of the Electricity Safety Act, compliance with an accepted or provisionally accepted BMP is a defence to a prosecution for a breach of the general duties.

2.1.2 Gas companies

Under section 32 of the Gas Safety Act, gas companies have general duties to manage and operate their facilities to minimise AFAP:

- the hazards and risks to the safety of the public and customers arising from gas
- the hazards and risks of damage to property of the public and customers arising from gas
- the hazards and risks to the safety of the public and customers arising from:
 - interruptions to the conveyance or supply of gas; and
 - the reinstatement of an interrupted gas supply.

Energy Safe can prosecute a gas company for a breach of its general duties, with maximum penalties of up to 9000 penalty units for a body corporate.

Under section 37 of the Gas Safety Act, a gas company must submit a GSC to Energy Safe for each of its facilities. The GSC must:

- be in writing
- in accordance with the regulations, specify the safety management system being followed or to be followed by the gas company:
 - to comply with their general duties
 - and outline any other prescribed matters relating to the safe conveyance, supply, sale, measurement or control of gas.

A gas company must not commission or commence to operate a facility unless a safety case for that facility has been accepted or provisionally accepted by Energy Safe.

Energy Safe can prosecute a gas company for non-compliance with an accepted or provisionally accepted GSC, including in relation to operation or management, or the removal, dismantling or decommissioning of the facility. These offences hold maximum penalties of up to 6000 penalty units for a body corporate.

Under section 50 of the Gas Safety Act, compliance with an accepted or provisionally accepted GSC is a defence to a prosecution for a breach of the general duties.

A gas company that is also a pipeline licensee that must submit an SMP under the Pipelines Act (see below) may submit a single safety case for the relevant infrastructure that addresses all the requirements under both the Gas Safety Act and the Pipelines Act.

2.1.3 Pipeline licensees

Under section 124 of the Pipelines Act, pipeline licensees have general duties to manage any pipeline operation so as to minimise AFAIRP:

- hazards and risks to the safety of the public arising from the pipeline operation

- hazards and risks to the environment arising from the pipeline operation.

Energy Safe can prosecute a pipeline licensee for a breach of its general duties, with maximum penalties of up to 9000 penalty units for a body corporate.

Under section 126 of the Pipelines Act, a pipeline licensee must give Energy Safe an SMP that:

- identifies risks to the safety of the public from the pipeline operation
- specifies what the pipeline licensee will do to eliminate or minimise those risks
- sets out other matters prescribed by the regulations.

A pipeline licensee must not carry out a pipeline operation unless Energy Safe has accepted an SMP for the pipeline operation. An operation, in relation to a pipeline, includes the testing, maintenance, alteration, decommissioning and removal of the pipeline.

Energy Safe can prosecute a pipeline licensee for non-compliance with an accepted SMP, with maximum penalties of up to 6000 penalty units for a body corporate. Unlike ESMSs, BMPs and GSCs, compliance with an accepted SMP is not a defence to a prosecution for a breach of the general duties.

As noted above, a pipeline licensee that is also a gas company that must submit a GSC under the Gas Safety Act may submit a single safety case for the relevant infrastructure that addresses the requirements under both the Gas Safety Act and the Pipelines Act.

2.2 Legislative amendments

The Energy Legislation Amendment (Energy Safety) Act amended the Electricity Safety Act, the Gas Safety Act and the Pipelines Act with effect from 16 May 2024. Of particular relevance to these guidelines, the amendments include changes relating to the requirements for review and revision of accepted safety cases under the Electricity Safety Act and the Gas Safety Act. The maximum penalty units that can apply for a breach of the general duties and non-compliance with accepted safety cases under all the Acts also increases, as noted above.

2.2.1 Review of accepted safety case—every five years

From 16 May 2024, MECs and gas companies must submit a revised ESMS, BMP or GSC as applicable to Energy Safe every five years, regardless of when the last revision was accepted. That is, a revision to an ESMS, BMP or GSC will no longer ‘reset the clock’ on the five-year review period.

The initial five-year review period following the commencement of these changes is calculated from the date of the most recent acceptance of an ESMS, BMP or GSC. For example, if the last revision of a safety case was accepted by Energy Safe on 1 May 2023, the five-year review date is 1 May 2028. A revised safety case taking into account the outcomes of the review must be formally submitted to Energy Safe by the five-year review date.

There is no change for pipeline licensees as the Pipelines Act already requires a pipeline licensee to review its accepted SMP every five years regardless of when the last revision was accepted.

Our approach and expectations relating to the five-year reviews of accepted safety cases are outlined in section 4.6.

2.2.2 Revisions of accepted safety case

From 16 May 2024, MECs and gas companies must submit all proposed revisions to an accepted ESMS, BMP or GSC as applicable to Energy Safe regardless of whether the revision is ‘significant’ or not. That is, MECs and gas companies will no longer be allowed to make changes to an accepted safety case without submitting it to Energy Safe for assessment and acceptance.

There is no change for pipeline licensees as the Pipelines Act already requires a pipeline licensee to submit all amendments to an accepted SMP to Energy Safe for assessment and acceptance.

Our approach and expectations relating to revisions of accepted safety cases are outlined in section 4.7. This includes our recommended approach to managing revisions to accepted safety cases while MECs and gas companies transition their safety cases to a form that no longer requires frequent revisions.

3 Concept of minimising hazards and risks

This chapter provides a high-level overview of the concept of minimising hazards and risks and the meaning of AFAP and AFAIRP. It also provides information about Energy Safe's expectations of energy infrastructure companies when determining what is 'practicable' or 'reasonably practicable'.

3.1 Definitions of 'practicable' and 'reasonably practicable'

The Electricity Safety Act and Gas Safety Act require MECs and gas companies to minimise hazards and risks AFAP, while the Pipelines Act requires pipeline licensees to minimise hazards and risks AFAIRP.

What is 'practicable' or 'reasonably practicable' is to be determined having regard to the matters set out in Table 3.1. In essence, energy infrastructure companies must identify all foreseeable hazards and risks arising from their infrastructure. They must also identify the risk controls available to eliminate, prevent or reduce the safety risks and:

- implement the most effective control or combination of controls to eliminate each safety risk where that is practicable, or
- where it is not practicable to eliminate a safety risk, implement all practicable controls that contribute to the minimisation of the safety risk.

Table 3.1: Matters to consider for determining what is 'practicable' or 'reasonably practicable'

As far as 'practicable' (AFAP) – the Electricity Safety Act and the Gas Safety Act	As far as is 'reasonably practicable' (AFAIRP) – the Pipelines Act
<ul style="list-style-type: none"> • the severity of the hazard or risk in question • the state of knowledge about the hazard or risk and any ways of removing or mitigating the hazard or risk • the availability and suitability of ways to remove or mitigate the hazard or risk • the cost of removing or mitigating the hazard or risk. 	<ul style="list-style-type: none"> • the likelihood of the hazard or risk concerned eventuating • the degree of harm that would result if the hazard or risk eventuated • what the person knows, or ought reasonably to know, about the hazard or risk and any ways of eliminating or reducing the hazard or risk • the availability and suitability of ways to eliminate or reduce the hazard or risk • the cost of eliminating or reducing the hazard or risk.

3.2 Determining what is 'practicable' or 'reasonably practicable'

3.2.1 Assessment must be made with a clear presumption in favour of safety

In determining what is 'practicable' or 'reasonably practicable', energy infrastructure companies must consider all the matters set out in Table 3.1 and weigh up each of the matters **with a clear presumption in favour of safety**. No single matter (e.g., cost) determines the outcome of an assessment. We expect the matters to be assessed and considered collectively and through the lens

of what a reasonable person taking proportionate action to eliminate or minimise risks ought to do in the circumstances.

While Victoria's energy safety laws do not specifically refer to 'grossly disproportionate', we interpret the legislation to require each available and suitable control to be implemented unless the cost of doing so is so grossly disproportionate to the benefit that it would be clearly unreasonable to justify the expense (see Box 3.1). If there are multiple controls that achieve the same result in eliminating or minimising a risk, then the most cost-effective option may be chosen. However, choosing a lower-cost option that is less effective on the sole basis that it is cheaper is unlikely to meet the test of 'practicable' or 'reasonably practicable', especially if the severity of harm is significant.

Energy infrastructure companies must detail their formal safety assessment and safety management system in their safety case (see chapter 5). Where a control is identified and not implemented, Energy Safe expects the energy infrastructure company to clearly explain why and how it determined that the cost of implementing the control is grossly disproportionate to the benefit. This must include the methodology used and any assumptions made in reaching this conclusion.

Box 3.1: Determining 'grossly disproportionate'

If a measure can be implemented and its cost isn't grossly disproportionate to the benefit, it is considered practicable or reasonably practicable and should be implemented. For a control to be rejected, it is insufficient for the cost to merely exceed the benefits of risk reduction; there must be clear evidence showing that the cost is "grossly disproportionate" to the benefit.

What qualifies as "grossly disproportionate" depends on the identified risk or hazard, considering the inherent uncertainty in measuring the benefits and costs of any measure. It is the responsibility of the energy infrastructure company to demonstrate whether the cost of a measure is grossly disproportionate to the benefit within the given context.

Importantly, the test is whether a control is practicable or reasonably practicable, not just affordable. The decision is based on justifiable cost and effort, not on the project's financial limitations or budget constraints.

3.2.2 Minimising hazards and risks AFAP or AFAIRP is doing more than reducing risks to a tolerable level

Energy infrastructure companies must take a precaution-based approach to determining what is 'practicable' or 'reasonably practicable', as opposed to a target-risk approach (see Box 3.2). This means doing more than simply implementing controls to reduce safety risks to a level deemed acceptable or tolerable by the energy infrastructure company – it means implementing controls until there are no additional controls that would further contribute to the reduction of safety risks, or it would be grossly disproportionate to implement the additional controls in the circumstances.

As noted above, Energy Safe expects energy infrastructure companies to explain and justify in their safety cases why a control is not implemented.

Box 3.2: Precaution-based and target-risk approaches to minimising hazards and risks

There are two broad approaches to determining whether safety risks have been minimised:

- A precaution-based approach means looking at all practicable controls and implementing those controls until the safety risk is eliminated or there are no additional controls that would contribute to the further reduction of the safety risk.
- A target-risk approach means looking at all practicable controls and implementing a selection of those controls until the safety risk is reduced to an acceptable or tolerable level.

3.2.3 State of knowledge

State of knowledge is one of the elements defined in the Electricity Safety Act and Gas Safety Act to minimise hazards and risks AFAP. An energy infrastructure company's state of knowledge represents

all the information it should know about the safety of its infrastructure and associated risks and controls, obtained from a range of sources (see Box 3.3). That is, state of knowledge is not just what an energy infrastructure company actually knows, but what it ought to know by proactively seeking out the information.

While the term state of knowledge is not explicitly mentioned in the Pipelines Act, the principle is relevant to determining AFAIRP, including having regard to what a person ought reasonably to know about eliminating or reducing hazards and risk, and the availability of ways to eliminate or reduce a hazard or risk.

It is also important to note that state of knowledge changes over time – as technologies change and ways of working evolve, new hazards, risks and controls emerge. Therefore, energy infrastructure companies must be proactive in continuously improving their knowledge, staying informed about industry developments and new technologies and assessing the impact on risks.

Energy Safe expects energy infrastructure companies to commit to proactively and continuously improving their knowledge and adapting their practices over time to ensure the highest levels of safety are always maintained. When new hazards or risks are identified because of improved state of knowledge, we expect energy infrastructure companies to demonstrate how they are addressing them. While immediate action may not always be possible, the risk should be properly assessed and appropriate actions taken or planned to eliminate or minimise the risk AFAP/AFAIRP.

This means doing more than simply adopting and complying with requirements specified in Victoria's energy safety laws such as prescribed technical standards (see below). We expect energy infrastructure companies to emphasise this commitment in their safety cases.

Box 3.3: State of knowledge

State of knowledge is all the information that an energy infrastructure company should reasonably know about managing the hazards and risks arising from their infrastructure. This includes (but is not limited to) information published in technical standards, lessons learnt from incidents and trials of innovations, and more broadly information obtained from engagement and consultation with stakeholders and peers.

Adoption of technical standards

Energy infrastructure companies must comply with all technical standards prescribed in Victoria's energy safety laws. However, energy infrastructure companies should also consider whether other non-prescribed technical standards are relevant to their circumstances and should be adopted.

Technical standards can assist energy infrastructure companies to identify the availability and suitability of controls. Accordingly, Energy Safe expects energy infrastructure companies to have regard to all relevant technical standards in determining what is 'practicable' or 'reasonably practicable'. Energy infrastructure companies must specify in their safety cases which prescribed or non-prescribed technical standards they have adopted, whether they have adopted the technical standard in full or in part, why, and how they are applied.

That said, we also expect energy infrastructure companies to consider whether there are other more effective or additional controls not specified in technical standards. Energy infrastructure companies do not necessarily meet their general duties by simply complying with prescribed requirements and technical standards.

Technical innovation and industry lessons

What is considered best practice evolves over time and learnings from incidents or trials of innovations are not always reflected in published technical standards, which tend to lag behind. Energy Safe expects energy infrastructure companies to employ strategies to stay up to date with technical

innovations and to continually learn and improve their state of knowledge by engaging with others within the industry and sharing information.

We also encourage energy infrastructure companies to trial new technologies and ways of working that could improve safety outcomes, subject to there being appropriate safeguards in place with clear timeframes and assessment and validation of outcomes. Trials must be conducted in accordance with the framework set out in the energy infrastructure company's accepted safety case or, where the accepted safety case does not provide a framework, the energy infrastructure company must revise its safety case and submit to Energy Safe for assessment and acceptance.

Stakeholder engagement and consultation

Engagement and consultation with stakeholders on the design, construction, operation, maintenance and decommissioning of infrastructure is essential for ensuring a robust approach to identifying potential hazards, assessing risks and determining controls. It provides an opportunity for the energy infrastructure company to receive information it may not otherwise have access to and to refine its approach to ensure hazards and risks are minimised. It also helps the energy infrastructure company to avoid unintended effects or consequences that may not otherwise be apparent.

Consultation with persons who are potentially affected by the design, construction, operation, maintenance or decommissioning of infrastructure is particularly important. Aside from allowing them the opportunity to provide input, it ensures they are informed of the energy infrastructure company's plans and allows them to make informed decisions about their own approaches to minimising hazards and risks.

An energy infrastructure company's stakeholders may include, for example:

- the Victorian community
- customers
- landowners or occupiers
- regulators
- emergency services
- industry bodies
- unions
- its workforce, including contractors, consultants and advisors.

Energy Safe expects energy infrastructure companies to engage and consult with a broad range of stakeholders, but especially those who will be potentially affected by the design, construction, operation, maintenance and decommissioning of infrastructure. Wherever possible, this should occur through direct engagement and consultation, but it may also occur through stakeholder group representatives. It should be a genuine and meaningful two-way dialogue in which stakeholders are given sufficient information and time to allow them to make informed assessments and provide input.

Stakeholder engagement can be integrated into broader regulatory consultation processes. For example, during an Electricity Distribution Pricing Review consultation, energy infrastructure companies may gather new information on consumer trends that present new safety risks, such as the increased use of rooftop solar, home batteries, or electric vehicles. Incorporating these insights into safety cases can enhance their robustness by addressing newly identified risks.

3.3 Exceptions to implementation of all practicable controls

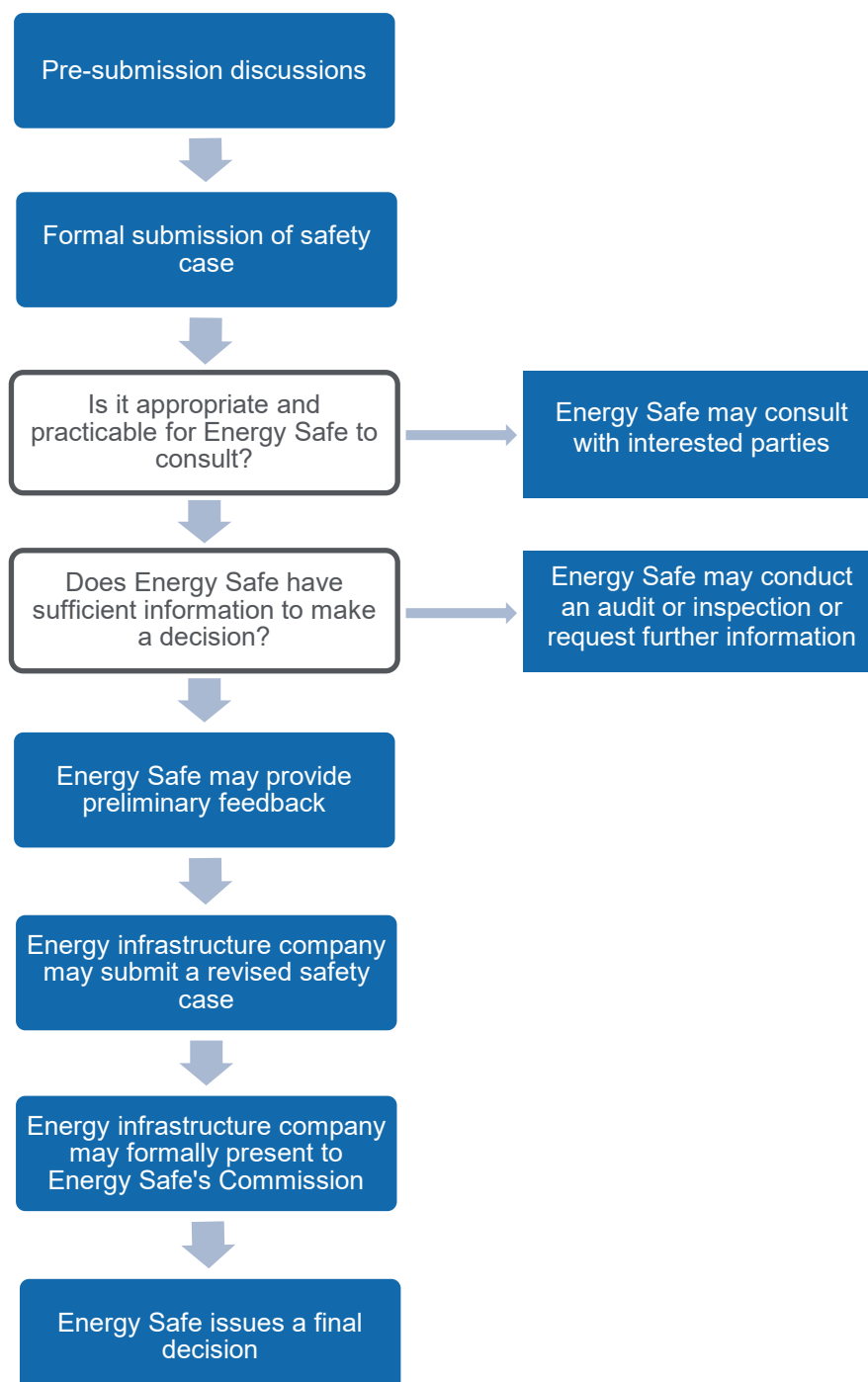
There are some limited circumstances where Energy Safe may accept that some practicable controls may not be implemented. For example, section 7A of the Electricity Safety Act provides that we may have regard to the reliability and security of supply in performing our functions under Part 8 or 10. This means a MEC could make a case for not implementing some practicable controls to balance safety and reliability considerations and we will take this into account in our assessment.

We will be more inclined to consider such an approach where affected parties have been consulted and are shown to support the proposal. While energy infrastructure companies bear the responsibility for conducting consultation in the first instance, we may also undertake consultation where appropriate.

4 Submission and assessment process

This chapter provides an overview of the submission and assessment process. Figure 4.1 shows the potential stages of the assessment process. However, the actual assessment process will depend on the circumstances, characteristics and complexity in each case. The sections that follow provide further detail about each of the stages.

Figure 4.1: Stages of Energy Safe’s assessment process



4.1 Pre-submission discussions

Energy Safe encourages energy infrastructure companies to engage with us as early as possible when planning to develop a new safety case or to revise an accepted safety case, so we can discuss before formal submission.

Pre-submission discussions typically comprise:

- a preliminary meeting to discuss the scope and objectives of the safety case and anticipated key issues, the assessment process and anticipated timeframes
- guidance about what should be in the safety case (i.e., incorporated documents) versus what should be in supporting submissions, and
- guidance about the stages of the assessment process.

We do not provide a consultancy service to review drafts of safety cases before formal lodgement. Any information or guidance provided during these discussions is not to be considered legal advice and does not bind Energy Safe to any position or outcome in the assessment. Energy infrastructure companies should always obtain their own advice on legal or technical issues as necessary to inform the development of their safety case and supporting submissions.

4.2 Formal submission

Energy infrastructure companies can formally submit their safety cases to Energy Safe by submitting it along with any supporting submissions as outlined below (Box 4.2).

We expect safety cases to be provided in both .docx format and in .pdf format. The .pdf format will be treated as the official safety case. The .docx version is for Energy Safe's convenience in developing our safety case assessment materials.

Where the safety case is a revision of a previously accepted safety case, we also expect both a clean version of the safety case and a marked-up version so that all changes can be readily identified.

Box 4.2: Contact details to submit a safety case

Energy infrastructure companies can submit a safety case by:

- Initially emailing info@energysafe.vic.gov.au to initiate pre-submission discussions with the appropriate team in Energy Safe.
- We will provide subsequent submission instructions for the safety case and any supporting documents.

4.3 Assessment

4.3.1 Threshold assessment

Energy Safe will carry out a preliminary review of the safety case to determine whether it is suitable for formal assessment. This is a review of key information that should be included in every submission, such as:

- the entity's legal name and details, to ensure they are accurate
- the scope and objectives of the safety case, including identification of the relevant Act and regulations pursuant to which it is submitted, to ensure it is clear for the purposes of the assessment
- a comprehensive description of the supply network, facility or pipeline operation to which the submission relates, to ensure it can be clearly identified

- an outline of the formal safety assessment, safety management system and emergency response plan
- compliance information, including an outline of:
 - each prescribed requirement and a reference to where it is addressed in the safety case
 - all documents that are referred to in the safety case and whether each document is an incorporated document or supporting submission, and
- all the expected documentation has been submitted.

Should the above not be included or clear, the safety case will not meet our threshold for formal assessment. If this is the case, we will advise the energy infrastructure company that the submission will not be formally assessed and will provide feedback on the issues that need to be addressed before re-submission.

Chapter 5 provides more information about the structure and content of safety cases.

4.3.2 Consultation with stakeholders

The preparation of a safety case requires energy infrastructure companies to comprehensively consider the hazards, risks and controls for their infrastructure. As outlined in chapter 3, energy infrastructure companies are expected to engage and consult with stakeholders to inform their assessments.

Energy infrastructure companies must include information about their engagement and consultation with stakeholders in their safety cases. This includes details of who, when, why and how stakeholders were consulted, an analysis of their feedback or submissions, and how that feedback has been taken into account in the development of the safety case.

We will take this information into account in our assessment. We may also consult on all or part of a safety case or on specific issues relating to safety cases. For example, we may seek views from other regulators such as the Australian Energy Regulator, WorkSafe Victoria or the Essential Services Commission on issues that also relate to their regulatory remit. We may also publicly consult on sector-wide issues to aid understanding of broader stakeholder views on safety and risks. For example, we may consult on our regulatory policies related to the adoption and application of specific controls. Where we undertake such consultation, our policy position following consultation, and the extent to which the safety case adopts our policy position, will also inform our assessment.

4.3.3 Audit, inspection or request for additional information

Energy Safe may need additional information to determine whether a safety case is appropriate to accept. To obtain this information, we may:

- conduct an audit or inspection to validate aspects of the safety case or to assess the design, construction, commissioning, operation, maintenance or decommissioning of assets, and/or
- request other additional information as necessary via a written notice.

We will explain the obligations and rights of the energy infrastructure company when arranging an audit or inspection or issuing a written notice.

We are not required to proceed with consideration of a safety case until the additional information we need is provided by the energy infrastructure company. Therefore, responses to our requests should be provided as soon as practicable and no later than the timeframe specified to avoid delays to our assessment.

4.3.4 Preliminary feedback

Energy Safe may provide preliminary feedback to the energy infrastructure company on its safety case to, for example:

- allow the energy infrastructure company to provide additional information or rectify any issues identified before making a revised submission or formal presentation
- ensure we have understood and considered all relevant facts and circumstances before making a decision, and/or
- provide procedural fairness in allowing the energy infrastructure company to respond before a formal decision is made.

We will typically provide this feedback in writing, but may do so verbally depending on the complexity, volume and type of feedback.

4.3.5 Revised submission

Depending on any preliminary feedback provided, the energy infrastructure company may decide to submit a revised safety case to Energy Safe or to provide further information.

We expect any revised submission adequately addresses the feedback provided. A revised submission must also be marked up to show all changes that have been made compared to the original submission, together with an explanation of the changes outlined in a covering letter or supporting submission.

4.3.6 Formal presentation

Energy Safe may invite the CEO of an energy infrastructure company together with operational executives and other key people responsible for developing and overseeing the implementation of the safety case to present the safety case to Energy Safe's Commissioners.

The purpose of the presentation is to give Energy Safe's Commissioners an opportunity to directly ask questions about key aspects of the safety case such as the risks and proposed controls. It also gives the energy infrastructure company an opportunity to provide further information about its commitment to continually improving knowledge about hazards, risks and controls and to safety and risk management in general.

We will be more likely to request a formal presentation where the energy infrastructure company has significant high-risk assets, or where there have been concerns about safety outcomes associated with the company and its infrastructure. There is a strong expectation that the presentation is made if requested.

An energy infrastructure company may further revise and resubmit its safety case to address any issues raised through this engagement. The information provided during the presentation will inform Energy Safe's decision regarding acceptance.

4.3.7 Final decision

Acceptance

Energy Safe will accept a safety case if we are satisfied that it is appropriate for the infrastructure to which it relates, and it complies with the relevant legislation.

We will communicate acceptance of a safety case to the energy infrastructure company in writing.

Provisional acceptance

While full acceptance is always the goal, Energy Safe may provisionally accept a safety case if we are satisfied that it will generally provide for the safe operation of the relevant infrastructure while any outstanding issues are resolved. For example:

- where we generally accept the approach but expect further detail to be provided for specific commitments made in the safety case, or

- where we do not accept one or more aspects of the safety case and expect that it be revised within a specified period.

A benefit of provisional acceptance is that operations and commitments in the new safety case are not delayed while outstanding issues are resolved, subject to the conditions being satisfied.

We will communicate provisional acceptance to the energy infrastructure company in writing. The provisional acceptance letter will state:

- the period that the provisional acceptance will be in force
- the extent to which the safety case has been accepted, and
- any limitations or conditions which will apply in relation to the use or operation of the infrastructure while the provisional acceptance is in force.

The indicative assessment timeframes for acceptance and provisional acceptance are the same. See Table 4.1 for further information on indicative assessment timeframes.

Non-acceptance

Energy Safe will not accept a safety case if we are not satisfied that it is appropriate for the infrastructure to which it relates or does not comply with the relevant legislation.

We will communicate the decision to the energy infrastructure company in writing, along with a statement of reasons for the decision and the issues that need to be addressed.

The energy infrastructure company must submit a revised safety case addressing the issues to Energy Safe within 28 days unless we agree otherwise.

Energy Safe may determine the safety case

Energy Safe's strong preference is for the energy infrastructure company to address any issues raised during assessment and to submit a safety case that is appropriate for acceptance. If necessary, we can require an energy infrastructure company to amend its safety case (see section 4.7 below for more information).

However, under the Electricity Safety Act and the Gas Safety Act, Energy Safe may also determine an ESMS, BMP or GSC which is to apply to the relevant infrastructure. This may be necessary when an energy infrastructure company fails to submit a safety case, or if we decide not to accept a safety case and the energy infrastructure company refuses to revise on the terms we require.

If we decide to determine a safety case, we will give notice in writing to the energy infrastructure company along with a statement of reasons for the determination. The safety case is deemed to be the accepted safety case from that date, overriding any prior safety case submitted by the energy infrastructure company and accepted by Energy Safe. The energy infrastructure company is required to comply with the safety case we determine.

4.4 Energy Safe's key considerations

Energy Safe will only accept a safety case if we are satisfied that it is appropriate for the infrastructure to which it applies. What we consider to be appropriate in the circumstances will in part depend on the levels of associated risks and any complexities. However, to be capable of acceptance, a safety case must at a minimum:

- Clearly and correctly identify the legal entity submitting the safety case and the infrastructure to which it applies.
- Be well-structured and demonstrate a robust assessment of hazards, risks and controls.
- Be unambiguous concerning the risk control measures that will be implemented and the performance standards or key performance indicators that the energy infrastructure company commits to achieve at a minimum.

- Contain sufficient detail to demonstrate how the energy infrastructure company will meet its general duties without the need to refer to other documents external to the safety case.
- Comply with the prescribed requirements in the relevant Acts and regulations.
- Clearly identify which documents form part of the safety case (**incorporated documents**) and which documents are supporting submissions only.

More information on the structure and contents of safety cases is provided in chapter 5.

4.5 Timeframe for Energy Safe decisions

Energy Safe must consider safety cases as expeditiously as the circumstances allow. As previously noted, the assessment process and therefore timeframes depend on the circumstances, characteristics and complexity in each case. It is also heavily dependent upon the quality of the safety case submitted by the energy infrastructure company and how promptly responses are provided to requests made for additional information.

Table 4.1 provides potential timeframes for some common scenarios, commencing from the date of formal submission and excluding any periods that we are awaiting additional information from the energy infrastructure company. These are highly indicative and may vary depending on whether the safety case meets the assessment criteria and key considerations noted above in sections 4.3 and 4.4. We will provide a better indication of actual timeframes during pre-submission discussions, including whether we consider the safety case changes to be minor or major, and will keep energy infrastructure companies informed throughout the assessment process.

Table 4.1: Potential timeframes for assessment

Scenario	Indicative timeframe
Minor revisions to an accepted safety case	3 to 9 months
Major revisions to an accepted safety case	6 to 12 months
New safety case – straight forward or limited scope	6 to 12 months
New safety case – complex	12 to 18 months

4.6 Review of accepted safety case—each five years

Energy Safe will ordinarily expect a five-year review to be a comprehensive review of the last accepted safety case. Energy infrastructure companies must undertake a full assessment of their hazards and risks and controls and consider whether the accepted safety case remains appropriate with a view for the next five years. This may result in the need for minor or major revisions, or the submission of an entirely new safety case.

However, we accept that there may be circumstances where a smaller scale review is appropriate. For example, if a comprehensive review was undertaken and a revised or new safety case was submitted to Energy Safe and accepted in the preceding 12 months. The energy infrastructure company will still need to undertake a review and demonstrate to Energy Safe that circumstances have not materially changed in this time. If an energy infrastructure company wishes to submit a review of its safety case prior to the five-year timeline to align with other regulatory cycles, it may do so voluntarily. However, this approach should be discussed with Energy Safe prior to commencement, and a subsequent five-year review is still required.

Energy infrastructure companies must document their review including the reasons for proposed revisions (or reasons for not revising) and submit this as a supporting submission along with a revised safety case to Energy Safe for assessment. We expect both a clean version of the safety case and a marked-up version to be submitted so that all revisions can be readily identified.

We encourage energy infrastructure companies to engage with us early and discuss their proposed scope of review before commencing the review.

4.7 Revisions of accepted safety case

4.7.1 Revisions initiated by the energy infrastructure company

All proposed revisions to an accepted safety case must be submitted to Energy Safe for assessment. However, Victoria's energy safety laws also specify circumstances in which energy infrastructure companies must submit a revised safety case to Energy Safe. Examples include (but are not limited to):

- changes in the assessment of hazards or risks that mean existing controls will no longer effectively eliminate or minimise risks
- developments in the state of knowledge about hazards, risks or the availability and suitability of controls that are not consistent with the accepted safety case or the basis upon which the safety case was accepted
- proposed modifications to a supply network, facility or pipeline operation in a manner that differs from any approach set out in the accepted safety case or that increases the level of risk to the safety of people or property
- proposed changes to work practices that mean they will no longer be consistent with work practices set out in an accepted safety case.

An energy infrastructure company should follow the process outlined in the preceding sections for submitting a revised safety case to Energy Safe for assessment. Noting the indicative timeframes outlined in Table 4.1, energy infrastructure companies should be mindful of avoiding concurrent formal safety case revisions. If an energy infrastructure company submits a revision while a previous revision is still under assessment, we will request the company to provide an amended submission that covers all the revisions.

Transitional arrangements following legislative amendments

We note that, prior to the legislative amendments that came into effect on 16 May 2024, some energy infrastructure companies may have revised their accepted safety cases without submitting the revisions to Energy Safe for assessment (e.g., where the energy infrastructure company decided that the change was not significant). However, this is no longer permissible from 16 May 2024.

Importantly, it is not viable for Energy Safe to continuously receive and assess proposed revisions to safety cases. As outlined in chapter 5, we expect energy infrastructure companies to submit safety cases that do not require frequent revisions. This means striking an appropriate balance with respect to the level of detail outlined in the safety case versus any supporting submissions.

However, we acknowledge that there may be a transition period while energy infrastructure companies update their safety cases accordingly. While this occurs, we recommend that energy infrastructure companies consider and record whether a proposed revision is material or not—material revisions must be submitted to Energy Safe before they are implemented, while immaterial revisions should be submitted to Energy Safe as soon as practicable (see Table 4.2). It is important to note that the legislation does not differentiate between material and immaterial revisions, and this is simply intended to be a transitional arrangement while safety cases are updated. This transitional arrangement will apply to revisions of existing safety cases, but when preparing new safety cases at the five-year review, we expect them to be drafted to minimise the need for frequent revisions.

Importantly, any revisions to an accepted safety case (material or not) are not considered as 'accepted' under the legislation unless and until they are accepted by Energy Safe. This means they cannot be relied upon for the purpose of the defences provided in the legislation unless and until they are accepted by Energy Safe.

Table 4.2 provides definitions of material and immaterial and examples of what types of revisions may fall within each category. It is noted that, while an individual revision may be considered immaterial, the cumulative effect of such revisions could become material. Therefore, energy infrastructure companies must carefully manage and assess their proposed revisions both individually and cumulatively.

The timeframe for review of any change is subject to assessment timeframes outlined in Table 4.1.

Table 4.2: Material versus immaterial revisions

Term	Definition	Examples
Material	A revision that is likely to change the basis on which the safety case was originally accepted by Energy Safe (e.g., any revisions that have the potential to meaningfully affect hazards, risks and controls, either directly or indirectly).	<ul style="list-style-type: none"> • Proposed changes to ownership of the legal entity, and therefore the entity that is submitting the safety case for acceptance. • Proposed changes to organisational structure or roles and responsibilities that impact the implementation of the safety case. • Proposed changes to performance standards or key performance indicators that the energy infrastructure company commits to achieve at a minimum. • A proposal to use new technologies or processes to implement risk controls. • A proposal to remove risk controls.
Immaterial	A revision that is unlikely to be considered contrary to the intent and interpretation of the safety case and does not meaningfully affect hazards, risks and controls, either directly or indirectly.	<ul style="list-style-type: none"> • A change to position title, name or their contact details listed in the safety case to ensure currency but that otherwise does not have an impact on the implementation of the safety case. • A change to a process that does not increase the level of risk to the safety of any person or property. • A correction of a typo in the safety case that does not have implications for the interpretation of the safety case.

It is the responsibility of energy infrastructure companies to carefully manage their proposed revisions and to ensure revisions are submitted to Energy Safe for assessment as required. It is our expectation that energy infrastructure companies assess whether a change is material or immaterial, and how changes may impact hazards, risks and controls. If there is uncertainty about the materiality of a change, this can be tested with Energy Safe.

There is an important distinction between the material and immaterial revisions referred to here, and the minor and major revisions outlined in Table 4.1. The major and minor revisions refer to the assessment timeframes, noting that the amount of work involved in assessing a revised safety case will depend on the scope of the changes and the time since the last full review. This is separate from whether a revision is considered material or immaterial, which concerns the timing of when a revision must be provided to Energy Safe for acceptance (i.e. whether a revision must be submitted to Energy Safe immediately, or as soon as practicable).

4.7.2 Revisions initiated by Energy Safe

Energy Safe may request an energy infrastructure company to submit a revised safety case in certain circumstances. This may occur, for example, where we identify deficiencies during an audit, inspection, investigation or legal proceedings. Alternatively, if we conclude that the accepted safety case does not adequately reflect the assets or the activities of the energy infrastructure company, we may also request a revision.

Any request will be in writing and will outline the matters to be addressed in the revised safety case. The request will also outline the proposed date of effect of the revised safety case, and the grounds for the request.

The energy infrastructure company may make a submission to Energy Safe, usually within 21 days unless otherwise agreed, on any of the following:

- that the revision should not occur
- that the revision should be in different terms from the proposed terms
- that the revision should take effect on a later date than the proposed date.

We will consider any such submissions and provide a notice of decision in writing to the energy infrastructure company. This decision may include accepting the submissions in full or in part and varying or withdrawing the request accordingly. We may also reject the submissions.

5 Structure and content of safety cases

This chapter provides high-level information about the structure and content of safety cases and some considerations for drafting a safety case that Energy Safe will be more likely to accept.

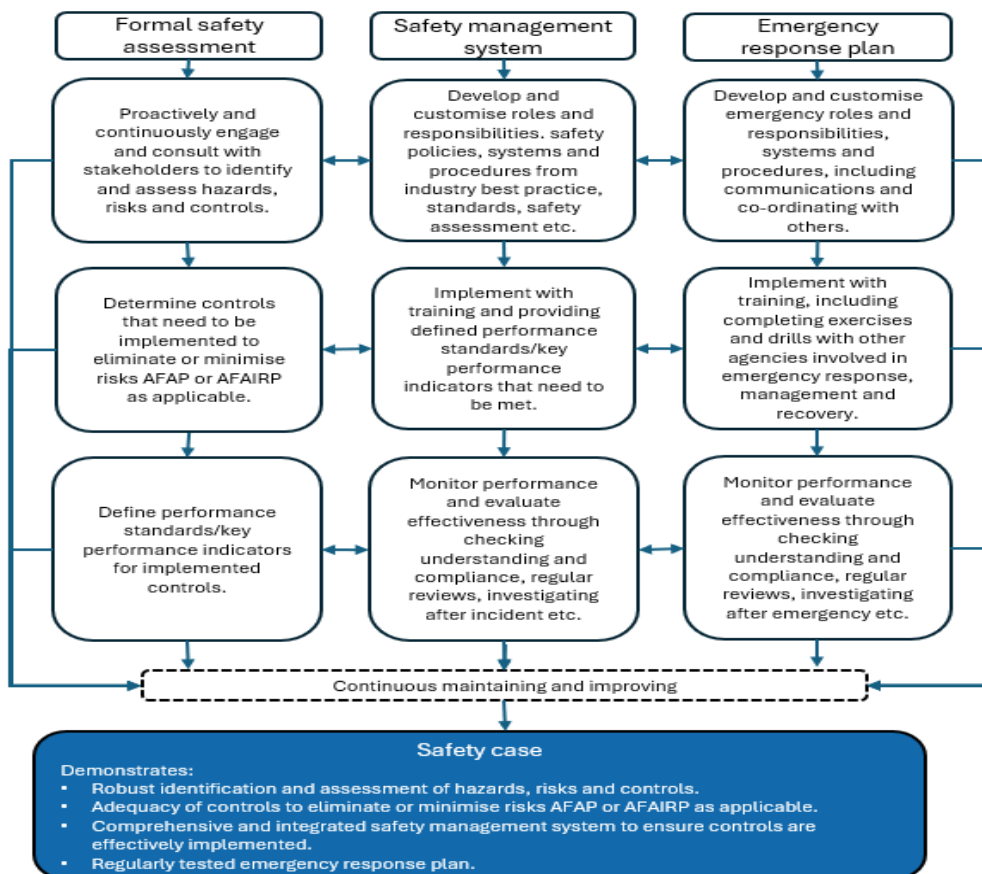
5.1 Safety cases

A safety case is a document or suite of documents produced by the energy infrastructure company and provided to Energy Safe as the body of evidence to demonstrate how it will ensure that the hazards and risks arising from its infrastructure will be eliminated or minimised.

It must be written with a clear view to demonstrating to us and others who are independent of the energy infrastructure company how the company will meet its general duties under Victoria’s energy safety laws (i.e., produced for this specific purpose, rather than being a collection of documents produced for other purposes). Accordingly, it must be written in plain English with clearly defined terms, directly address how the company will meet its general duties and avoid irrelevant or unnecessary detail or jargon.

A safety case does not guarantee that incidents will not occur. However, a safety case which is underpinned by a robust formal safety assessment, safety management system and emergency response plan forms the basis for ensuring high standards of safety (see Figure 5.1).

Figure 5.1: Overview of the links between safety case, safety assessment, safety management system and emergency response plan



5.2 Structure and content of safety cases

A safety case must be well-structured, clear and comprehensive to persuasively demonstrate that the energy infrastructure company has arrangements in place to identify, assess and eliminate or minimise hazards and risks systematically and continuously.

Table 5.1 sets out the key elements Energy Safe generally expects to see in every safety case, which should also be used as a guide for structuring a safety case. While companies have the flexibility to structure their safety cases as they see fit, these key elements should be clearly identifiable to facilitate our assessment process.

Table 5.1: Key elements of a safety case

Element	Description
Preliminary	Provides key legal and administrative details relating to the safety case.
Introduction	An overview of the company, scope and objectives of the safety case and important information to aid navigation and interpretation of the safety case.
Infrastructure description	A detailed description of the supply network, facility or pipeline operation to which the safety case relates, including information about location, configuration, design and construction materials. Also, other contextual information that influence hazards and risks such as age of assets and environmental factors.
Formal safety assessment	An outline of the risk management methodology used by the energy infrastructure company, the outcomes of the risk assessment including details of identified hazards, risks and controls, and demonstration of risk minimisation AFAP or AFAIRP as applicable.
Safety management system	An outline of the arrangements in place ensure controls are effectively implemented. Includes performance standards/key performance indicators that the energy infrastructure company commits to achieve at a minimum.
Emergency response plan	An outline of the arrangements in place to ensure the energy infrastructure company is ready to respond to, manage and recover from all reasonably foreseeable emergencies.

5.2.1 Preliminary

A safety case should include a preliminary section that outlines the key legal and administrative details relating to the safety case, including:

- details about the legal entity submitting the safety case
- the Act(s) and regulations pursuant to which the safety case is submitted
- the version number and revision history of the safety case (if applicable), and
- details about the person(s) who have developed and approved the safety case for submission.

Energy Safe expects all new safety cases and revisions to accepted safety cases to be reviewed by the energy infrastructure company's operational executives and approved for submission by the CEO and governing board. This also applies where we have requested the revision. This is so we can be satisfied that the information provided, and commitments made in the safety case, have the appropriate attention and agreement at the highest levels within the company. As noted in chapter 4, we may also require a formal presentation to Energy Safe's Commissioners as part of the assessment

process and, as such, we expect the CEO and relevant operational executives to have detailed knowledge of the safety case and be committed to ensuring its effective implementation.

5.2.2 Introduction

A safety case should include an introductory section that gives an overview of the energy infrastructure company and the scope and objectives of the safety case. It should be drafted in such a way that it could be provided to internal and external stakeholders as an easy-to-follow introduction to the company, its infrastructure, the associated hazards and risks and the safety case.

The introduction should also include the information outlined below to aid navigation of the remainder of the safety case.

Definitions and abbreviations

Definitions and abbreviations for all terms used in the safety case should be included in the introduction.

For clarity and consistency, the energy infrastructure company should ensure all terms that are defined in legislation are used throughout the safety case. Also, where Energy Safe has issued a policy or guidelines that define common terms used in safety cases, we expect energy infrastructure companies to also adopt those definitions in their safety cases.

Revision and approval details

Energy infrastructure companies must keep records about their accepted safety case and any revisions made to the accepted safety case.

The introduction should contain information about how the energy infrastructure company manages revisions to safety cases, including version control and who has the authority to review and approve revisions prior to them being submitted to Energy Safe for assessment. As above, we expect all new safety cases and major revisions to be reviewed by operational executives and approved for submission to Energy Safe by the CEO and governing board (where applicable). However, the energy infrastructure company may outline other arrangements for minor revisions.

Compliance information

A safety case must contain information about how it complies with any requirements prescribed in the relevant Act(s) and regulations and be clear about which documents that are intended to form part of the accepted safety case (i.e., incorporated documents).

Our preference is that this information is contained in tables as follows:

- A table outlining each prescribed requirement and a reference to where it is addressed in the safety case documentation.
- A table outlining all documents that are referred to in the safety case and whether the document is an incorporated document (see later discussion of incorporated documents versus supporting submissions).

All incorporated documents must be submitted to Energy Safe for assessment.

5.2.3 Infrastructure description

A safety case must include a description of the supply network, facility or pipeline operation to which it relates. The description must provide sufficient information to enable Energy Safe to identify the location of the infrastructure and to assess the risks associated with the infrastructure.

The type of information that should be provided as part of the infrastructure description includes (but is not necessarily limited to):

- The location of the infrastructure with maps, diagrams and photos as visual aids for clarity.
- The physical characteristics of the infrastructure, such as construction materials, age and condition of assets.
- The design specifications and technical standards that were applied at the time of construction, and whether enhancements or modifications have been made over time to align with updated specifications or standards.
- Environmental or other factors that affect operations and maintenance, and therefore the hazards and risks associated with the infrastructure, or impact the consequence of a hazard eventuating.

It is essential that the infrastructure description is comprehensive and accurate as any infrastructure not captured in the description or that is incorrectly described will not be covered by the safety case.

5.2.4 Formal safety assessment

A safety case must include a formal safety assessment where that is prescribed in the regulations, but otherwise should include a summary of the formal safety assessment that informs the safety management system. Either way, the safety case must contain sufficient information to enable Energy Safe to assess the robustness of the energy infrastructure company's assessment of hazards, risks and controls. It must also show how the implemented controls will eliminate or minimise hazards and risks AFAP or AFAIRP as applicable.

The type of information that should be provided as part of the formal safety assessment includes (but is not necessarily limited to):

- A description of the methodology used, including engagement, consultation and investigations undertaken, to inform the formal safety assessment.
- An identification of hazards that have the potential to cause an incident.
- An assessment of the risks, including the likelihood and consequences of an incident.
- An assessment of the available controls to eliminate or minimise the risks.
- An outline of the controls and their effectiveness to be implemented to eliminate or minimise the risks AFAP or AFAIRP as applicable.
- If any identified controls will not be applied, the reasoning as to why they will not be applied (see section 3.2.1).
- Defined performance standards/key performance indicators that must be achieved at a minimum for the implemented controls to eliminate or minimise the risks AFAP or AFAIRP as applicable.
- Information about the review and revision of the formal safety assessment to take account of changes in circumstances and/or improvements in the state of knowledge about hazards, risks and controls (including through monitoring the effectiveness of the safety management system and investigations and reviews following incidents or emergency situations).

The focus of the information provided should be on the key/major hazards arising from the infrastructure. Where defined performance standards/key performance indicators are included, they must be sufficiently detailed and unambiguous, and therefore should specify:

- who is responsible
- what has to be done
- when it must be done, and
- the expected outcomes.

Energy infrastructure companies can choose to demonstrate their risk assessments via methods that best suit their circumstances. One commonly used method is bow-tie diagrams, which show how a range of causes, controls and outcomes can be linked together and associated with identified hazards.

See discussion of common weaknesses in section 5.4 for an example related to clear versus ambiguous commitments in safety cases.

5.2.5 Safety management system

A safety case must include a description of the energy infrastructure company's safety management system. The description must provide sufficient information for Energy Safe to assess the likely effectiveness of the energy infrastructure company's arrangements to implement and monitor the performance of controls to eliminate or minimise hazards and risks.

The type of information that should be provided as part of the description includes (but is not necessarily limited to):

- An overview of the company structure and documented roles, responsibilities, accountabilities and authorities.
- An outline of the published technical standards and any industry codes applied or to be used in the design, construction, commissioning, installation, operation, maintenance and decommissioning of the supply network, facility or operation.
- An outline of the minimum competency and training requirements for all roles involved in performing work for the safe design, construction, operation, maintenance and decommissioning of the supply network, facility or operation.
- An outline of the safety policies, procedures and systems that are followed and applied (e.g., work permit systems and asset inspection procedures), including the outcomes that they achieve and how they contribute to eliminating or minimising risks AFAP or AFAIRP as applicable.
- An outline of the training on the safety policies, procedures and systems, including the frequency and evaluation of training.
- An outline of the monitoring, auditing and review of the safety policies, procedures and systems, including the frequency and evaluation and the process for identifying and implementing changes arising from those audits and reviews.
- An outline of how incidents will be reported to Energy Safe, and sites of incidents preserved where applicable, in accordance with the requirements under the Act(s) and regulations.
- An outline of how incidents will be investigated and how findings will inform reviews or changes to the safety case.
- Performance standards/key performance indicators that the energy infrastructure company commits to achieve at a minimum, cross-referenced to the formal safety assessment.

5.2.6 Emergency response plan

A safety case must include a description of the energy infrastructure company's emergency response plan. An emergency response plan is intended to ensure the energy infrastructure company has effective arrangements in place to safely manage and recover from all reasonably foreseeable emergencies. It:

- identifies potential emergency situations that may affect the safe operation of the supply network, facility or operation
- identifies and assesses the associated risks
- includes detailed response arrangements to eliminate or minimise the associated risks, and
- includes regular testing to ensure the arrangements are appropriate.

The description must provide sufficient information to enable Energy Safe to identify the potential emergency situations and associated risks, and to assess the likely effectiveness of the energy infrastructure company's arrangements to eliminate or minimise the associated risks.

The type of information that should be provided as part of the description includes (but is not necessarily limited to):

- A definition of what constitutes a potential emergency situation and a list of all identified potential emergency situations, cross-referenced to the formal safety assessment.
- An outline of the associated risks, cross-referenced to the formal safety assessment.
- An outline of the documented emergency response roles and responsibilities, including chain of command.

- An outline of the documented emergency response policies, procedures and systems, including how the energy infrastructure company communicates, liaises and co-ordinates with relevant internal and external stakeholders about the emergency situation (e.g., emergency services).
- An outline of the training on the documented emergency response policies, procedures and systems, including the frequency and evaluation of training.
- An outline of the testing of the documented emergency procedures and systems, including the frequency and evaluation of testing.
- An outline of the review of the emergency response policies, procedures and systems following an emergency situation taking place.
- Information about the review and revision of the emergency response policies, procedures and systems to take account of the outcomes of testing, or findings/lessons learnt following an emergency situation taking place.
- Performance standards/key performance indicators that the energy infrastructure company commits to achieve at a minimum in emergency situations, cross-referenced to the formal safety assessment.

Notably, we do not generally expect the emergency response plan or documented emergency response procedures themselves to be incorporated documents (see discussion below).

5.3 Incorporated documents and supporting submissions

Energy Safe expects energy infrastructure companies to clearly distinguish between documents that are submitted or provided during the assessment process and are intended to:

- form part of the accepted safety case (**incorporated documents**), or
- inform our assessment but do not form part of the accepted safety case (**supporting submissions**).

As previously noted, a safety case must contain sufficient detail to demonstrate how the energy infrastructure company will meet its safety obligations without the need to refer to other documents external to the safety case.

However, energy infrastructure companies should consider providing a supporting submission to, amongst other things:

- provide a simplified overview of the safety case to facilitate consultation, where that is necessary
- provide additional context to the reasons for the submission of a new or revised safety case (e.g., to address a request from Energy Safe for a revision to a safety case and how the submission meets that request)
- details of who, when, why and how stakeholders were consulted, an analysis of their feedback or submissions, and how that feedback has been taken into account
- provide a report outlining the energy infrastructure company's review of its existing safety case, any issues identified and analysis of required revisions, or
- explain why the safety case is appropriate having regard to the relevant Act and regulations.

5.3.1 Incorporated documents

Energy Safe will not accept a document referenced in a safety case as being an incorporated document unless it is:

- explicitly identified as forming part of the safety case
- available to Energy Safe to review as part of the assessment of the safety case
- a controlled document that is subject to the same change controls as the parent document
- all changes are recorded and submitted to Energy Safe for acceptance in accordance with the requirements for the parent document, and
- subject to the same internal compliance and quality assurance as the parent document.

Since incorporated documents form part of the safety case, they are subject to the revision principles outlined in section 4.7.

5.3.2 Referencing other documents external to the safety case

Energy infrastructure companies may include references to internal operating procedures and other such documents in their safety cases. However, Energy Safe will not accept these documents as being incorporated unless they are explicitly identified as such in the safety case (and meet the criteria outlined above).

It is the responsibility of the energy infrastructure company to assess and decide which documents are proposed to be an incorporated document. Noting the requirements relating to revisions to accepted safety cases, energy infrastructure companies should carefully decide whether a referenced document should be incorporated in full, in part (i.e., only an extract of the relevant part(s) of the document is provided) or summarised in the safety case.

Referenced documents do not form part of an accepted safety case, and as such, changes to them may not require a revision to a safety case and subsequent submission to Energy Safe. However, this is largely dependent on the nature of the change and any impact it has on the hazards, risks and controls in the accepted safety case. In the first instance, we expect energy infrastructure companies to assess whether any changes to documents may instigate a revision. Refer to 'Section 4.7 - Revisions of an accepted safety case' for further information on making this assessment.

We encourage energy infrastructure companies to consider this early in the development or revision of a safety case and to discuss the proposed approach during pre-submission discussions.

5.4 Common weaknesses

The following are some common weaknesses that we have observed with safety cases:

- Incorrect legal entity or multiple legal entities.
- Insufficient detail to allow an assessment of the appropriateness to accept.
- Too much detail so the currency of the document is difficult to maintain.
- Vague language rather than clear and specific information and commitments.
- Poor cross-referencing.
- Lack of version control.
- Disclaimers.

5.4.1 Incorrect or multiple legal entities

The legal entity submitting the safety case must be correctly identified using its full and correct legal name, address and ABN or ACN. The legal entity must be the entity required to submit a safety case under the Acts and regulations.

A safety case should be submitted by a single legal entity, not multiple legal entities jointly submitting a safety case to meet their obligations under the Acts and regulations. Where different legal entities have the same formal safety assessment and management control structures etc, Energy Safe may consider accepting a combined safety case. In these circumstances, the relevant entities would need to demonstrate that the proposal addresses how each entity will meet its general safety duties.

Where legal entities other than the legal entity submitting a safety case are referred to in the safety case, the reason needs to be clear along with relevant details about the responsibility and accountability of those entities.

Energy Safe will not accept a safety case where there is any doubt about the ownership, management control, responsibility and accountability of the legal entity submitting a safety case.

5.4.2 Insufficient detail

Simply referencing documents external to a safety case or technical standards will generally not provide a sufficient level of detail to enable Energy Safe to form a judgement about the appropriateness of the safety case.

The following are some examples of insufficient detail in a safety case:

- Details in relation to a formal safety assessment limited to either a reference to an assessment having been performed or a commitment to conduct an assessment.
- Details in relation to the safety management system to be followed limited to listing policies or procedures that are contained in documents external to the safety case.
- Only partial details of the technical or other control measures identified in the formal safety assessment.
- Listing technical standards that will be followed without further explanation of the relevance and appropriateness of the standard for the circumstances.

The level of detail included in a safety case should, to an extent, correlate with the size and complexity of the infrastructure and the levels of associated hazards and risks.

5.4.3 Too much detail

There needs to be a balance between providing a readable document that contains useful information, and including so much detail that the document becomes quickly out of date and/or requires frequent revisions.

The following are some examples of too much detail.

- Dates, times and names of persons who will be conducting inspections of an asset over a five-year period and the full operating procedures those persons will follow. Instead, the safety case might include an outline of the inspection program, including the scope and objectives of inspections, the minimum frequency of inspections and the role and qualifications of persons conducting inspections.
- Dates, times, location and costs of training operational employees and contractors. Instead, the safety case might include an outline of the training program, including the roles they apply to, the frequency of training and competencies upheld.
- A full copy of internal operating procedures. Instead, the safety case might provide an overview of activities covered by internal operating procedures, the objectives of the procedures, any performance standards or key performance indicators outlined in the procedures, and how they contribute to minimising hazards and risks.

5.4.4 Vague language

Safety cases must use simple, clear language, and make commitments that are enforceable, measurable, and auditable. This ensures that energy infrastructure companies can be held accountable if they do not comply with their safety case and put Victorians at risk of harm. Energy Safe will not accept safety cases where only vague statements are made relating to commitments to achieve safety outcomes.

Examples of vague language include:

- High-level statements with insufficient detail to understand the action that will be taken.
- Using undefined terms that allows for multiple interpretations of the intended meaning.
- Providing target performance standards or key performance indicators rather than minimums that the energy infrastructure company commits to achieving.
- Including caveats that render any commitments unenforceable.
- Referring to other legal entities in the safety case (e.g., third party contractors) as being responsible for certain activities on behalf of the energy infrastructure company in a way that seeks to transfer its responsibility for ensuring safety.

While we appreciate the need for energy infrastructure companies to retain some operational flexibility, the safety case must be unambiguous. Table 5.2 provides a high-level example of the difference between a clear and ambiguous commitment.

Table 5.2: Comparison of a clear and ambiguous commitment in a safety case

Risk: asset failure leading to bushfire, loss of containment of gas or explosion	
Control: inspection of assets	
Clear commitment	Ambiguous commitment
<p>We will inspect each asset at least every 36 months. Each inspection will involve:</p> <ul style="list-style-type: none"> • physically attending the site where the asset is located and observing, examining and testing the asset to determine whether there are any risks to the correct and safe functioning of the asset • recording the results of the inspection and actions required to remedy the risks to the correct and safe functioning of the asset • assigning timeframes within which the required actions must be taken to ensure risks to the correct and safe functioning of the asset are addressed before they are realised, and • completing the required actions within the assigned timeframe to remedy the risks. 	<p>We will aim to inspect each asset every 36 months. Each inspection may involve:</p> <ul style="list-style-type: none"> • observing, examining and testing the asset • recording the inspection results • assigning priority for follow up, and • following up in line with the assigned priorities.

5.4.5 Poor structure and cross-referencing

The structure of a safety case is critical for readability. As most parts of a safety case are interrelated, it essential that they are structured and cross-referenced in a clear and logical manner.

Where multiple references are made to the same provision, definition, or subject matter, it should be cross-referenced to ensure consistent intent, meaning and purpose.

While there is no single template for what a safety case should look like, we encourage energy infrastructure companies to follow the general approach outlined in section 5.2.

5.4.6 Lack of version control

Where the safety case is a revision of a previously accepted safety case, Energy Safe expects both a clean version of the safety case and a marked-up version to be submitted so that all changes can be readily identified.

Energy infrastructure companies must have strict protocols in place to ensure that safety cases are only modified by authorised person(s) and the current accepted version is readily identifiable. As noted in section 5.2, we expect the safety case to include information about revision and approval details so that we can be satisfied that there is appropriate oversight and management.

5.4.7 Disclaimers

A safety case should never contain a disclaimer that states or implies that the energy infrastructure company cannot guarantee the accuracy of any information contained within the safety case.

Energy Safe will not accept a safety case that includes a disclaimer that could be interpreted as limiting the extent to which the energy infrastructure company takes full accountability and responsibility. This includes for ensuring the accuracy of information or the implementation of the safety case.

6 Non-compliance

Where Energy Safe considers an energy infrastructure company has not complied with its accepted safety case, we can take a range of actions to remedy the non-compliance and hold the company to account.

We will assess and determine our response in the circumstances based on the available action that is proportionate to the nature of the offence in accordance with our Compliance and Enforcement Policy.

This may include:

- education
- official warning
- improvement notices or directions
- requirement to revise a safety case
- accepting an enforceable undertaking
- prosecution.