



State Emergency Response Plan Electricity and Gas Supply Disruption Sub-Plan

Edition 1



As control agency for the emergency type, the Department of Land, Water and Planning, has prepared and is responsible for the maintenance of this plan.

This plan has received the endorsement of the State Crisis and Resilience Council (SCRC).



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This document is also available in Word and PDF format at www.emv.vic.gov.au

Acknowledgement of Country

Emergency Management Victoria (EMV) acknowledges Aboriginal and Torres Strait Islander people as the Traditional Custodians of the land. EMV also acknowledges and pays respect to the Elders, past and present and is committed to working with Aboriginal and Torres Strait Islander communities to achieve a shared vision of safer and more resilient communities.

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State emergency management priorities

The State emergency management priorities apply to electricity or natural gas supply disruption emergency responses. These priorities are intended to guide the decisions of emergency managers at all levels.

State strategic control priorities	How this applies to a significant electricity or natural gas supply disruption
<p>Protection and preservation of life is paramount. This includes:</p> <ul style="list-style-type: none"> • safety of emergency services personnel and • safety of community members including vulnerable community members and visitors/ tourists located within the incident area. 	<p>Victoria has a high reliance on the supply of electricity and natural gas. A major supply disruption may have significant impacts on human life. Supply disruptions not only pose risk to life supporting equipment but a loss can have consequential impacts such as suffering in extreme temperatures.</p> <p>The protection of life always takes primacy during an electricity or natural gas supply disruption.</p>
<p>Issuing of community information and community warnings detailing incident information that is timely, relevant and tailored to assist community members make informed decisions about their safety.</p>	<p>Community information and warnings are required so that the community can take action to protect themselves from the impact and consequences of a supply disruption.</p> <p>Energy and natural gas supply companies and government will work together to ensure the community is appropriately informed of supply disruptions and emergencies if they occur. Energy supply companies provide information to their consumers about minor disruptions. Government provides emergency warnings when necessary.</p>
<p>Protection of critical infrastructure and community assets that support community resilience.</p>	<p>A major supply disruption can significantly impact critical infrastructure such as telecommunications and transport. All agencies with a role in managing an energy or natural gas emergency must consider the impact and consequences of their decisions on critical infrastructure and assets that support community resilience.</p> <p>Critical infrastructure owners and operators must also plan for the protection of critical infrastructure during a major supply disruption to minimise consequential impacts.</p>
<p>Protection of residential property as a place of primary residence.</p>	<p>Victorian households are highly reliant on energy supply for lighting, heating or cooling, cooking, refrigeration and, in some cases, water. Emergency managers must consider the impact and consequences of their decisions on this reliance.</p>
<p>Protection of assets supporting individual livelihoods and economic production that supports individual and community financial sustainability.</p>	<p>Businesses and industries that rely upon energy supply for the provision of their products or services must prepare, test and update their business continuity plans to ensure the impacts and consequences of a supply disruption on their business are minimised.</p>
<p>Protection of environmental and conservation assets that considers the cultural, biodiversity, and social values of the environment.</p>	<p>A major supply disruption can have many impacts on the environment. For example, a loss of electricity can result in sewage treatment failure which could lead to untreated sewage being added directly to water streams. There can also be impacts on the environment caused by events such</p>

as major gas leaks or explosions.

1 Introduction

1.1 Purpose

This State Emergency Response Plan (SERP) Electricity and Gas Supply Sub-plan (sub-plan) outlines the Victorian arrangements for the coordinated response to the impacts and consequences of a significant disruption to the supply of electricity or natural gas which meets the definition of a major emergency in the *Emergency Management Act 2013*.

A major emergency means a large or complex emergency which:

- a) has the potential to cause or is causing loss of life and extensive damage to property, infrastructure or the environment,
- b) has the potential to have or is having significant adverse consequences for the Victorian community or part of the Victorian community, or
- c) requires the involvement of two or more agencies to respond to the emergency.

1.2 Objective

This sub-plan will assist in achieving effective consequence management of a significant disruption to the supply of electricity or natural gas by establishing coordination and collaboration arrangements across government, business and the community.

Through applying this plan and working together in an integrated and coordinated way, government, agencies, business and the community can seek to mitigate the impacts of a significant disruption to the supply of electricity or natural gas on the community, property and the environment.

1.3 Scope

This sub-plan includes:

- high level information about the potential risks and consequences of a significant disruption to the supply of electricity or natural gas for people, infrastructure and the environment;
- the governance arrangements at the state, regional and local levels in place to mitigate these consequences before, during and after an emergency;
- the coordination and collaborative processes that occur between government, industry and the community to mitigate the consequences of the significant disruption;

- the positions with accountability and the agencies responsible for managing the consequences of a significant disruption to the supply of electricity or natural gas.

The sub-plan relates to:

- situations where the electricity or gas supply disruption is not part of a broader emergency event; and
- situations where the disruption is part of a broader emergency event (e.g. storm or fire) in which case the sub-plan informs only the part of the consequences and response relevant to the electricity or gas supply disruption.

This sub-plan does not include:

- the operational arrangements industry has in place to restore the supply of electricity or natural gas.

The sub-plan recognises that the responsibility and expertise to restore electricity and natural gas supply rests with the privately-owned electricity and gas industry. There are a number of economic and legislative regulatory instruments that authorise industry to provide a reliable, efficient service and to restore supply as quickly as possible.

1.4 Authorising environment

The *Emergency Management Act (1986 and 2013)* is the empowering legislation for the management of emergencies in Victoria.

The Emergency Management Manual Victoria (EMMV) contains policy and planning documents for emergency management in Victoria, and provides details about the roles different organisations play in the emergency management arrangements.

The State Emergency Response Plan (Part 3, EMMV) identifies Victoria's organisational arrangements for managing the response to emergencies.

This sub-plan is a subordinate plan of the SERP and has been approved by the State Crisis and Resilience Council (SCRC).

Other relevant legislation, regulations and instruments for electricity include:

- *Electricity Industry Act 2000*
- *Electricity Safety Act 1998*
- *National Electricity Law* and *National Electricity Rules* (contained in the schedule to the *National Electricity (South Australia) Act 1996*)
- *Electricity Distribution Code 2015*
- *Essential Services Act 1958*

Other relevant legislation, regulations and instruments for gas include:

- *Gas Industry Act 2001*
- *Gas Safety Act 1997*
- *Pipelines Act 2005*
- *National Gas (Victoria) Act 2008*

- *Gas Safety (Gas Quality) Regulations 2007*
- *Gas Distribution System Code 2014*
- *Essential Services Act 1958*
- *National Gas Law and National Gas Rules* (contained in the schedule to the *National Gas (South Australia) Act 2008*)

A brief summary of this legislation is provided in Appendix 7.1.

1.5 Activation of the plan

The arrangements in this plan apply on a continuing basis and do not require activation.

The energy emergency arrangements at the national level applying to electricity and gas outages, which affect more than one jurisdiction, include:

- Power System Emergency Management Plan: Overview
- National Electricity Market (NEM) Memorandum of Understanding (MOU) on the Use of Emergency Powers,
- NEM Emergency Protocol
- Natural Gas Supply (Natural Gas Supply Emergency Response Protocol) MOU
- National Gas Response Advisory Committee: Interruption to Supply Process

1.6 Audience

The audience for this plan comprises the Victorian Government and agencies within the emergency management sector, including community and business groups with a significant role in the management of the emergency and relevant private industry stakeholders.

1.7 Linkages and industry arrangements

This sub-plan reflects the energy industry's legislative framework, the arrangements in the SERP which provide the strategic direction for emergency management in Victoria and the accepted state practice for managing emergencies.

The arrangements in the SERP have not been repeated unless necessary to ensure context and readability. The sub-plan outlines the Victorian approach to electricity and natural gas disruptions including, but not limited to, elements that are given authority through electricity or natural gas specific regulatory instruments above and as listed in Appendix 7.1.

There are also a number of protocols, a national MoU and procedures in place that are activated during an emergency once pre-defined triggers have been met. These documents outline the electricity or natural gas-specific arrangements and agreements in place between the relevant parties including the Australian Energy Market Operator (AEMO), the Victorian Government, Energy Safe Victoria (ESV), WorkSafe Victoria, the Commonwealth Government and industry. Refer to Appendix 7.2. for an overview of the related plans and arrangements.

1.8 Exercising and evaluation

This plan will be exercised and evaluated within one year from the date of approval. Where improvements to the emergency management arrangements in this sub-plan are required, the sub-plan will be amended and a revised version issued. Exercises will be conducted in accordance with the State Exercising Framework.

If this plan is applied to manage a specific natural gas or power outage an exercise will not be required. An evaluation will be conducted on the actual application of the plan which can identify any required improvements.

1.9 Review

This plan was current at the time of publication and remains in effect until modified, superseded or withdrawn.

This plan will be reviewed every 3 years and updated if necessary. Consideration will be given to an earlier revision if the plan has been applied in a major emergency or exercise, or following a substantial change to the relevant legislation or arrangements, or if a need is identified.

2 The emergency context

2.1 Electricity and natural gas arrangements

Electricity and natural gas are an integral part of Victorians' livelihoods and businesses and are required for many essentials such as lighting, heating or cooling, cooking, washing, bathing, refrigeration and transportation.

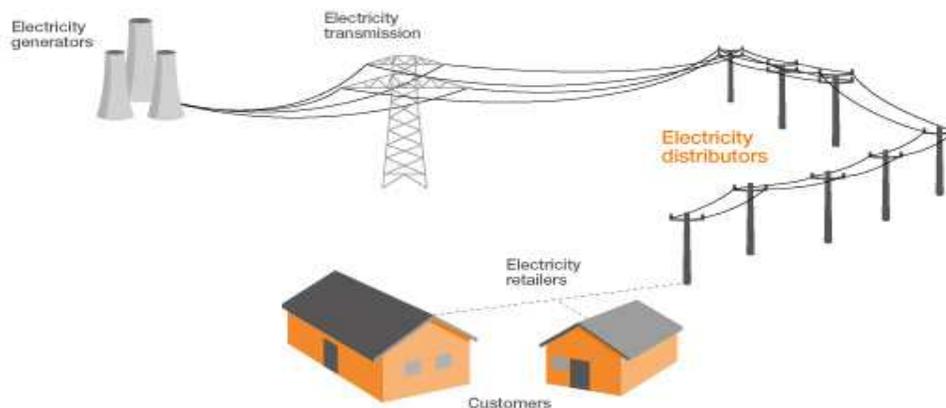
The electricity and natural gas industries in Victoria are wholly privately owned and operated. The electricity and gas supply networks are managed within economic and legislative frameworks which seek to minimise disruptions and incentivise prompt restoration of supply. Responsibility for responses to supply interruptions and restoration of supply rests with the Industry.

National arrangements have been established to manage an electricity or natural gas supply emergency where the disruption affects or has the potential to affect multiple jurisdictions. These arrangements include national advisory committees comprised of Australian Energy Market Operator (AEMO), industry, Australian, state and territory government representatives that can provide advice on the management of the supply emergency. Annual emergency exercises regularly test the effectiveness of the national arrangements.

Energy Safe Victoria (ESV) is the technical safety regulator for gas and electricity. ESV investigates electricity or gas incidents that have safety implications.

2.1.1 Electricity network

The AEMO oversees the overall system security of the National Electrical Market (NEM) at the transmission level and can act to protect and maintain system security.

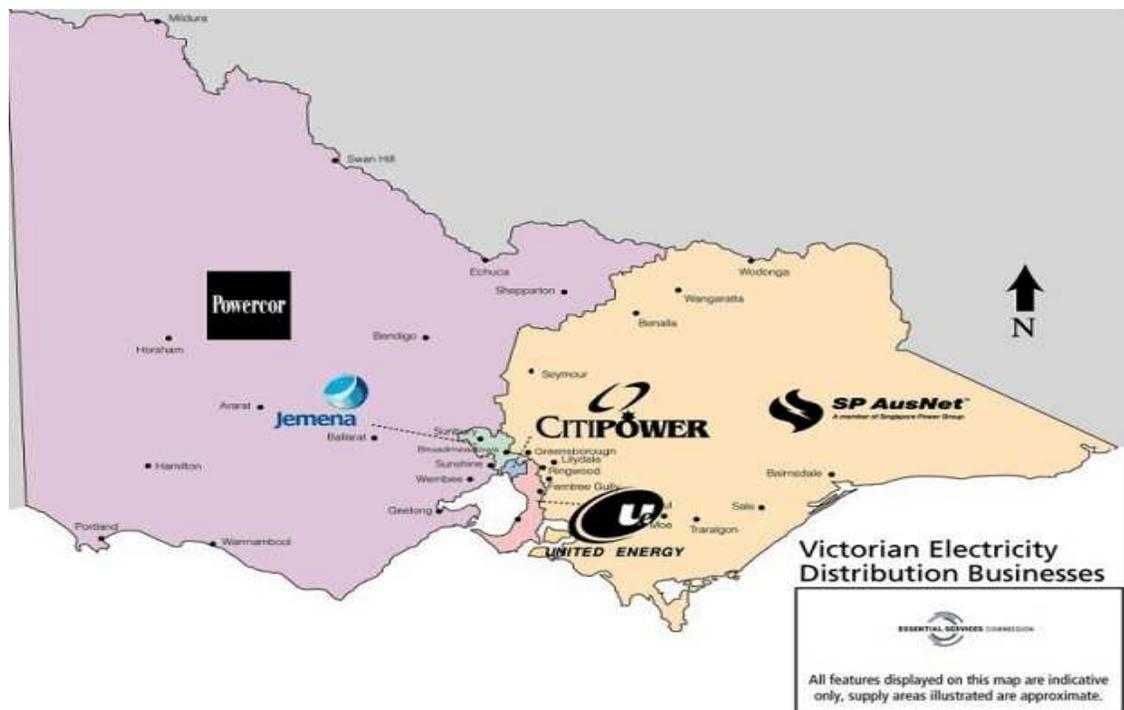


Source: United Energy

Victoria forms part of the National Electricity Market (NEM) which includes South Australia, New South Wales, Queensland and Tasmania through physical interconnections. Five electricity distribution businesses own and operate the Victorian electricity distribution networks, each of which is responsible for geographically distinct areas.

- Citipower
- Powercor
- United Energy
- Jemena
- AusNet Services

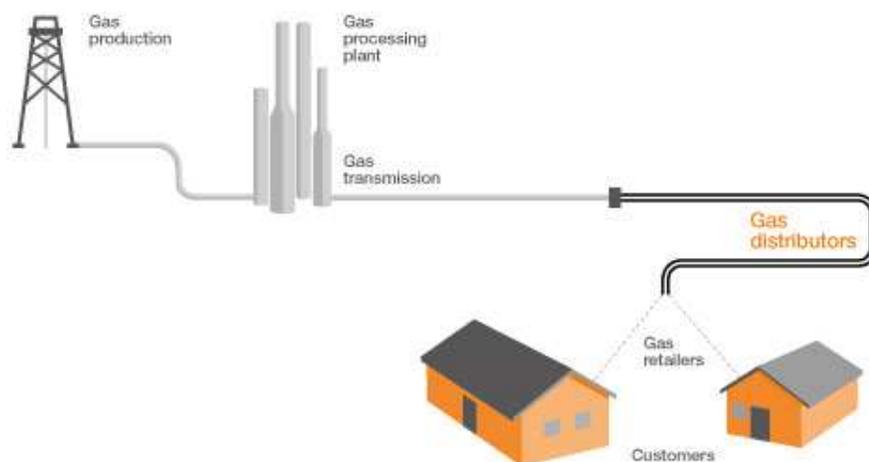
The below map outlines the electricity distribution businesses geographic regions.



2.1.2 Gas Network

Three distribution businesses own and operate the natural gas distribution network in Victoria, Australian Gas Networks, Multinet and AusNet Services. One company, APA Group, owns and maintains the natural gas transmission network that falls within the Victorian Declared Transmission System (DTS). AEMO operates the transmission network and is responsible for overall system security of the DTS. Separate businesses own and operate gas pipelines that connect Victoria with neighbouring states.

This interconnection of gas markets between New South Wales, South Australia and Tasmania means that a gas emergency in Victoria has the potential to impact on these states. Similarly, an emergency arising in New South Wales, South Australia or Tasmania could potentially impact Victoria.



Source: Multinet Gas

2.2 Causes of supply disruptions

Electricity and natural gas supply interruptions can be caused by any number of different factors including damage to infrastructure and assets, technical equipment failure, industrial disputes or a supply demand imbalance that cannot be rectified by the market.

In the case of electricity, disruptions may be caused by extreme weather conditions such as high winds, thunderstorms, flooding or bushfires, or by other causes such as traffic accidents or animals coming into contact with equipment. The risk of outages is heightened over the summer period due to higher demand coupled with increased heat induced stress on assets.

In the case of natural gas, potential causes of disruption include damage to underground infrastructure caused by third parties digging, or natural causes such as flood or earthquake.

A significant disruption to natural gas supply during peak summer periods may also impact on natural gas fired peaking electricity generation and hence on the availability of electricity.

Natural gas emergencies may also arise when natural gas in the system is off-specification and is therefore unsafe to use.

3 Consequences

3.1 Consequences of electricity or natural gas disruption

The consequences of any particular disruption to electricity or natural gas will vary greatly according to the location of the incident, the number and type of customers affected, the time of week or day and the duration of the incident. For example, the consequences of an electricity supply disruption affecting the Melbourne or a regional Central Business District (CBD), a residential suburb, or small town would all be different.

The time for restoration of supply of electricity or natural gas can vary from minutes to hours, and potentially longer, depending on the nature, location and cause of the supply interruption and complexity of repairs required. The vast majority of supply interruptions are of a short duration and result in minimal impacts on households and businesses. In these circumstances, distribution businesses are able to effectively manage the situation through business as usual procedures.

Whilst Victoria enjoys high levels of reliability for the supply of electricity and natural gas and the risk of a significant disruption to supply is low, the consequences for the community, business and transport should a major disruption occur, are significant.

The impact of concurrent emergencies occurring can also influence the management of an electricity or natural gas disruption. The impact of these consequences on vulnerable people and other sectors of the community will vary significantly.

3.1.1 Prolonged disruptions

The duration of electricity and/or gas disruption will greatly influence the consequence of health and wellbeing implications and the viability of sectors heavily reliant on power. Examples of these may include food safety and the risks associated with the dependency on appliances for cooling, heating & hot water. Similarly the distribution of energy supply hold significant implications for the transport sector and other industry sectors – as evidenced in the Alcoa/Portland power outage.

3.2 Wellbeing

Victorian households and businesses extensively use and are heavily reliant on electricity and natural gas, even more so during extreme weather. Electricity and gas are an integral part of people's lives for the essentials such as lighting, heating/cooling, cooking, refrigeration and for some people access to water.

Prolonged electricity outages may have a compounding impact on people's ability to safely store and prepare food, which may affect their health.

Electricity disruptions can also have an effect on livestock and agriculture practices. For example, without electricity dairy farmers may have difficulties in milking, which has a potential to affect the health of livestock.

Gas outages have similar effects on individuals, with a loss of heating, cooking and hot water. There are also potential safety concerns associated with gas outages where unsuitable alternative fuels, such as Liquefied Petroleum Gas (LPG), are used to power natural gas appliances.

3.2.1 Power Dependent Customers

Section 5.6 of the *Electricity Distribution Code* specifies the obligations of electricity distribution businesses with regard to customers with special needs (otherwise known as life support customers or power dependent customers). Where a customer or an electricity retailer provides an electricity distributor with confirmation from a registered medical practitioner or a hospital that a person residing at the customer's supply address requires Life Support Equipment the distributor must:

- Register the supply address as being a Life Support Equipment Supply address;
- Give the customer advice to assist the customer in preparing a plan of action should an unplanned interruption to electricity supply occur;
- Provide the customer with an emergency telephone contact number.

Under Section 5.7 of the *Electricity Distribution Code*, and in the event of a widespread supply incident, a distributor must inform the Department of Health and Human Services (DHHS) of the street address of these customers where it is likely that electricity supply will be disrupted for a period greater than 20 hours.

Once DHHS has received this reporting, it will decide on the appropriate actions to be undertaken to ensure these customers' wellbeing needs are being met. DHHS' responsibilities are defined in the *Emergency Management Manual Victoria*.

3.3 Liveability

Electricity disruptions may cause disruption to the road, rail and tram networks, businesses and essential services such as the healthcare or banking systems.

People living or working in high-rise buildings may be at risk of being stranded in lifts or unable to access higher floors without using stairs.

Transport and telecommunication outages may lead to interruptions in the supply chain for industry and business, leading to loss of business continuity and a major economic cost to the State.

All agencies with a role in protecting critical infrastructure need to take action to prepare for emergency situations that will protect these services during electricity and gas disruptions.

3.4 Sustainability

There are many interdependencies between services that rely on electricity and natural gas, for which the effect can compound across government and the private sector – for example loss of electricity in a regional area that also affects transport could see loss of

perishables in a local supermarket and an inability to re-stock – which could impact on the broader community, tourism and other local businesses.

Rail and tram networks reliant on electricity and natural gas may cease to operate. Under this scenario people may not be able to travel to work due to a lack of public transport options, or due to traffic congestion, which may in turn affect the delivery of services, access to health or other community services.

Many telecommunications base stations also only have limited back up power meaning any extended loss of power would affect communications.

3.5 Viability

Services, business, and industry with a dependency on electricity and natural gas, such as transport and other critical infrastructure need to ensure they prepare and regularly test and update their business continuity plans to reduce the disruption caused by outages.

4 Community resilience

4.1 Shared and individual responsibility for action

Community resilience is enhanced through community members understanding the potential impacts of an electricity or natural gas supply disruption, recognising the risk to themselves, their family, friends and community and taking steps to protect themselves. Likewise, business owners and managers recognising the risks to their business, their customers and employees and taking steps to be prepared through business continuity planning.

4.1.1 Life support customers

Life support customers (customers that have registered as households which have life support equipment, such as dialysis machines, that is essential for their care) must have established plans in place to manage power outages. Life support customers or their representatives are expected to advise their electricity distributor of their needs and provide up-to-date contact details.

4.2 Emergency information and warnings

Access to timely, tailored and relevant information about an emergency assists a community to make informed decisions and to act purposefully. Communities, individuals and households in turn need to take responsibility for their own safety and act on information, advice and other messages provided before, during and after an emergency.

Public communications, warnings and/or advice to the Victorian community before, during and after an emergency operates within the existing emergency management arrangements. Collaboration, coordination and early notifications between government and electricity and natural gas businesses is necessary to ensure communities receive consistent and complementary messaging.

Victoria has an integrated warning system which uses a variety of channels including website, app, hotline, social media channels and emergency broadcasters. Information may also be disseminated through DELWP energy consumer social media channels or other government social media channels where appropriate, such as Business Victoria, Energy Safe Victoria (ESV) and Better Health Channel.

Where a significant gas or electricity supply disruption, that requires immediate notification to the community the use of telephone alerting through “Emergency Alert”, may be used.

4.2.1 Outage Information

Electricity distribution businesses are required to provide information to customers on the nature and estimated duration of supply interruptions either by way of a 24 hour telephone service or on their websites. The relevant links are listed below. Opt-SMS notifications and social media may also be used at the discretion of each distribution business.

CitiPower and Powercor	www.powercor.com.au/power-outages/
Jemena	www.jemena.com.au/outages/electricity/
United Energy	www.unitedenergy.com.au/outage-map/
AusNet Services	www.outagetracker.com.au/outagemap

Natural gas distribution businesses are required to provide a 24 hour telephone number for customers in the event of an unplanned interruption. Emergency Management Victoria provides a centralised website for Victorians to find emergency information and warnings - www.emergency.vic.gov.au.

4.2.2 Emergency Management Joint Public Information Committee

The collaboration between agencies is necessary to ensure the public receives timely consistent messaging on the possible impacts and consequences of significant electricity or natural gas disruptions. The Emergency Management Joint Public Information Committee (EMJPIC) coordinates emergency communication across the relevant government departments and agencies to ensure such messaging is consistent.

4.2.3 Community information

A range of agencies and organisations have responsibility in the provision of information to communities which is why it needs to be coordinated and integrated, this includes public education and awareness raising.

The Department of Environment, Land, Water and Planning (DELWP) runs public information campaigns on electricity outages as well as providing general guidance on how to act during electricity supply interruptions. This includes *Your Guide to Power Outages* which can be downloaded as a brochure and a range of FAQs:

www.energyandresources.vic.gov.au/energy/safety-and-emergencies/power-outages

DHHS publishes a range of public health material including supporting material on what to do from a health perspective in the event of an electricity outage:

www2.health.vic.gov.au/emergencies/emergency-system/during-an-emergency

'Advice on Food Safety and Emergency Power Failure'

'Power blackouts: using alternative fuel and electricity generation safely'

www.health.vic.gov.au/environment/floods-power-blackouts

www.health.vic.gov.au/foodsafety/bus/emergency_situations

Where the supply emergency involves a significant safety aspect, ESV will provide media materials for use by nominated spokesperson if and as required. ESV provides information on who to contact in the event of an electricity or natural gas emergency:

www.esv.vic.gov.au/For-Consumers/Emergencies

as well as information on what to do during an emergency:

www.esv.vic.gov.au/For-Consumers/Emergencies/Electricity

www.esv.vic.gov.au/For-Consumers/Emergencies/Gas

Industry also makes information available to the public in the event of a supply interruption. Where an incident goes well beyond a single industry participant or the jurisdiction AEMO is authorised to coordinate communications on behalf of industry under the Single Industry Spokesperson Protocol for electricity and natural gas. These are available at:

Electricity: www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Emergency-Management/Victorian-role

and:

Gas: www.aemo.com.au/Gas/Emergency-management/Victorian-role

Electricity and gas distribution businesses must also provide information to customers on the nature and estimated duration of supply interruptions either by way of a 24 hour telephone service or on their websites. SMS notifications and social media may also be used at the discretion of each business.

4.3 Critical Infrastructure Resilience

Infrastructure is essential to the delivery of essential services to communities. Part 7A of the Emergency Management Act 2013 sets out the legislative arrangements for building critical infrastructure resilience. This is supported by the Victorian Critical Infrastructure Resilience Strategy available at:

www.emv.vic.gov.au/our-work/critical-infrastructure-resilience

Under these arrangements, owners and/or operators of infrastructure that has been categorised as vital are required to undertake a risk assessment and develop an action plan to mitigate the risks identified.

The responsible businesses are required to implement an emergency risk management planning process in accordance with Regulations and Ministerial Guidelines for Critical Infrastructure Resilience that considers all envisaged emergency risk hazards.

These businesses must also prepare a Statement of Assurance outlining the processes and plans to manage the risks identified, which is then submitted to the relevant minister.

This statement includes identification of dependencies and the scope of the businesses' program to test, validate, monitor and positively ensure the robustness of the risk management arrangements.

The responsible businesses must conduct and evaluate an exercise program to test their capability to respond to and recover from an event in an all-hazards environment. Guidelines are provided to businesses for the exercise management process.

5 Management of an electricity or natural gas supply disruption

5.1 High level principles

The State's emergency management arrangements are premised around command, control, coordination, consequence, communication and community. As mentioned earlier, this sub plan relates to both electricity or gas supply disruptions that are not part of a broader emergency event and, where the disruption is part of a broader emergency event (e.g. storm or fire). As every emergency event is different, the management model for these events must be agile, adaptive and inclusive to ensure the best possible outcomes. Emergencies are best managed under arrangements whereby a range of agencies and organisations that have roles and responsibilities take a coordinated and collaborative approach to deliver the best possible health, economic, social and environmental outcomes.

DELWP's role as the control agency means it is involved in the State, Regional and Local tiers of responding to electricity and gas emergency events. DELWP also provides subject matter expertise to the appropriate operational roles within Victoria's emergency response command and control arrangements.

As with all emergencies it is important that adequate planning takes place before the event to ensure governance structures and participation are considered. These plans form part of the State Emergency Response Plan to ensure accountabilities are documented and understood.

The Emergency Management Commissioner (EMC) has responsibility to ensure effective controls are in place and are enacted in accordance with the state plan in the event of a major electricity or gas disruption occurring. The Regional and Municipal Emergency Response Coordinators are to assure performance, against these plans.

5.2 Victorian government management arrangements

The control agency for major electricity or natural gas disruption is DELWP. A Class 2 State Controller (SC) with the appropriate emergency management training and skills will be appointed by the secretary of DELWP as required.

The role of the SC is to identify and manage the broader impacts and consequences on the community of a major electricity or natural gas emergency. It is not the role of the SC to manage the actual electricity or natural gas supply disruption or to restore supply¹. That is the role of the electricity and natural gas industry which may include the relevant distribution and/or transmission company and AEMO. The SC, with the

¹ However reserve powers to intervene and direct certain actions be taken do exist as a 'last resort'.

oversight of the EMC, manages the overall direction of the government response across all agencies to the supply disruption.

As described in the State Emergency Response Plan (EMMV Part 3) Emergency Management Teams (EMT) are formed at each activated tier of emergency response management.

Regional Level Arrangements

Emergency Management Teams (EMTs) are collaborative forums where agencies, government and service providers with a diverse range of responsibilities during emergencies meet to discuss the risks and likely consequences of an electricity or gas supply disruption. The EMTs assist the EMC, controllers and coordinators in establishing the priorities and plan a 'whole of government' approach to the management of these emergencies throughout a continuum for the response to and recovery from the event.

Not all agencies have the capability to provide a representative for the Emergency Management Team at each emergency management tier. For example, a person may represent their agency at both the Regional Emergency Management Team and Incident Emergency Management Team.

5.2.1 Role of State Coordination Team (SCoT)

The State Coordination Team (SCoT) oversees the functions and responsibilities of coordination on behalf of the EMC for Class 2 emergencies. It sets the strategic context of the readiness, response, relief and recovery functions.

SCoT will routinely convene monthly or weekly during peak periods or as determined by the EMC. The DELWP energy representative will ensure relevant information from SCoT is shared with appropriate stakeholders, as required.

5.2.2 Role of State Emergency Management Team (SEMT)

The role of the SEMT is to facilitate discussions to enable agencies and departments to develop a consistent situational awareness regarding the emergency and to identify and manage strategic risks and consequences. SEMT will routinely convene monthly or weekly during peak periods, or as determined by the EMC.

Figure 1 – Government connections for energy emergencies

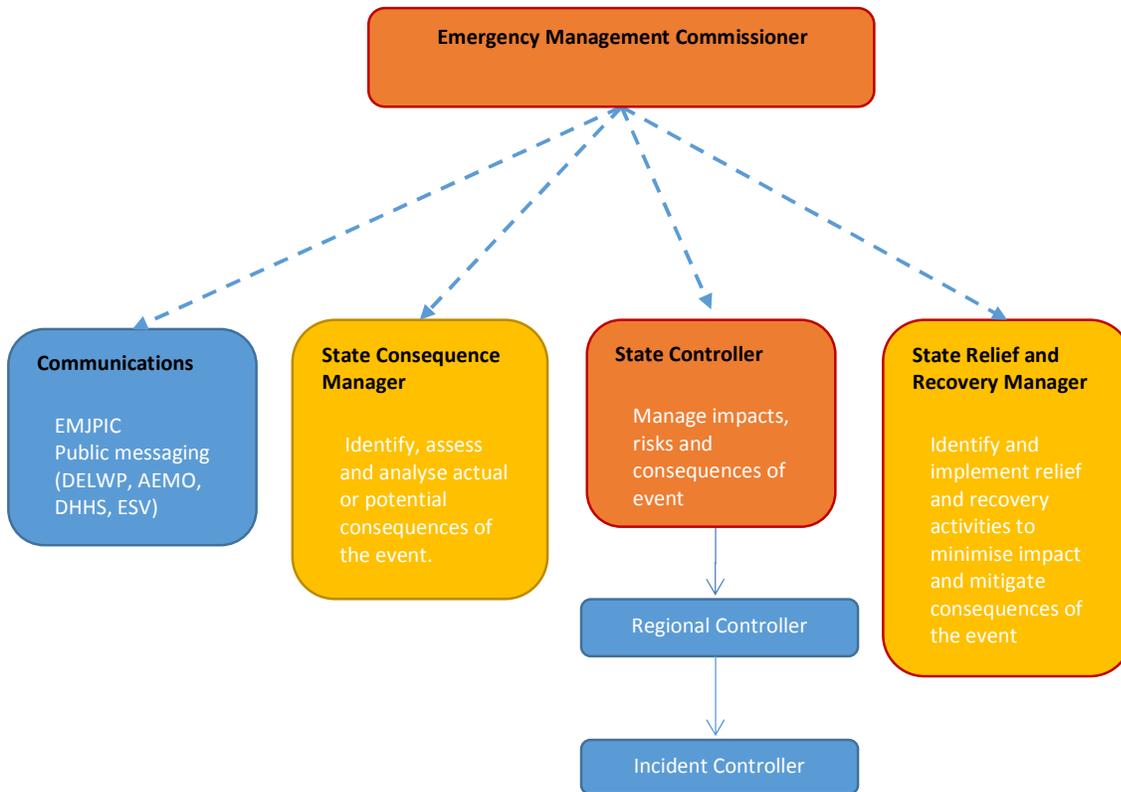
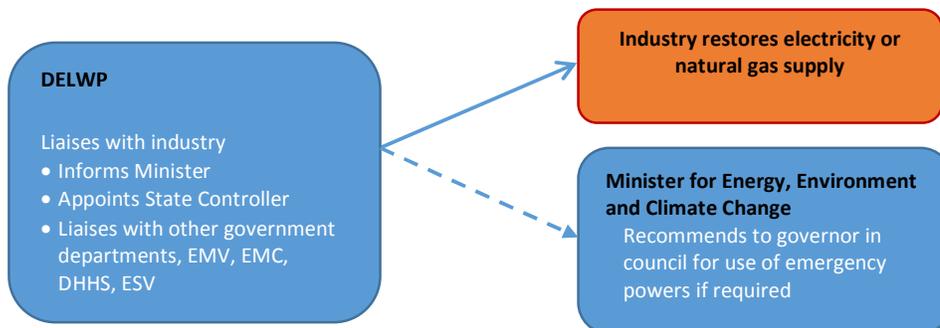


Figure 2 - Control Agency linkages



5.3 Prevention and Preparedness

Policy and planning has a major influence on facilitating effective management of energy-related emergencies when they occur. Pre-planning is Government’s main lever to influence the speed and location of supply reinstatement by industry, as Government does not have direct control over industry resources during an event.

Energy specific planning, legislative and regulatory frameworks outline Government expectations from industry with regard to supply restoration and communications to

customers. AEMO's electricity load shedding guidelines, gas emergency protocol and gas curtailment and recovery guidelines in addition to the *Electricity Distribution Code* and the DHHS *Power Outage Notification Protocol – Life support customers experiencing power outages* are examples of these pre-planned arrangements.

DELWP's activities in relation to prevention and preparedness include:

- Formulation of policy
- Review and input into national MOU and state and national protocols and processes.
- Participation in national and state emergency policy and planning committees

5.4 Energy Emergency Management

DELWP is designated as the control agency for energy supply emergencies in the State of Victoria in accordance with the EMMV and make it accountable within Government for the effective management of energy emergencies.

Response to energy emergencies are strongly focussed on restoration of supply, managing any consequences that emerge during the absence of energy supply and minimising the adverse consequences to the community, consumers, infrastructure users resulting from the emergency.

Where the disruption to electricity or gas supply is as a result of another emergency event, DELWP will work in collaboration with the control agency of the other emergency to ensure the integration and consistency approach in the management of the emergencies to provide the best outcomes for the community.

Regardless of the cause of the disruption to electricity or gas, DELWP collaborates with the AEMO and electricity and gas distribution and transmission businesses. These businesses have a direct role in supplying electricity and gas to customers and for responding to emergencies that affect their transmission and distribution networks. The sector will utilise its own resources for reinstatement of natural gas and electricity.

In the event of a significant electricity or natural gas supply disruption or the potential of a significant disruption, DELWP:

- Liaises with energy businesses and AEMO, through the Victorian Energy Emergency Communications Protocol (VEECP), to assess and report on the impacts to electricity or gas supply.
- Provides analysis and advice to State and Local Governments and emergency agencies regarding the energy industries and energy supply. In the case of state-wide supply disruptions, communications to emergency services and other areas of Government are facilitated through the SEMT.
- Advises the Minister for Energy, Environment and Climate Change about energy supply disruptions, and in extreme outages about reserve legislative powers to intervene in energy markets. This could include issuing mandatory restrictions on the use of electricity under the *Electricity Industry Act 2000*, or gas under the *Gas Industry Act 2001*.
- Liaises with other jurisdictions in the case of supply disruptions that affect jurisdictions other than Victoria and advises on the application of national agreements. This includes representing Victoria on the National Gas Emergency Response Advisory Committee.

While DELWP is the control agency for energy disruptions, the reinstatement of failed generation or transmission/distribution assets are managed by each industry sector.

6 Collaboration

6.1 Notification

The market operator and/or transmission or distribution businesses notify DELWP of actual or potential significant supply disruptions for electricity or natural gas in accordance with the (VEECP). DELWP will assess the information it receives and notify EMV if it believes the disruption or potential disruption is significant enough to cause widespread or prolonged affects to the community.

An emergency service or another agency may become aware of an outage or incident before DELWP. In this case the agency that becomes aware of the incident will notify EMV who in turn will notify DELWP. DELWP will notify the EMC of significant events at the earliest convenience possible in line with standard procedures.

6.2 Escalation

As a general principle electricity and gas events will be managed at the lowest possible level but if escalation is necessary the following principles apply.

At a local level, an incident will be dealt with as business as usual with only necessary monitoring by department and agencies.

Management of an incident will be escalated from local (incident) level to regional level when more than one Local Government area is affected.

Management of an incident will be escalated from regional to State level when more than one region is affected, or has widespread impacts to the Victorian community.

6.3 Emergency Management Commissioner

Under the *Emergency Management Act 2013*, the EMC has legislated management responsibilities across major emergencies. These include response coordination, ensuring effective control arrangements are established, consequence management and recovery coordination.

6.4 Agency roles and responsibilities

Control of an electricity or gas disruption may be exercised at any tier depending on the location and nature of the event. Control may only be exercised from the State tier by the SC, with regional and or incident tiers providing support through the provision of local knowledge or consequence management.

The consequences and implications of an electricity or natural gas supply interruption can be wide reaching. Numerous government and non-government agencies and functional areas have roles in managing the consequences of such an emergency, in accordance with the EMMV. Some examples of the roles and responsibilities are summarised below.

6.4.1 Department of Environment, Land, Water and Planning

The various portfolio areas in DELWP advise on the implications of the disruption related to their portfolio area of responsibility.

DELWP advises government on the potential or actual implications of the energy disruption, including in extreme supply shortages, and the potential use of reserve legislative powers to intervene in the electricity and natural gas markets. This could include the potential issuing of mandatory restrictions on the use of electricity under the *Electricity Industry Act 2000*, or natural gas under the *Gas Industry Act 2001*.

DELWP works with local communities to ensure the local community is aware of nearby critical infrastructure through:

- being mentioned in the Victorian Planning Provisions such as Clause 19 Infrastructure which already references gas pipelines;
- local Environmental Significance Overlays and other overlays;
- Clause 65 Decision Guidelines.

DELWP also has accountabilities with restoration of sewage and waste water management and restoration of essential water supplies for domestic use.

6.4.2 The Australian Energy Market Operator (AEMO)

AEMO provides intelligence and technical information on the natural gas or electricity disruption to DELWP including expected duration and likely location of impacts if limited to a particular area.

6.4.3 Transmission and/or distribution businesses

Businesses provide technical information and intelligence on incidents that affect their networks. Information can include locations, number of customers impacted and expected duration. The information will be provided directly to AEMO or DELWP, or through the VEECP to emergency management agencies, as required.

Businesses collaborate to coordinate and make an Emergency Management Liaison Officer (EMLO) available to the SCC on a rotational basis to assist the two-way flow of information between government and industry. Where more than 20,000 customers are off electricity supply in a single distribution network, that distribution business sends a list of registered life support customers expected to be off electricity supply for more than 20 hours to the Department of Health and Human Services.

Distribution businesses also provide information to customers on electricity and gas supply disruptions affecting their networks.

6.4.4 Natural gas retailers

Natural gas retailers make direct contact with their large industrial or commercial customers who are sensitive to natural gas quality issues where there is an event

affecting supply to those customers, or where a need arises to reduce natural gas demand in the network.

Note that electricity retailers have no role in the management of electricity supply disruptions.

6.4.5 Energy Safe Victoria

ESV advises on any potential safety aspects of disruptions. It monitors performance of industry participants on safety and provides specialist technical advice to industry and government. It enforces electricity or natural gas restrictions, should they be declared.

The Director of ESV also has independent powers under the *Electricity Safety Act 1998* and the *Gas Safety Act 1997* to give direction to do anything or give any direction necessary to make an unsafe electrical or gas situation safe.

6.4.6 Victoria Police

Victoria Police is responsible for emergency response coordination at the regional, municipal and incident tiers of emergency response management and the Regional Emergency Response Coordinators (RERCs), Municipal Emergency Response Coordinators (MERCs) and Incident Emergency Response Coordinators (IERCs) undertake emergency response coordination in the region, municipality and at the incident respectively.

The EMC liaises with the RERCs, MERCs and IERCs through the Senior Police Liaison Officer (SPLO)

6.4.7 WorkSafe

WorkSafe provides input on worksite related Occupational Health and Safety (OHS) concerns or actions relating to major hazard facilities in the energy sector.

6.4.8 Department of Health and Human Services

The Department of Health and Human Services (DHHS) advises on public health related issues and risks arising from the disruption of electricity or gas supplies. Public health issues and potential health consequences that need to be managed may increase with extended outages.

DHHS communicates with stakeholders within public health and public health-related sectors so that plans to mitigate impacts are initiated.

DHHS provides support to power-dependent customers during extended power outages by:

- Facilitating wellbeing checks for people listed as power-dependent customers by power providers when power outage triggers have been met;
- Linking power-dependent customers to appropriate support services; and
- Providing guidance for the development of standard operating procedures for power-dependent customers.

6.4.9 Department of Economic Development, Jobs Transport and Resources

The various portfolio areas in DEDJTR advise on the implications of the disruption related to their portfolio areas of responsibility, such as:

- public transport related impacts arising from the disruption and communication with stakeholders within related sectors so they can initiate their plans to mitigate impacts; and
- any economic related impacts arising from the incident and communication with stakeholders within the sector, including tourism, business and agriculture, so they can initiate their plans to mitigate impacts. Channels such as regional tourism boards may be used.

6.4.10 Environmental Protection Authority

The Environmental Protection Authority (EPA) advises on any environmental impacts that may result following a prolonged electricity or natural gas disruption.

The EPA also advises on the public health issues and risks associated with pollution or waste associated with gas or electricity producing operations that are licensed by the EPA. This includes emissions to air, land or water during normal and abnormal operations.

6.4.11 Public Transport Victoria

Public Transport Victoria coordinates public transport operators to understand and communicate whole-of-sector impacts associated with an energy outage and works with them in the development of required alternate transport plans and arrangements.

7 Appendices

7.1 Summary of Primary Authorising Legislation

Acts and Regulations	Brief Summary
<i>Electricity Industry Act 2000</i>	Allows for the proclamation of emergency powers in relation to an electricity emergency where certain conditions are met, the Minister for Energy, Environment and Climate Change can exercise broad direction powers.
<i>Electricity Safety Act 1998</i>	Allows for the Director of Energy Safety Victoria (ESV) to issue directions to address a safety issue.
<i>National Electricity Law and National Electricity Rules (contained in the schedule to the National Electricity (South Australia) Act 1996)</i>	Provides for regulation of electricity transmission and distribution by the AEMC and the AER in each participating jurisdiction of the NEM.
<i>Electricity Distribution Code 2015</i>	Sets out requirements on electricity distribution companies in relation to: <ul style="list-style-type: none"> • Information to be supplied to customers in relation to supply disruptions • Customers with special needs • Notification requirements in relation to DHHS with regard to significant outages.
<i>Gas Industry Act 2001</i>	Allows for the proclamation of emergency powers in relation to a natural gas emergency where certain conditions are met, the Minister for Energy, Environment and Climate Change can exercise broad direction powers.
<i>Gas Safety Act 1997</i>	Allows for the Director ESV to issue directions to address safety issues.
<i>National Gas (Victoria) Act 2008</i>	Outlines the requirements and arrangements for AEMO maintaining the Gas Emergency Protocol and component parts.

<i>National Gas Law and National Gas Rules (contained in the schedule to the National Gas (South Australia) Act 2008)</i>	Provides for regulation of the natural gas pipeline services by the AEMC and the AER in all jurisdictions other than Western Australia.
<i>Gas Distribution Code 2014</i>	Sets out requirements on gas distribution companies so that customers can obtain relevant information in the event of an unplanned interruption.
<i>Pipeline Act 2005</i>	Outlines laws relating to the construction and operation of pipelines in Victoria and provides the Minister with powers in the event of an emergency.
<i>Gas Safety (Gas Quality) Regulations 2007</i>	Sets minimum safety standards for the quality of gas and the testing of natural gas conveyed through transmission pipelines.
<i>Essential Services Act 1958</i>	Allows for the proclamation of an emergency where an essential service is likely to be interrupted and outlines the powers of the Minister during such period of emergency.

7.2 Related Plans and Arrangements

Document	Description
Policies and Procedures	Plans and standard operating procedures exist to govern the day to day operations of the electricity and gas networks and to assist the operational decision makers that sit within each organisation. Each electricity and gas infrastructure business has its own operational plans.
Emergency Management Plans	<p>Emergency Management Plans are prepared, maintained and exercised by each electricity and gas entity, being electricity generators, gas production facilities, transmission network owners in accordance with their regulatory requirements. Electricity and gas industry asset owners and participants conduct their own exercises on a regular basis.</p> <p>The AEMO established Power System Emergency Management Plan: Overview (PSEMP) is intended to enable a co-ordinated response to power system incidents.</p>
Communications Protocols	The Victorian Energy Emergency Communications Protocol (VEECP) provides a mechanism for communication between electricity or gas distribution and transmission businesses, AEMO, government and emergency services during a significant energy related incident.

<p>Single Industry Spokesperson Protocol (SISP) gas or electricity</p>	<p>Electricity or gas businesses can agree to activate the Single Industry Spokesperson Protocol (SISP) when pre-determined triggers have been met. The SISP is an agreement whereby AEMO may speak on behalf of the Victorian electricity or gas supply industry when there are widespread and prolonged supply disruptions affecting more than one distributor.</p>
<p>AEMO established Victorian Arrangements</p>	<p>AEMO: Emergency Procedures (Gas) – Describes procedures for managing a gas emergency.</p> <p>AEMO: General Procedure, Gas Load Curtailment and Gas Rationing and Recovery Guidelines - provides an overview of the order in which gas load will be curtailed and restored to preserve system security and with regard to the social and economic needs of the community.</p>
<p>National Arrangements</p>	<p>Emergency arrangements at the national level applying to electricity and gas outages which affect more than one jurisdiction include:</p> <ul style="list-style-type: none"> • Power System Emergency Management Plan: Overview • NEM MOU on the Use of Emergency Powers • NEM Emergency Protocol • Natural Gas Supply (Natural Gas Supply Emergency Response Protocol) MOU • National Gas Response Advisory Committee: Interruption to Supply Process.
<p>Communications Strategy for Power Outages</p> <p>Communications Strategy for Natural Gas Supply Disruptions</p>	<p>The DELWP Corporate Services has prepared a DELWP Communications Strategy for Power Outages which includes information on power outages. DELWP Corporate Services has also prepared a Communications Strategy on Natural Gas Supply Disruptions. These strategies include information on government linkages, stakeholders and key messages designed to increase the resilience of the community in case of a disruption to electricity or gas supply by providing advice and what actions they should take if disruptions occur.</p>

7.3 Glossary

Term	Definition
AEMO	
Agency	Means a government or a non-government agency. (<i>Emergency Management Act 1986</i> section 4) Agencies include government and non-government organisations, government departments, local government and volunteer organisations with a role in emergency management as listed in the Emergency Management Manual Victoria Part 7 – Emergency Management Agency Roles.
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Class 1 Emergency	a) a major fire; or b) any other major emergency for which the Metropolitan Fire and Emergency Services Board, the Country Fire Authority or the Victoria State Emergency Service Authority is the control agency under the state emergency response plan. (<i>Emergency Management Act 2013</i> section 3)
Class 2 Emergency	A major emergency which is not— a. a Class 1 emergency; or b. a warlike act or act of terrorism, whether directed at Victoria or a part of Victoria or at any other State or Territory of the Commonwealth; or c. a hi-jack, siege or riot. (<i>Emergency Management Act 2013</i> section 3)
Class 2 State Controller	A person appointed as a Class 2 controller at the state tier under the <i>Emergency Management Act 2013</i> section 39. (<i>Emergency Management Act 2013</i> section 39)
Class 3 Emergency ²	A Class 3 emergency means a warlike act or act of terrorism, whether directed at Victoria or a part of Victoria or at any other State or Territory of the Commonwealth, or a hi-jack, siege or riot. Class 3 emergencies may also be referred to as security emergencies.
Consequence Management	Consequence management means the coordination of agencies, including agencies who engage the skills and services of non-government organisations, which are responsible for managing or regulating services or infrastructure which is, or may be, affected by a major emergency. The objective of consequence management is to minimise the adverse consequences to users of services or infrastructure caused by the interruption to the services or infrastructure as a consequence of the major emergency while having regard to the need to ensure that— a) safety considerations are paramount; and b) if the major emergency is due to— (i) a hi-jack, siege or riot; or (ii) a warlike act or an act of terrorism— the exercise of police powers is not to be interfered with.

² Although the term ‘Class 3 emergency’ is not recognised in legislation, Victoria Police has agreed for the term to be used to improve the readability and useability of the State Emergency Response Plan.

	(Emergency Management Act 2013 section 45)
Control Agency	The control agency is the agency with the primary responsibility for responding to a specific form of emergency. The EMMV Part 7 – Emergency Management Agency Roles lists control agencies for specific emergencies. (Emergency Management Act 2013 section 54)
Coordination	Coordination is the bringing together of agencies and resources to support the response to and recovery from emergencies.
DAC	District Agency Commander for DELWP
Declared Transmission System	Network of gas transmission pipelines that transport natural gas in Victoria
Department	Victorian Government departments, including those with portfolio responsibility for agencies with a role in emergency response
EMC	Emergency Management Commissioner
EM-COP	Emergency Management Common Operating Picture. Emergency Management Victoria has developed EM-COP as the tool for building and maintaining a common operating picture for emergency management in Victoria.
Emergency	The actual or imminent occurrence of an event which in any way endangers or threatens to endanger the safety or health of any person in Victoria or which destroys or damages, or threatens to destroy or damage, any property in Victoria or endangers or threatens to endanger the environment or an element of the environment in Victoria including, without limiting the generality of the foregoing— a) an earthquake, flood, wind-storm or other natural event; and b) a fire; and c) an explosion; and d) a road accident or any other accident; and e) a plague or an epidemic or contamination; and f) a warlike act or act of terrorism, whether directed at Victoria or a part of Victoria or at any other State or Territory of the Commonwealth; and g) a hi-jack, siege or riot; and h) a disruption to an essential service. (source: Emergency Management Act 2013 Part 1 section 3)
Emergency Management Sector	The sector comprising all agencies, bodies, departments and other persons who have a responsibility, function or other role in emergency management. (Emergency Management Act 2013 section 3)
Electricity Distribution Businesses	Company that owns and operates the electricity distribution infrastructure (poles and wires) in a particular geographic area of Victoria.
ESV	Energy Safe Victoria
Gas Distribution Businesses	Company that owns and operates the gas distribution infrastructure (pipelines) in a particular geographic area of Victoria.
Incident	An event, occurrence or set of circumstances that: a) has a definite duration b) calls for human intervention c) has a set of concluding conditions that can be defined d) is or will be under the control of an individual who has the authority to make decisions about the means by which it will be brought to a resolution.
Major Emergency	A major emergency is: a) a large or complex emergency (however caused) which— (i) has the potential to cause or is causing loss of life and extensive damage to property, infrastructure or the environment; or (ii) has the potential to have or is having significant adverse

consequences for the Victorian community or a part of the Victorian community; or
 (iii) requires the involvement of 2 or more agencies to respond to the emergency; or

c) a Class 1 emergency; or

d) a Class 2 emergency.

(*Emergency Management Act 2013* section 3)

NEM	National Electricity Market
RAC	Regional Agency Commander for DELWP
RCT	Regional Control Team
Recovery	The assisting of persons and communities affected by emergencies to achieve a proper and effective level of functioning. (<i>Emergency Management Act 2013</i> section 3)
Region	A region is one of the Victorian Government Regions, as defined in the Emergency Management Manual Victoria Part 8 Appendix 8.
Relief	The provision of life support and essential needs to persons affected by an emergency
Resources	The people, equipment or services an agency requires to perform its emergency response role and responsibilities.
Response	The combating of emergencies and the provision of rescue services. (<i>Emergency Management Act 2013</i> section 3)
	For the purpose of the State Emergency Response Plan, emergency response is the action taken immediately before, during and in the first period after an emergency to reduce the effect and consequences of emergencies on people, their livelihoods and wellbeing, property and the environment and to meet basic human needs.
Response Agency	Any agency with a role or responsibility during an emergency response. Response agencies are either the control agency or a support agency.
SAC	State Agency Commander (SAC) for DELWP
SISP	Single Industry Spokesperson Protocol
SERP	The state emergency response plan prepared under the <i>Emergency Management Act 2013</i> section 53.
State Response Controller	A person appointed as a State Response Controller under the Emergency Management Act 2013 section 37. (<i>Emergency Management Act 2013</i> section 3)
Support Agency	A support agency is an agency that provides services, personnel or material to support the control agency. The EMMV Part 7 – Emergency Management Agency Roles lists the support agencies for specific Class 1 emergencies and support agencies that provide specific services during all emergencies.
Whole of Government	For the purpose of the State Emergency Response Plan, the whole of government is a collective term for all agencies with a role or responsibility in emergency management in Victoria, as listed in EMMV Part 7 – Emergency Management Agency Roles.

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