MARSH

COMBINED LIABILITY INSURANCE

2020 - 2026

VICTORIAN POWER NETWORKS & UNITED ENERGY

23 NOVEMBER 2020

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Scope of Report

This report to Victorian Power Networks and United Energy (VPN/UE) provides Marsh's assessment of the current bushfire liability insurance market, an overview of the 2020 VPN/UE Combined Liability insurance* renewal as well as providing forecasts in relation to premium costs up to 2026.

By way of Marsh expertise, Marsh has extensive experience in the bushfire liability insurance market as it pertains to electricity transmission and distribution providers in Australia. The client base we currently service covers the majority of the state of Victoria as well as South Australia, Western Australia, Northern Territory and the Australian Capital Territory in totality. The team that has authored this report collectively hold over 40 years' experience in the servicing and/or placement of bushfire liability insurance (Marsh team credentials are included in the Appendices of this report).

This report includes:

- A summary of the local and global market drivers and how they impact on premiums
- Examples of claims activity globally for bushfire/wildfire and how such claims impact on premiums
- Expected premium ranges for the combined (bushfire) liability insurance program of VPN/UE for each insurance year of the 2020-2026 period, and the reasons for those expected premiums, along with impacts on overall policy limit (capacity) available.

** Combined liability insurance is insurance that VPN/UE purchases to cover third party legal liability, with the most substantial exposure for VPN/UE by far being liability for causing bushfires.*

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Bushfire Liability – Market Overview

Due to significant capacity withdrawal from the sector, there has been a meaningful reduction in bushfire liability capacity, with such capacity offered at a significantly higher cost. The loss capacity is due to a number of factors, including:

- Increased wildfire/bushfire activity local and globally (see Bushfire Claims Examples in subsequent section), with insurer's unfavourable perceptions of this risk compounded by:
  - Bushfire activity in Australia during the 2019/20 bushfire season
  - The fact that five of California's six largest fire events since 1932 were recorded in August and September of 2020 alone
- Non-fire related casualty losses being experienced locally and globally (particularly in the mining sector)
- Continued consolidation of insurers through merger and acquisition activity
- Increased focus by insurers on overall capital deployment, and
- Closure of Lloyds Syndicates and changes in insurer appetite.

We consider each key global market below:

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In summarising the market conditions, we estimate that **well over $500m in capacity has exited the Bushfire Liability sector since the beginning of 2019.** In today's market, insurers are scrutinising and revising their pricing models, with a much greater focus on adequacy of 'pay-back' period. This is resulting in upward pressure on premium outcomes, and downward pressure on overall policy limit for insureds in the sector.

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Bushfire Claims Examples

Bushfire is not a hazard or phenomenon that is unique to Australia. In recent times, major bushfires/wildfires have occurred throughout the world, including in North America (with frequency in California), France, Germany, Greece, Indonesia, Italy, Poland and Russia. The consequences are typically measured in terms of hundreds or thousands of buildings destroyed, number of lives lost, and millions of dollars in property damage and resources spent fighting the fire.

The most recent 2019/20 bushfires in Queensland, New South Wales, Victoria, South Australia, Western Australia and the ACT have captured attention globally, with insurers monitoring the impact and the size and scale of the losses. In addition to utilities related liability losses, estimated insured property losses arising from the 2019/20 bushfire season now stand at $2.32bn.

While there have been a large number of bushfire losses over time in Australia, and there has been increased bushfire activity recently, the largest bushfire events from an insurance perspective (excluding the 2019/20 bushfire events) have included:

- St Patricks Day Fire (VIC) in 2018, which burnt 400 km2 of land in Victoria's south-west farmland, wildlife reserves and property. Overall losses stand at $22.5m.
- The Black Saturday Fire (VIC) in 2009, which burnt 4,500 km2 of land, killed 173 people and destroyed some 2,000 homes. Overall losses A$1.7bn, insured losses A$1.07bn (in original values).
- The Ash Wednesday Fire (VIC/SA) in 1983, which burnt 5,200 km2, destroyed some 2,400 homes and killed 75 people. Overall losses A$335m, insured losses A$176m (in original values).
- The Tasmanian Black Tuesday Fires (TAS) in 1967, which burnt more than 2,600 km2 , destroyed some 1,400 homes and killed 62 people. Overall losses were A$35m, insured A$14m (in original values).
- The Black Friday Fire (VIC) in 1939, which burnt almost 20,000 km2, destroyed more than 700 homes and resulted in 71 fatalities.

The increase in frequency of bushfire events is contributing to a more selective approach from insurers in relation to where they will provide capacity, how much capacity they will provide, and the cost of that capacity.

Notable bushfire events outside of Australia have included:

- March 2010: Western Russia — Several hundred individual wildfires caused an estimated US$15 billion in damage.
- May 2016: Alberta, Canada — The Fort McMurray Wildfire destroyed at least 2,400 homes and buildings. With estimated losses of around CDN$4 billion, it is the costliest disaster in Canadian history.
- November 2018: Butte County, California, US - The Camp Fire was the deadliest and most destructive in California history. It caused at least 86 fatalities and destroyed 18,804

structures. It was also the world's costliest natural disaster in 2018 and is the most destructive wildfire in history with total damage of US$16.5 billion.
- 2020 West Coast Wildfires: well over 2 million hectares have burned across California, Oregon, Washington State and neighbouring Idaho. Tens of thousands of people were forced to leave their homes and at least 27 people have died. At this early stage, the cost of these fires is expected to be similar to the 2018 California fires

Whilst catastrophic bushfire events such as those above gain attention globally, frequent 'smaller' bushfires events overseas still generate substantial losses to the insurance market (just as the smaller bushfire events do in Australia).

VPN/UE insurers participating at primary layers of bushfire liability risks across Australia have been, and continue to be, significantly out of pocket as a result of bushfires over recent years, with insurance pay outs exceeding the premiums they have received by several fold. To quantify this, across the industry over the last decade or so, insurers participating at the lower attachment points on the VPN/UE policy have experienced claims incurred costs (i.e. actual and forecast pay outs) in the vicinity of $100 million across the sector versus premiums received of circa $25 million. The difference of approximately $75 million represents a material loss for these insurers which is not sustainable. This factor is a key contributor in the material re-rating of bushfire liability pricing.

Furthermore, the insurance market is at a level that, should another severe bushfire event occur, significant reductions in capacity will occur (on top of the reductions to date) such that limited capacity will be available, with such available capacity coming at a substantially increased cost.

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VPN/UE Combined Liability Program – Next Regulatory Period

Context

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Before considering future forecasts for the VPN/UE Liability placement, it is important to explain some fundamental aspects and influencers within the current insurance market:

Not an actuarial exercise

Household (or domestic) insurance products are priced by insurers on an actuarial basis. This is not the case with bushfire risk for network businesses.

The reason an actuarial approach can be taken by household insurers is because there is a high volume of incidents and claims, and a significant amount of data available to the insurance market, to adopt such an approach to pricing. This is not the case with bushfires.

Yes, there have been, and continue to be, serious and catastrophic bushfires, and their frequency is increasing, but there is an insufficient volume of incidents and occasions on which a network business has been at fault, for the bushfire liability risk insurers of those networks to be able to adopt an actuarial approach to pricing of premiums.

Insurers perception of bushfire liability risk has changed dramatically

There has only recently been an increased recognition of, and focus on, the increased risk, severity and frequency of bushfires in Australia and globally by insurers. Recent losses are leading, and will continue to lead, to significant pressure to recover increased premiums.

The catastrophic bushfires that occurred in Australia during 2019/2020 led to insurers becoming extremely concerned about their bushfire liability exposure. To a far greater extent than in the past, insurers are having to justify – internally within their organisations – the risks proposed to be underwritten. There is an increased focus on due diligence and analysis of profitability of proposed underwritten risks. Regardless of the recent bushfires, but certainly severely accentuated by their occurrence, this has resulted in insurers in the primary layer having no appetite to take on new risk, whilst reducing capacity and to seeking premium increases to recover historical paid losses.

For those underwriters that remain willing to underwrite bushfire liability, their view of your world is that bushfire frequency in Victoria continues to increase, which in turn increases the risk they insure. In this environment, insurers that continue to offer capacity are being staunch in their need to receive a minimum dollar amount per quantum of capacity offered, whilst simultaneously looking to reduce capacity they offer. Many of VPN/UE's insurers need to receive a minimum dollar amount per quantum of capacity offered, and that minimum is increasing significantly as historically it has been inadequate.

Underwriter stakeholders are influencing behaviour

Treaty reinsurers are challenging underwriting approaches taken, forcing accountability on direct insurers in way that has not been seen previously in Australia and is more akin to the USA.

In the current environment, underwriters have been required by Lloyds and/or management to assess the level of aggregated risk they have to Bushfire exposure. Specific to your risk, this requirement is driven by the fact that VPN/UE primary layer insurers are also the primary layer insurers for all other networks, as well as government and regulatory bodies at Federal, State and Local level and ancillary service providers. Because of their in depth analysis, each insurer has identified the fact that some insureds (inclusive of VPN/UE/SAPN) have been paying comparatively less to other peer organisations within their portfolio. Consequently insurers are now:

a) Mandating minimum dollar amounts per quantum of capacity offered which are required to take appropriate account of bushfire exposure as well as increased internal costs (particularly the cost of reinsurance which has trended upwards significantly in recent times)
b) Required to determine the level of volatility in their portfolio and demonstrate the portfolio is robust enough to sustain large bushfire losses. Where this has not been demonstrated, management has exited from this sector (there have been 6 examples of this over the course of 2020)

As a result, whereas previously strong mitigation practices had assisted VPN/UE to secure more favourable premiums that their peers, the benefit of this positive risk differentiation has been heavily diluted in today's market. Strong risk mitigation practices do however remain crucial for the purposes of ensuring that VPN/UE can access maximum available capacity.

In summary, underwriters are now faced with a decision – correct the portfolio and accounts that are under-priced or to which they are overexposed or exit the sector (and possibly lose their jobs). The reality is that for a number of insurers it is easier not to write an account in this market than face the consequences of a large bushfire loss. As noted earlier, many of the insurers need to receive a minimum dollar amount per quantum of capacity offered. Like other businesses, they are experiencing increased internal costs and increased costs of reinsurance. Coupled with the impacts on their businesses of recent bushfires, these costs are pushing up the minimum price per million dollars of cover that they are willing to accept.

Forecast premiums - expected future insurance costs

VPN/UE has requested Marsh to provide its assessment of the expected future insurance costs for the insurance years within the next regulatory control period (2021-2026) for the Combined Liability insurance. The majority of these insurance costs (> 90%) relate to the risk of bushfire liability, and nearly all of the expected increase in insurance costs for the current and future insurance years within the 2020-2026 period are driven by the risk of bushfire liability.

As is evident from the information and explanations provided in this report, VPN/UE's insurers have made it expressly clear that the recent catastrophic bushfires across Australia and Victoria, coupled with the fact that those insurers have not recovered losses from past bushfires, will result in significantly increased premiums over the 2020-2026 period. Put simply, insurers must seek to recover past losses, whilst provisioning for future losses, or withdraw from the market (which, in turn, would lead to further increases in premiums from those remaining insurers).

Against this backdrop, the outcome of our assessment is that VPN/UE can expect Combined Liability insurance premium costs over the next regulatory control period within the ranges set out in the table below (with those costs being expressed in Australian dollars). Note that the insurance costs include statutory charges (i.e. non-residents' tax and stamp duty other than GST).

Victorian Power Networks

	2019/20 Actual	2020/21 Actual	2021/22 Estimate	2022/23 Estimate	2023/24 Estimate	2024/25 Estimate	2025/26 Estimate
Forecast Increase Range			20 - 45%	20 - 35%	10 - 20%	0 - 10%	0 - 10%
Low	AUD 5,504,963	AUD 9,771,705	AUD 11,726,046	AUD 14,071,255	AUD 15,478,380	AUD 15,478,380	AUD 15,478,380
High			AUD 14 168 972	AUD 19 128 112	AUD 22 953 734	AUD 25 249 108	AUD 27 774 018

United Energy

	2019/20 Actual	2020/21 Actual	2021/22 Estimate	2022/23 Estimate	2023/24 Estimate	2024/25 Estimate	2025/26 Estimate
Forecast Increase Range			20 - 45%	20 - 35%	10 - 20%	0 - 10%	0 - 10%
Low	AUD 2,374,690	AUD 4,215,245	AUD 5,058,294	AUD 6,069,953	AUD 6,676,948	AUD 6,676,948	AUD 6,676,948
High			AUD 6 112 105	AUD 8 251 342	AUD 9 901 611	AUD 10 891 772	AUD 11 980 949

In relation to the cost ranges set out in the above tables, we make the following comments:

- Our view is that the trend of increasing premiums will continue in subsequent years. Whilst the degree of certainty does diminishes into the future, we would suggest that at a minimum allowance is made for future years' increases at the mid-point of the ranges we have outlined; i.e. 32.5%% for the 2021/2022 insurance year, 27.5% for the 2022/2023 insurance year, etc.
- It is important to note that the placement/program structure can vary significantly year by year as insurer appetite, capacity and pricing changes. This could adversely impact overall policy limits available to VPN/UE in the future. The above projections assume capacity will be purchased to the extent it is commercial reasonable to do so
- In addition to overall policy limit, from a bushfire liability coverage perspective the pressures faced during the 2020 renewal will remain a factor in future renewals. I.e.:
  1. Policy limit reinstatements may no longer be available at future renewals, a position already taken by Liberty
  2. Failure to supply coverage will likely be restricted to losses arising from personal injury and property damage triggers above a certain attachment point (e.g. $100m)

  It is therefore assumed that in future years, coverage will be preserved to the maximum extent possible noting that changes to cover may be mandated by insurers with no alternative options available
- The above ranges of costs are based on the following assumptions:

- No major changes to VPN/UEs' risk profile
- No additional significant losses to the liability program, and
- No further significant deterioration in the global insurance market.

Finally, whilst we have assumed no further significant deterioration in markets in arriving at our expected cost ranges, we note that bushfires/wildfires globally are at an unprecedented level and ongoing occurrences will have adverse impacts on pricing guidance provided.

APPENDICES

Credentials

This report has been prepared by the following individuals:

Name	Experience	Qualifications
David Brumpton Chief Client Officer, Energy & Power, Pacific	David has 37 years' experience in the insurance industry mainly in client relationship management and designing risk financing programs across a diverse range of clients in the Energy & Power, Construction and Infrastructure sectors. He has a deep industry experience across a variety of clients in the Energy & Power sector and in addition to his role as Client Executive for some of Australia's largest clients, he has previously held the position of Manager, Risk Management at SA Power Networks. David also has specific expertise with electricity and gas transmission and distribution exposures having worked with Victoria Power Networks, Western Power, Horizon Power, ActewAGL, and Australian Gas Infrastructure Group	• Australian and New Zealand Institute of Insurance and Finance (Senior Associate) • Graduate Diploma of Financial Services (Insurance) • OIL Technical Accreditation
Jeremy Rowsell National Casualty Leader	Over the past 28 years, Jeremy has placed complex casualty programs across a number of key international markets including the UK, Africa and Asia-Pacific. Having worked in both Australian and broader Lloyd's and London markets, Jeremy can leverage significant expertise in the negotiation and successful placement of clients' programs. Jeremy is extremely adept at being innovative and creating beneficial solutions for his clients. Having working across all casualty lines, General Liability, Professional Indemnity and MPT / ACI, Jeremy has strong experience with coordinating, designing and implementing major programs, and has been instrumental in adding value to clients across all market conditions. Jeremy also has specific expertise with electricity and gas transmission and distribution exposures as the casualty	• Master of Business Administration (Executive) • Australian and New Zealand Institute of Insurance and Finance (Fellow) • Certified Insurance Professional (CIP) • Diploma of Financial Services (Insurance Broking • Fellow, Australian Insurance Institute

Name	Experience	Qualifications
	placement broker for Victoria Power Networks, United Energy, South Australian Power Networks, Western Power, Horizon Power, APA Group and historically other Victorian based distributors.	
Dan Sullivan Energy and Power Leader - Victoria	Dan has 17 years of experience in the corporate insurance industry, having worked at three global brokers during his career. Whilst an expert in the management of large complex accounts, over the last several years Dan specialised within the utilities sector inclusive of Senior Advisory roles for major Marsh clients operating in the power and water sectors.	• Australian and New Zealand Institute of Insurance and Finance – CIP Fellow • Postgraduate Diploma in Insurance and Risk Management • Bachelor of Business

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