Western Renewables Link

EES Submission

August 2025

VFF Submission

Western Renewables Link EES

Victorian Farmers Federation

1. Context

This executive summary provides a high-level overview of key concerns and recommendations but does not replace the detailed evidence-based submission that will be lodged within the extended timeframe.

VFF Policy Position: The VFF maintains a clear and consistent policy that the Western Renewables Link must not proceed in its current form. Transmission planning must be strategic, coordinated, and respectful of agricultural land and rural communities. Forced acquisition, inadequate compensation, and poor consultation are incompatible with a fair and just energy transition. Agriculture must be recognized as a hard constraint in transmission planning, with proper protection for Victoria's productive food and fibre regions.

Victorian Farmers Federation (VFF) – Executive Summary

The Victorian Farmers Federation (VFF) submission in response to the Environmental Effects Statement (EES). The VFF strongly opposes the WRL in its current form, citing fundamental failures in consultation, planning, and protection of agricultural land.

2. Executive Summary

The EES is critically flawed, relying on desktop analysis rather than on-ground assessments due to lack of landholder consent.

Ausnet as the developer has failed in its design, planning and implementation of the WRL.

Consultation has failed: landholders report exclusion, coercion, and loss of trust in AusNet and the process.

Agricultural impacts are severe – cropping inefficiencies, irrigation restrictions, biosecurity risks, and intergenerational farm viability are at stake.

Economic modelling ignores agriculture, despite evidence of significant financial losses.

Compensation is inadequate, short-term, and unjust. It fails to reflect long-term productivity losses and mental health impacts.

Bushfire risks are understated, with no enforceable obligations on AusNet and unacceptable liability risks for farmers.

Aviation impacts (aerial spraying, farm airstrips, emergency response, drones) are minimised or ignored in the EES.

The WRL process has caused social division, mistrust, and long-term harm to rural communities.

3. VFF Recommendations

Reject the current WRL proposal and EES as inadequate.

Restart planning with agricultural land treated as a hard constraint.

Undertake full reassessment of agricultural and economic impacts, co-designed with affected landholders.

Develop a fair, long-term compensation framework linked to actual farm business losses.

Strengthen enforceable commitments for bushfire safety and aviation access.

4. Failure of Engagement and Process

AusNet has failed in every measure to engage respectfully and transparently with the community, neighbours, and affected landowners. From the outset, the project has been marked by coercion, poor consultation, and a refusal to genuinely address community concerns. These failures cannot be allowed to stand.

The Western Renewables Link represents an abject failure of process that undermines trust, endangers the success of the energy transition, and alienates the very people whose cooperation is essential to achieve decarbonisation. Unless this approach is fundamentally reset, the WRL risks delaying renewable energy development by eroding social license across rural Victoria.

Sincerely

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Victorian Farmers Federation

Contents

5. Introduction – Victorian Farmers Federation

The Victorian Farmers Federation (VFF) welcomes the opportunity to respond to the Environmental Effects Statement (EES) for the Western Renewables Link (WRL). However, we do so with significant reservations regarding the validity, integrity, and adequacy of the EES process as it relates to agricultural land, regional communities, and rural livelihoods.

From the outset of this project there has been widespread and justified refusal of landholders to grant access to their properties a consequence of years of poor consultation, inadequate transparency, and a failure to genuinely engage with affected farming communities. As a result, the EES is critically compromised by its reliance on desktop-based analysis in lieu of direct, on-the-ground assessment and does not constitute a robust or reliable evaluation of the project's environmental and socio-economic impacts.

The proponents have produced a document that is speculative, superficial, and in many respects, misleading. It fails to accurately account for the complexity of modern agricultural operations, the cumulative impacts of land fragmentation, or the long-term consequences for food and fibre production and the long-term impacts on the regional economy. Moreover, the exclusion of key landholder insights and real-world farm-level data undermines the EES's standing as a credible planning instrument.

The VFF's response to the EES will focus on the agricultural and economic impacts of the WRL, as well as key environmental and social issues most relevant to farming communities. Our submission is grounded in a rigorous methodology that prioritises real-world data, collected directly from affected landholders, farming enterprises, and regional stakeholders. It reflects the lived experience of those on the ground and provides a more accurate, evidence-based assessment of the WRL's true cost to Victoria's productive landscape.

From the perspective of Victoria's farming sector, this EES represents a profound failure of process. It does not meet the standards expected of major infrastructure assessment in a productive agricultural landscape, nor does it inspire confidence in the state's ability to manage the energy transition equitably. The VFF urges decision-makers to reject this flawed document as a basis for project approval and to fundamentally reconsider the planning framework underpinning transmission infrastructure in rural Victoria.

5.1. Impact of the Transmission Network

Cutting through some of the most valuable and productive farmland in Victoria, the transmission network stretches 190 km from Bulgana to Sydenham, consisting of a 210 m wide easement. It will impact the entirety of the affected property titles for the purpose of temporary construction and permanent operational components.

EES Technical Report E Land Use and Planning Impact Assessment identifies that *(t)he Rural Zones, which reflect the use of the land for farming, are the dominant zones across the study area. Approximately 90 per cent (90%) of land within the Project Area is located within one of the Rural Zones (most commonly the Farming Zone). Agricultural land includes land-*

dependent, production-based land uses such as grazing, horticulture, food and crop production, intensive animal husbandry, hobby farming and forestry.

In Section 35.07 Farming Zone of the Victoria Planning Provisions, the purpose is:

- *To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.*
- *To provide for the use of land for agriculture.*
- *To encourage the retention of productive agricultural land.*
- *To ensure that non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture.*
- *To encourage the retention of employment and population to support rural communities.*
- *To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.*

The decision guidelines for agricultural issues and the impacts from non-agricultural uses are:

- *Whether the use or development will support and enhance agricultural production.*
- *Whether the use or development will adversely affect soil quality or permanently remove land from agricultural production.*
- *The potential for the use or development to limit the operation and expansion of adjoining and nearby agricultural uses.*
- *The capacity of the site to sustain the agricultural use.*
- *The agricultural qualities of the land, such as soil quality, access to water and access to rural infrastructure.*
- *Any integrated land management plan prepared for the site.*

EES Technical Report H Agriculture and Forestry Impact Assessment states that *(o)ne of the important features to note in areas of high value agricultural land, particularly where horticultural crops (including potatoes) can be grown, is that farmers aim to utilise all available land. This reflects the high returns per hectare that this land can generate. This means that while the area impacted by the transmission line may appear to be small, it may be very significant for the particular farm business.*

This provides the context of this submission, which is that the EES has been dismissive of the impact that the proposed network has on the viability of individual farm businesses, the relevant planning provisions and the resulting cumulative impact on regional farm production, social and economic development.

5.2. VFF General Position on the Western Renewables Link

The Victorian Farmers Federation (VFF) maintains a firm and unequivocal position regarding the Western Renewables Link (WRL): namely, that this project must not proceed in its current form. The WRL represents a failure of process, consultation, planning and respect for agriculture. It exemplifies a rushed and top-down approach to transmission planning that ignores the rights of landholders and the broader implications for Victoria's agricultural base.

The EES Summary Report indicates that *(t)he Project will help increase Victoria's renewable energy supply, assisting with reducing electricity prices for consumers and decreasing emissions from coal-fired generation*. The VFF supports a renewable energy supply, however in this instance reduced electricity prices for consumers would be subsidised by farmers as a result of inadequate compensation for the use of land, permanent loss of production and increased costs due to loss of farm practice efficiency.

5.3. Lack of Strategic, Statewide Transmission Planning

While the Victorian Transmission Planning (VicGrid) framework highlights the Western Renewables Link (WRL) as a key element, it places reliance on a transmission line that is still "under development" and has not been approved by this EES planning panel. The lack of strategic, statewide planning means that this line remains unapproved, with no proper assessment of alternatives or long-term land-use impacts, and indeed, it should be denied. The WRL has been advanced in isolation, without integration into a clear, statewide blueprint for transitioning Victoria's energy grid in a manner that protects food and fibre production. Infrastructure of this scale requires a coordinated and coherent framework—one that genuinely assesses alternatives, maximises public benefit, and considers long-term land-use conflicts. The WRL, as currently proposed, fails to meet these requirements. Furthermore, the VicGrid plan depends on this unapproved project as its backbone and offers no public contingency or alternative pathway, leaving agricultural and community stakeholders exposed to unnecessary risk.

5.4. Failed Consultation and Community Engagement

Landholders have been repeatedly excluded from meaningful consultation, bullied, and harassed throughout the WRL process. AusNet's failure to gain access to farms for on-ground studies – forcing reliance on desktop analysis - is a damning indictment of the process. If the proponent cannot engage respectfully and transparently with the very people whose land is required to build this project, how can they reasonably claim the social licence to construct it? Using the powers granted through VicGrid, including police enforcement and severe fines for non-compliance, will only inflame resistance and deepen mistrust. Far from advancing the energy transition, such an approach will delay it. The WRL consultation process has failed by every tangible measure, and the Panel must not reward that failure with project approval.

Premier Jacinta Allen and the VicGrid CEO have on multiple occasions acknowledged the systematic failures of Ausnet in both project development, community consultation and landowner/neighbour engagement. Ausnet's failure to acknowledge these past mistakes, and failures of process in their EES further inflames a volatile environment. The VFF believes that these past failures in planning of the WRL cannot be rectified or mitigated, and that should the project proceed, it would create a dangerous precedent for other infrastructure projects. On this basis alone, the VFF proposes that the project should be scrapped in its current form.

5.5. Agriculture Must Be Protected and Prioritised

Agricultural land is a critical and finite resource that must be valued appropriately in all major infrastructure decisions. Victoria comprises just 3% of Australia's landmass, yet produces 23% of the nation's food. Section 2 of the Western Renewables Link (WRL) alone encompasses 0.04% of Victoria's land mass, but is responsible for approximately 40% of Victoria's potato production and 5% of all potato production in Australia. The WRL threatens some of the state's most productive farmland, putting biosecurity, operational efficiency, land use, and the intergenerational viability of farms at risk. The agricultural impact assessment in the EES is superficial and flawed, failing to account for real-world farming operations or the cumulative regional impacts of multiple linear infrastructure projects.

5.6. Inadequate Compensation Framework

The proposed compensation model grossly underestimates the long-term and cumulative impacts of transmission infrastructure on farming businesses. These effects extend far beyond the physical footprint of poles and wires—they encompass operational disruption, mental health impacts, increased biosecurity risk, landscape degradation, and the devaluation of highly productive and irreplaceable land. Current compensation offers are short-term, transactional, and fundamentally unjust. In many cases, farmers are left financially worse off, with reductions of up to 30% in farm value and potential losses exceeding $1 million per property. The EES fails to adequately plan for or account for these consequences. Landholders deserve a compensation framework that fairly reflects the enduring economic, social, and operational burdens imposed by transmission infrastructure.

5.7. Commercial Consent is Non-Negotiable

The principle of commercial consent must be central to any transmission development in Victoria. Forced acquisition, coercion, and statutory override of farmer concerns represent an erosion of property rights that undermines public trust and democratic planning. No transition is just if it is achieved at the expense of the rural communities who produce our food and fibre.

6. VFF Response to Chapter 15 – Agriculture and Forestry

Chapter 15 of the WRL EES attempts to quantify and mitigate the agricultural and forestry impacts of the WRL. However, from the perspective of the VFF and the farmers we represent, the chapter fails to accurately reflect the severity, complexity, and long-term nature of the project's disruption to agricultural enterprises.

2.1. Flawed Methodology: A Desktop Exercise Disguised as Engagement

Despite claims of consultation and field investigation, the EES relies heavily on desktop assessments and roadside inspections. While the chapter outlines extensive modelling and data analysis, this fails to substitute for genuine, on-farm collaboration with affected landholders. A project that has been denied access to farms cannot credibly assess the spatial, economic, or operational impact of transmission infrastructure on farming enterprises.

The result is a deeply flawed agricultural impact assessment that generalises complex mixed farming systems into oversimplified enterprise types, ignoring the interplay between land use, seasonal operations, and infrastructure. This top-down approach devalues the lived knowledge of farmers and undermines the legitimacy of the report.

2.2. Underestimation of Severity of Impact

The EES repeatedly downplays the operational impacts of the WRL by framing them in terms of aggregate regional losses, rather than assessing the practical, day-to-day disruptions to farming enterprises. This approach masks the real consequences of placing permanent infrastructure in the middle of working farm systems.

2.2.1. Cropping Inefficiencies: Compounding Operational Costs

Cropping enterprises will be forced to navigate around towers multiple times per season across various activities: sowing, spraying, fertilising, harvesting, and stubble management. These activities are conducted with precision equipment that relies on straight-line efficiency, GPS-guidance, and timing. The imposition of towers into paddocks fractures this efficiency and introduces constant navigational constraints.

Even in a "best-case scenario", where machinery is able to loop around the base of a tower, the cumulative time and input inefficiencies are significant:

- Each pass may require equipment to slow down, disengage implements, and manoeuvre cautiously around the base.
- A single tower in a paddock may result in dozens of such slow-downs per season, across multiple operations.
- The additional time, fuel use, and chemical inefficiencies translate into real costs.

Industry-based estimates indicate this could result in an additional cost estimated at $4,000 per year, per tower, factoring in machinery wear, fuel, labour, chemical over-application, and lost yield due to overlaps or missed strips.

This is not an abstract or one-off cost: it is a compounding annual inefficiency baked into the business for the lifetime of the project. This figure excludes the lost production on land immediately under or adjacent to towers, which may be left uncropped due to access difficulty, soil compaction, or safety concerns.

2.2.2. Aerial Applications

High-value horticultural, broadacre cropping and pastoral enterprises in the proposed WRL region rely heavily on aerial application, often multiple times per season, to achieve production targets and maintain crop health. During wet winters, aerial application is frequently the only viable means of applying fertiliser or controlling pests and diseases in crops such as cereals and oilseeds. Potatoes, in particular, are highly susceptible to disease, and once the crop reaches row closure—where plants in adjacent rows meet—ground access with tractors or machinery becomes impossible without causing plant damage and substantially increasing the risk of pathogen spread.

Transmission line easements will prevent the use of manned aircraft, due to safety and navigational concerns, thus creating a significant barrier to aerial application. This restriction will have direct implications for the management and productivity of high-yielding crops, horticultural enterprises and pastures. Transmission lines pose flight-safety hazards, limiting the safe operation of both fixed-wing and rotary aircraft, especially in fragmented paddocks where manoeuvrability is already constrained.

2.2.3. Irrigation Constraints

Although not formally designated as an irrigation district, the Section 2 project area has reliable rainfall, runoff, and significant groundwater reserves, and many landholders hold irrigation licences. Irrigation is widely used to establish or finish high-yielding cereal and oilseed crops, to grow out-of-season fodder for livestock, and to support summer horticultural production such as potatoes, pyrethrum, and niche seed crops.

Irrigation infrastructure in the proposed WRL district has evolved over time:

- **Solid-set irrigation**: Historically, irrigation relied on manually laid metal pipes with attached sprinklers. This system was fully compatible with existing transmission infrastructure when the last line was constructed.

- **Spray-gun irrigators**: The next stage of development introduced large sprinkler guns capable of watering strips up to 110 metres wide. This remains the most common technology in the district due to its adaptability to uneven topography and irregular paddock shapes. However, spray guns are prohibited on transmission line easements.
- **Centre-pivot and lateral-move irrigators**: These modern systems are both labour- and water-efficient. Centre pivots irrigate circular areas from a fixed central point, while lateral moves cover long, straight corridors. Their size varies depending on the number of spans, often extending several hundred metres. Although permitted under transmission lines, their operation is constrained by tower placement, often necessitating redesign or paddock realignment. In some cases, continued irrigation may not be feasible, thus drastically reducing land value and enterprise viability.

A key point of inconsistency exists in current easement guidelines: end guns fitted to centre-pivot and lateral systems are permitted, while stand-alone spray guns are prohibited. Producers are concerned that transmission line owners may impose future restrictions on end guns, further reducing irrigation efficiency.

In the Ballarat–Waubra corridor, where these systems are widely used, the inability to move equipment freely under transmission lines could require costly redesign or relocation. Given that such systems can cost hundreds of thousands of dollars to install, any reduction in irrigated capacity represents a major write-off and significantly undermines farm productivity.

2.2.4. Fair Estimation of the Impacts

The creation of transmission line easements introduces long-term constraints on aerial application, irrigation practices, and overall farm management. These constraints diminish production efficiency and reduce the flexibility of farming systems, imposing significant and ongoing financial losses over the lifetime of the infrastructure potentially 80 years or more.

Any infrastructure program design should therefore ensure that farmers are fairly and adequately compensated for the enduring economic impacts of these restrictions – the WRL proposed compensation model does not meet this requirement.

It is also important to note that each farm business is unique and the impact of building transmission assets on farmland need to be assessed on a farm-by-farm basis -a generic ‘formulaic approach’ will not properly capture individual farm impacts and is therefore unlikely to result in appropriate compensation.

The VFF has engaged with more than 150 farmers and landowners to understand the impact on their economic return of being required to move from their current production (for

example, potato growing or cropping) to grazing because of restrictions on farm business practices resulting from transmission easements.

This data has been used to develop several illustrative case studies to show the impact of transmission lines on farm businesses. These case studies are illustrative only, and as noted above the exact impact will vary from farm to farm.

Example 1: Forced Enterprise Change

The direct impacts of isolating the easement and associated land within the project envelope from existing farm operations may be manifested as a forced enterprise change, for example, only being able to graze lambs in the easement area rather than growing potatoes or cropping under irrigation.

As an example, and based on discussions with farmers, it is possible to estimate the impact on the returns to different farmers resulting from fencing off an easement 100 meters wide and one kilometre long (10 hectares of land).

If a famer involved in irrigated potato growing were forced to change from growing potatoes to grazing lambs, they would suffer an 82 percent drop in return. Similarly, a grains producer (depending on the quality of the land they farm) would suffer a reduced return per hectare of land impacted by the easement of between 47 and 60 percent.

Other farmers will suffer impacts depending upon the size of the easement and the nature of their farming business – this is why the nature of the impact needs to be assessed on an individual farm by farm basis.

These direct financial impacts are ongoing for the lifetime of the infrastructure. Lower returns would be reflected in the market value of the easement area, and the farmer should receive compensation for these losses.

It should be noted that the financial impacts noted above relate to operating losses only, i.e. they are likely to be significantly underestimated, because they do not include the capital costs of:

- Erecting and maintaining exclusion fencing to secure livestock
- The provision of other infrastructure necessary for grazing, for example water troughs, facilities to load livestock onto trucks etc.
- Changes to existing farm infrastructure still used for the original production (for example, modifying irrigation equipment.
- Labour inefficiencies and loss of economies of scale which could impact overall returns on the land.

These costs will need to be assessed on a farm-by-farm basis.

Example 2: Taking account of severance and disturbance

The impact of the easement is more than just the land covered by the actual easement itself. The quarantining of a section of land on the farm can have significant impacts on the farm business.

These impacts will vary from farm to farm and so an onsite farm specific assessment and evaluation is required to fully understand the impact of the easement on the ongoing operation of the farm.

The location of the easement on the property can impact production beyond the area of the actual easement.

For example, in Figure 1 the paddock is approximately 22.3 hectares in size and the easement running parallel to the boundary is approximately 4.15 hectares. Assuming the remainder of the paddock can still be accessed and farmed as before the easement was acquired, the impact on the farmer is the loss of the 4.15 hectares to normal production. Assuming this is the loss of potato production and is replaced by grazing the farmer forgoes $23,862 in income per year for the life of the easement.

Figure 1: Easement parallel to boundary

In this case there is no severance or disturbance impact included in the estimated impact.

In Figure 2, the easement effectively cuts the same paddock into two. The area of the easement is approximately 7 hectares. The effective direct loss to the farmer of being unable to grow potatoes but instead having no option but to graze lambs on the easement is $40,250 per annum.

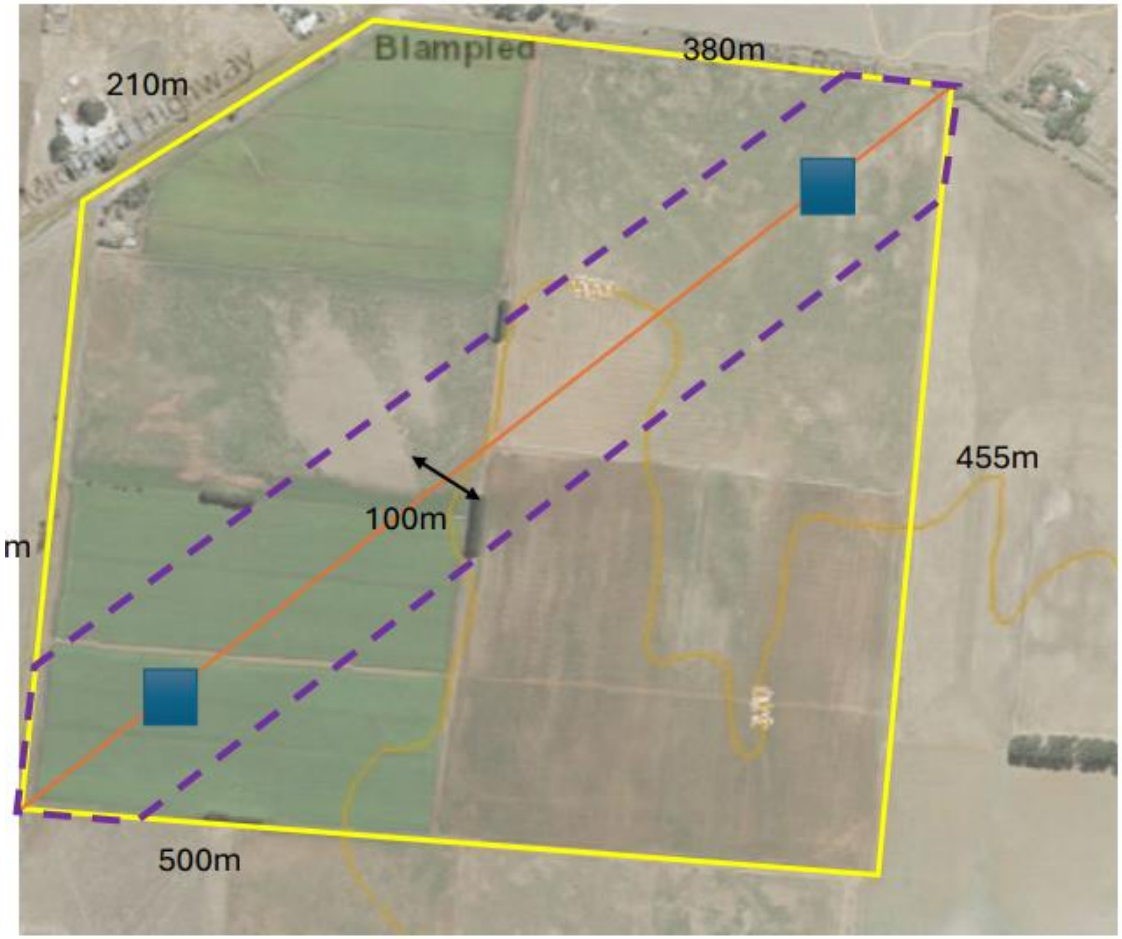

Figure 2: Easement diagonal to boundary

However, the dissection of the paddock may mean that other areas of the paddock can no longer be used to grow potatoes even though they are not part of the easement. For example, it may not be possible to drive machinery under the transmission line to get to the other side of the paddock or restrictions on irrigation mean that part of the land can no longer be used for horticulture. These impacts will affect the farming business for the life of the easement and transmission infrastructure.

If we assume that the bottom corner of the paddock can no longer be used to grow potatoes due to lack of irrigation, it can also only be used to graze lambs. This area which is outside the easement – measures approximately 9.1 hectares. Grazing lambs in place of growing potatoes will result in the farmer losing $52,325 per annum on this section of the paddock.

The total impact of the loss on the acquired easement and the section of the paddock which can no longer be used for potato production is significant. As a result of a 7-hectare easement the farmer is losing $92,575 per annum, which occurs for the life of the easement and transmission asset, in addition to incurring devaluation in land value across the area.

These combined losses must be considered when determining compensation for hosting transmission assets – the key point being that compensation models need to consider impacts on profitability and land value beyond the area of land impacted by the easement.

These examples assume that there is an alternative product – lambs – which can be grazed on land previously used for potato production. If no farming activity is practical, for example, where the land cannot be accessed by stock, the costs in terms of forgone income imposed on the farmer is even higher. In fact, the farmer may incur direct costs if they need to manage weeds or pest animals on the now unfarmed land.

2.2.5. Livestock Enterprises: Movement, Access and Management Impacts

For livestock producers, the introduction of towers and transmission easements fragments farm layouts, disrupts internal movement patterns, restricts access to stockyards, and reduces visibility across paddocks. These physical barriers complicate mustering and transport, increase the risk of injury to stock and workers, and add time and labour to even routine management tasks.

The EES downplays these disruptions as “temporary” or “manageable”, yet in reality, many will be permanent for the life of the infrastructure. They will require ongoing workarounds that undermine efficiency and increase operating costs. The assumption that farmers can simply “adapt” ignores the embedded planning, infrastructure investment, and interlinked systems that underpin successful livestock enterprises.

During the construction phase, large areas of pasture and areas used for cropping and potato production will be fenced off or rendered inaccessible as noted above, immediately reducing available grazing land. In many cases, this will force producers to either de-stock or seek agistment elsewhere—an increasingly scarce and costly option, particularly during drought when feed availability is already under extreme pressure. In such periods, the loss of even small areas of pasture can have outsized consequences, triggering forced sales of breeding stock, disrupting production cycles, and eroding the genetic base of herds and flocks built up over decades.

Example 3: Cost Implications of Restricted Access

If access is restricted to a paddock during the construction phase of the Western Renewables Link (WRL), the impacts on livestock operations are substantial, and are likely to be replicated across the region.

For a typically sized mob of 150 ewes in Section 2, producing 210 lambs per season—farmers would need to purchase supplementary fibre and protein in the form of pellets and hay for the duration of restricted access, assumed to be a full year. Over 365 days, the flock would require approximately 110 tonnes of feed Dry Matter at an estimated cost of $500 per tonne, resulting in an additional expense of around $68,438 per farm.

The financial impact is compounded when considering multiple properties across Section 2. For example, if ten farms are similarly affected, the total cost of supplementary feed alone would approach $684,000. These figures account only for immediate costs of replacing lost feed; they do not capture additional labour costs, rehabilitating damaged areas, or broader operational disruptions such as restrictions on aerial application, irrigation access, machinery movement, or farm labour scheduling.

The cumulative economic burden also interacts with other stressors, including drought recovery, market fluctuations, and seasonal variability, multiplying the long-term impact on farm viability. The compounding nature of these costs illustrates how even temporary construction disruptions can generate structural and intergenerational effects, eroding productivity, profitability, and resilience. This example underscores the urgent need for robust mitigation strategies and fair compensation frameworks to ensure that rural communities are not left to absorb the permanent costs of transmission infrastructure.

These impacts will be disproportionately severe for farms and businesses, where operational margins are narrow and enterprise flexibility is limited. Unlike larger enterprises, smaller farms have fewer paddocks to rotate stock, less capacity to reconfigure laneways or yards, and less access to capital for major infrastructure changes. For these businesses, the cost of redesigning fencing, reconfiguring access routes, or building new yards to accommodate tower placement could easily exceed $500,000, a material cost which would represent a significant financial burden, which is not acknowledged or compensated under the current framework.

In short, for livestock producers, especially smaller and more intensively managed properties, the WRL will not simply be an inconvenience. It represents a permanent structural constraint on farm operations, magnified in times of drought and compounded by the lack of viable agistment options. These are not “manageable” disruptions; they are enduring productivity losses that will weaken the resilience and viability of affected enterprises.

2.2.6. Lack of Whole-Farm System Modelling

There is no evidence that full enterprise cycles—covering both cropping and livestock—were modelled to determine cumulative impacts over time, and no discounted cashflow (DCF) analysis was provided to assess longer term impacts. Nor is there any meaningful recognition of the impacts on farming business continuity, intergenerational planning, or mental health stress created by the uncertainty, fragmentation, and disruption associated with transmission easements. Without whole-farm system modelling, the long-term economic and operational costs to individual producers are systematically underestimated.

2.2.7. Agricultural Land Treated as a Flexible Trade-Off

While Chapter 15 recognises the productivity and economic value of the land traversed by the WRL, this recognition does not translate into genuine prioritisation. Productive farmland is treated as something to be worked around or "rehabilitated" rather than actively protected from damage. Even with acknowledgment of areas with the most productive soils (e.g. Waubra to Gordon), there is no route avoidance based on agriculture as a hard constraint—only adaptation or compensation. Agricultural areas should have been designated as strategic constraints in route selection. Instead, they are treated as flexible trade-offs within a mitigation hierarchy that always prioritises the engineering needs of the transmission line.

2.2.8. Inadequacy of Compensation Framework: Compensation is No Substitute for Protection

The compensation framework offered is reactive and transactional. It is based on physical disturbance and foregone income but fails to compensate adequately for:

- Devaluation of land linked to forced enterprise change and access restrictions
- Operational inefficiencies
- Future land use limitations
- Increased input costs (e.g. ground-based spraying replacing aerial, if feasible)
- Mental health impacts.
- Interruption to investment cycles and enterprise planning.

The EES positions financial compensation as the solution to impact, without acknowledging that some agricultural losses such as business autonomy, or disrupted succession pathways are not financially quantifiable.

2.3. Environmental Performance Requirements (EPRs): Aspirational, Not Enforceable

While Chapter 15 outlines a range of Environmental Performance Requirements (EPRs), they rely on AusNet's discretion, landholder engagement, and voluntary mitigation. The VFF is concerned that these requirements:

- Are non-binding and lack robust enforcement mechanisms.
- Fail to account for the unequal power dynamics between landholders and project proponents.
- Do not ensure timely, independent arbitration or appeal pathways for disputes.

Mitigation frameworks built around trust and cooperation cannot succeed where trust has already been lost.

2.4. Conclusion and Recommendations

Chapter 15 of the WRL EES presents a sanitised and incomplete version of the agricultural consequences of this project. Its failure to engage meaningfully with affected landholders, its superficial treatment of enterprise-level impacts, and its overreliance on compensation and flexible mitigation measures render it inadequate as a basis for project approval.

The VFF calls on the EES Inquiry Panel to:

1. Reject the current agricultural impact assessment as incomplete, inadequate and misleading.
2. Demand a full re-assessment of agricultural impacts, co-designed with affected landholders.
3. Mandate that productive agricultural land be treated as a route constraint in transmission planning.
4. Establish independent oversight for the design and delivery of compensation and mitigation measures.
5. Recommend the rejection or redesign of the WRL route based on its disproportionate and irreversible impact on Victorian agriculture.

7. Response to Chapter 14 – Economics

Chapter 14 of the Western Renewables Link (WRL) EES presents a high-level economic analysis of the proposed transmission line and associated infrastructure. While it purports to consider both macroeconomic and local industry-level impacts, the treatment of agriculture the dominant economic contributor across much of the project corridor is grossly inadequate and fails to satisfy the evaluation objective to “avoid or minimise adverse effects on land use, social fabric… [and] businesses including farming.”

This chapter proceeds from an abstract, modelled viewpoint with little evidence of meaningful engagement with actual agricultural businesses or their economic realities. It fundamentally overlooks the long-term and structural economic damage transmission infrastructure will impose on farming enterprises and regional food production.

7.1. Key Criticisms

1. Exclusion of Agriculture from Economic Impact Assessment

The most glaring failure of Chapter 14 is the deliberate exclusion of the 'Agriculture, Forestry and Fishing' sector from its business impact analysis. The chapter states these impacts are "assessed in detail" in Chapter 15 (Agriculture and Forestry), but this division results in a siloed and insufficient treatment of agriculture's economic significance, particularly in key regions such as the Grampians, Pyrenees and Daylesford-Creswick-Ballan, where agriculture contributes up to 28% of Gross Value Added (GVA).

Failure to Account for Agricultural Impacts – Absence of Stringing Bays in Section 2

The Environmental Effects Statement (EES) does not provide a comprehensive or transparent account of the economic impacts on agriculture, as expressly required by the Terms of Reference. Agriculture has been treated as a peripheral consideration, notwithstanding its status as the predominant land use and a central driver of the regional economy.

In Section 2 of the alignment, transmission towers are located within easements and, in numerous cases, in the centre of productive paddocks. Despite this, the EES contains no detail regarding the location or operation of stringing bays in this section. This omission constitutes a critical failure in disclosure. Stringing bays are not incidental works; they determine the scale and location of construction activity, the extent of machinery movements, and the period for which land will be removed from productive use.

The absence of stringing bay information renders the assessment incomplete and materially deficient. Without this information, it is not possible to evaluate the full economic, operational, and cumulative impacts of construction on agricultural enterprises. The failure to disclose these details undermines the integrity of the assessment process and prevents the EES from satisfying its Terms of Reference in respect of agricultural impacts.

2. No Quantified Loss Estimates for Farm Businesses

While other sectors such as manufacturing and tourism are modelled or discussed in terms of cost and benefit, no estimates are provided of the economic losses likely to be experienced by impacted farm enterprises due to:

- **Reduced productivity or loss of use** from fragmented paddocks and easements.
- **Increased operating costs**, especially in cropping enterprises where machinery must navigate tower bases multiple times annually.
- **Biosecurity restrictions**, limiting movement of livestock and introducing new infection risks.

- **Fodder and water losses**, particularly where aerial application or central pivots are no longer feasible.
- **Property devaluation**, due to towers reducing land utility and market attractiveness.

For example, farmers have reported that navigating machinery around a single tower will incur additional operating costs likely to exceed $3,000 per year, when accounting for fuel, labour, inefficiency, and time. A property with multiple towers will see this cost multiplied significantly yet no such costings are acknowledged.

3. Concerns with CGE Modelling

The VFF has concerns with the CGE modelling presented in the chapter, including:

- That it obscures local disadvantage
- Does not seem to have taken account of flow on effects
- That no sensitivity analysis has been presented.

Local disadvantage is obscured

The computable general equilibrium (CGE) modelling presented in this chapter provides a broad national perspective on GDP and investment uplift, but it masks substantial localised economic and operational harm.

While transmission infrastructure may contribute to growth in Victoria's economy by enabling new renewable energy projects, this growth is not equitably shared. Large sections of the Western Renewables Link (WRL) are explicitly excluded from a Renewable Energy Zone (REZ) under the VicGrid plan, a decision acknowledged by both the Victorian Government and VicGrid as necessary to protect strategically important farmland. Despite this exclusion, the WRL is still proposed to traverse these highly productive areas, including regions responsible for approximately 40% of Victoria's potato production and other high-value crops.

The result is a clear misalignment between policy intention and project implementation. The economic benefits of the WRL largely flow to developers, metropolitan electricity consumers, and government revenue streams, while farmers absorb permanent operational and capital losses. These include reductions in crop yields, restrictions on aerial application and irrigation, increased biosecurity risk, and the ongoing devaluation of productive farmland. For many properties, these losses exceed $1 million over the life of the asset, leaving landholders substantially worse off with little recourse.

This is not a net benefit. It represents a transfer of costs from state infrastructure investment onto private landholders and businesses, undermining agricultural productivity, local economic resilience, and community trust. The WRL's exclusion from a REZ should serve as a clear signal that it is not appropriate to site major transmission infrastructure through some

Victoria's most productive farmland, and the EES should recommend that the project not proceed in its current form.

Flow on impacts from reduction in agricultural incomes are not considered

The analysis presented fails to take account of the impact of farm businesses on the wider agricultural supply chain.

Negative economic impacts on farmers will feed through to reduced activity along the agricultural supply chain. Other businesses supplying and servicing the agricultural sector, such as fencing contractors, fertiliser and other input suppliers, livestock transporters and professional providers such as agronomists will face reduced demand from famers due to reduced ability to pay.

These impacts will have flow on affects to other areas of the State's economy. However, given the assumptions in the CGE modelling, these effects will not be accurately reflected in the results. The CGE results therefore present the proposed project in an unrealistically positive light.

Lack of sensitivity analysis

The Victorian Farmers Federation (VFF) is deeply concerned that the CGE modelling underpinning this chapter does not appear to include any sensitivity analysis. Sensitivity analysis is critical for understanding how changes in key assumptions or inputs—particularly those relating to agricultural productivity and land-use impacts—affect the model's outcomes. Given the VFF's strong concerns that the economic and operational impacts on farmers are significantly understated, a robust assessment would require modelling multiple scenarios, including those where agricultural producers experience negative outcomes.

Without such analysis, it is impossible to determine how sensitive the reported benefits are to even minor changes in assumptions, such as variations in crop yields, farm income, or operational restrictions caused by transmission infrastructure. The absence of scenario testing raises serious questions about the reliability and credibility of the modelling, particularly for evaluating the distributional impacts of the project. In effect, the current analysis presents a one-sided view of benefits while failing to capture the potential costs borne by rural communities and primary producers. A comprehensive sensitivity analysis is essential to ensure that decision-makers fully understand the risks and distributional consequences of the Western Renewables Link.

4. Flawed Residual Impact Assumptions

The chapter declares the residual economic impact on most industries to be "neutral", relying heavily on Environmental Performance Requirements (EPRs) to address potential harm. This is speculative and unsubstantiated.

Mitigation measures—such as temporary business support or stakeholder engagement—do not reverse lost productivity, disrupted operations, or degraded land values. Agriculture is a long-term investment business, and short-term strategies or consultation processes will not cancel out structural constraints imposed by tower placements and transmission corridors.

Farms within Section 2 of the Western Renewables Link (WRL) corridor operate at a high intensity, requiring careful planning, rapid decision-making, and continuous management to maintain productivity and profitability. Operations are time-sensitive, with crop sowing, fertilisation, irrigation, pest control, and harvesting all following tightly coordinated schedules. Taking even a single paddock out of production during construction disrupts this delicate balance, creating immediate financial loss and cascading effects across the broader farm enterprise.

The economic consequences are cumulative. A disrupted paddock can delay subsequent sowing or harvesting cycles, increase input costs, reduce overall yield, and compromise biosecurity or crop quality. These impacts are amplified in mixed farming systems, where livestock and cropping rotations are interconnected; for example, loss of fodder in one paddock necessitates supplementary feed purchases, which in turn affects labour allocation and operational efficiency elsewhere on the farm. The structural constraints imposed by transmission towers and corridors therefore extend far beyond the footprint of the infrastructure itself, creating multi-season, intergenerational consequences for farm viability. Section 2 is particularly sensitive because it encompasses some of Victoria's most productive and climate-resilient farmland, including regions responsible for a substantial portion of the state's potatoes, cereals, and high-value crops. The WRL's construction and ongoing operation threaten not only immediate productivity but also the long-term operational flexibility and economic resilience of these highly managed farms.

5. Drought and Other Climatic Extremes Amplify Economic Vulnerability

The economic assessment fails to account for the potential effect of drought, extreme rainfall and climate change on agricultural businesses already under pressure from the WRL proposal. Many farms in the affected corridor are currently managing severe rainfall deficits, with livestock and cropping operations experiencing significant input cost pressures, reduced yields and lower margins. In this context, any further disruption whether it be loss of productive

land, increased operational costs due to towers, or uncertainty around costs imposed by land access poses a serious threat to farm liquidity.

The assumption in Chapter 14 that farming enterprises will "adapt" over time ignores the real-time economic challenges faced by these businesses, particularly under drought stress. Infrastructure impacts must be assessed within the broader climate risk environment—something this EES has entirely overlooked.

7.2. VFF Recommendations

To meet the evaluation objective and provide a truthful accounting of the economic consequences for agriculture, the following actions must be taken:

1. **Full economic modelling of agricultural losses** must be included in this chapter, not diverted to Chapter 15. This modelling should incorporate:
    - Increased cost of operations per tower and per property.
    - Yield and productivity losses (e.g., due to spraying inefficiencies or lost arable land).
    - Long-term land devaluation metrics.
    - Impacts to vertically integrated enterprises (e.g. on-farm processing, agritourism)
    - Impacts to the wider food and agricultural supply chains.
2. **Engagement with affected farmers** must form part of the economic assessment methodology. This includes field inspections and detailed farm system modelling, not just stakeholder interviews.
3. **Agricultural areas must be treated as a constraint** in routing decisions, not simply as land available for linear infrastructure. Economic contribution of prime agricultural land must be valued on par with energy or transport corridors.
4. **Compensation must be linked to actual economic loss**, Compensation for easements cannot be arbitrary. It must be directly tied to the genuine economic impact on the farm, including opportunity costs, reduced productivity, long-term impairment of farm viability, and reduced land values. Mitigation strategies must recognise that the true cost of disruption extends beyond immediate losses to the ongoing limitations imposed on farm operations. Compensation assessments must be revisited whenever guidelines are updated and reassessed as accepted farming practices evolve — including the adoption of technologies such as virtual fencing — to ensure landholders are fairly compensated for changes in operational costs and land-use potential.

7.3. Conclusion

Chapter 14 presents an incomplete view of the economic implications of the WRL project. By ignoring agriculture's real economic role and excluding farm and supply chain losses from quantification, the EES fails to meet its stated objective of minimising harm to affected businesses. If unamended, this chapter is effectively a justification of a foregone conclusion, rather than a genuine impact assessment.

The VFF strongly urges a full reconsideration of the economic impact framework and integration of farm-level economic modelling to restore credibility to the assessment.

8. Response to Chapter 13 – Bushfire

8.1. Overview

Chapter 13 of the EES outlines the bushfire risk associated with the construction and operation of the Western Renewables Link (WRL). Whilst the report acknowledges the WRL will traverse high bushfire risk areas and identifies theoretical mitigation measures, the VFF contends that this chapter lacks adequate grounding in on-farm realities, underplays the risks to agricultural assets, and places excessive trust in compliance-based mitigation without accounting for response limitations in rural fire emergencies.

The chapter presents an overly confident view of AusNet's capacity to manage and mitigate bushfire risk without fully appreciating the unforgiving and compounding consequences of fire events on farming enterprises.

8.2. Key Concerns

1. Bushfire Risk is Understated Given Unique Features of Agricultural Landscape

The proposed WRL route traverses areas of high and very high bushfire risk, as acknowledged in the EES. These areas are not just at risk environmentally—they are also productive agricultural zones, with significant on-ground infrastructure (fencing, pasture, crops, livestock, machinery, hay and fuel storage) that is extremely vulnerable to fire.

The assessment does not adequately address the unique risks created by infrastructure failures in open paddocks, where fire can move rapidly across dry grassland with limited natural firebreaks. Human and livestock safety, pasture loss, haystack ignition, and long-term recovery from fire events are not adequately considered in terms of agricultural impact.

2. Reliance on "Low Likelihood" Assumptions is Dangerous

The chapter makes repeated assertions that the likelihood of transmission infrastructure igniting a fire is "very low", especially with appropriate mitigation measures in place. However, this assessment fails to sufficiently account for:

- Extreme fire weather events, which are increasing in frequency and intensity.
- The risk of equipment failure, conductor clashing, or accidental ignition during construction and maintenance.
- The cumulative risk of towers interacting with dry grasslands, wind-driven conditions, or existing landscape fuel loads.

Recent high-profile infrastructure-related fires across Australia have shown that "low likelihood" events can have catastrophic outcomes when they do occur. Rural communities cannot afford for infrastructure developers to get it wrong, even once.

3. Lack of Specific Commitments to Fire Prevention on Farms

The Environmental Performance Requirements (EPRs) listed in Chapter 13 are high-level and lack specific obligations around fire prevention on private agricultural land. There are no enforceable guarantees regarding:

- Vegetation clearance protocols under and around towers in grazing or cropping paddocks.
- Maintenance of line height/prevention of sagging over time
- Fuel load management near easements in consultation with landholders.
- Machinery movement restrictions during declared fire danger periods.
- Real-time communication with landholders during fire weather days.

Farmers cannot be expected to carry the bushfire risk burden without clear commitments and ongoing mitigation activities from project proponents.

4. Firefighting Access and Liability Implications Remain Unclear

Chapter 13 offers no clarity on how firefighting access will be managed in the event of an ignition on or near WRL infrastructure—particularly when infrastructure is located in the middle of privately owned farmland.

The following points are unclear:

- Who is responsible for suppressing fires near transmission towers?
- Whether transmission corridors will be accessible to emergency vehicles during high-risk periods
- What level of coordination exists between AusNet, CFA, and local brigades for transmission-specific risks?

Additionally, landholders face potential liability if fire spreads from their land, even if the source is project related. This creates an unacceptable legal and insurance risk for farmers.

8.3. VFF Recommendations:

To protect farming communities and ensure accountability, the VFF recommends the following:

1. Full bushfire risk modelling must be conducted in partnership with local brigades, councils and landholders, including farm-level fire scenario testing.
2. AusNet must publicly commit to ongoing, enforceable fire prevention obligations on all private agricultural land, including vegetation management, access planning, and operations protocols during high fire risk periods.
3. Farmers must be indemnified from any legal or financial liability in the event of a bushfire linked to WRL infrastructure.
4. Compensation frameworks must reflect long-term agricultural recovery costs, including fencing, pasture regrowth, loss of stock, and business interruption—none of which are currently acknowledged in this chapter.
5. The WRL must not proceed through high-risk bushfire areas without clear risk avoidance strategies, not just mitigation.

8.4. Conclusion

Chapter 13 fails to provide the necessary assurance that the Western Renewables Link can be developed, operated and maintained without exposing rural landholders to unacceptable bushfire risks and potentially crippling legal liability. The VFF is not satisfied with mitigation being treated as a compliance box-ticking exercise when lives, livelihoods and rural communities are at risk.

A fire-safe energy transition must start with landholder safety and protection—not afterthoughts in a risk register. Without a credible, co-designed and enforceable bushfire management plan, the WRL cannot be considered a safe or responsible project.

9. Response to Chapter 16 – Aviation

9.1. Overview

Chapter 16 of the Western Renewables Link (WRL) Environment Effects Statement (EES) attempts to address the aviation impacts associated with the construction, operation and decommissioning of the transmission project. While the chapter acknowledges the existence of aircraft landing areas (ALAs), low-flying operations and aerial agricultural activities, its treatment of the issue is overly simplistic, lacks meaningful engagement with agricultural aviation users, and grossly underestimates the operational consequences for farming enterprises.

The VFF contends that aviation impacts—particularly those relating to aerial agriculture and emergency response have been minimised through a narrow regulatory lens, without sufficient regard for practical, on-ground disruption to food production, safety, and business viability.

9.2. Key Concerns

1. Agricultural Aviation Treated as a Footnote

Chapter 16 of the EES acknowledges that aerial agricultural applications (e.g. spraying and fertilising) are undertaken within the Western Renewables Link (WRL) corridor but fails to quantify their scale, frequency, or the economic reliance of local enterprises on this activity. This omission disregards a critical production system upon which many Victorian cropping operations depend, particularly those with large paddock footprints, sensitive soil structures, or tight seasonal spraying windows.

In Section 2 of the proposed alignment, between Smeaton and Newlyn, aerial spraying operators have confirmed they will no longer be able to safely operate due to the introduction of transmission towers and lines exceeding 80 metres in height. These structures create permanent “no-go zones” for fixed-wing aircraft and helicopters, removing aerial application as a viable farming tool across significant tracts of highly productive land.

The EES suggestion that pilots may simply make “minor adjustments” to flight paths or descent profiles is both inaccurate and misleading. Low-level agricultural aviation cannot be safely or effectively conducted around obstructions of this scale, particularly in areas with existing variations in topography and navigational challenges. Flight path alteration in close proximity to towers would materially compromise both coverage and safety, creating unacceptable operational risks for pilots and landholders alike.

By treating agricultural aviation as a peripheral issue, the EES fails to meet its Terms of Reference requirement to provide a comprehensive assessment of economic and operational impacts on agriculture. The loss of aerial application capacity is not incidental; it represents the permanent removal of an essential production method, with direct consequences for crop yields, pest and disease management, timeliness of operations, and overall farm viability.

2. Permanent Loss of Aviation Utility on Farms

The EES notes that Aircraft Landing Areas (ALAs) on farms are not registered or certified and therefore implies that their disruption is less significant. This completely misses the point: these ALAs are critical, privately maintained infrastructure used for aerial application, firefighting, and emergency medical access.

The erection of towers in and around these strips makes safe takeoff and landing impossible. Once tower lines are installed across or near these airstrips, they are effectively rendered inoperable, permanently removing aviation access from those farms. This outcome is not a "minor" inconvenience—it is a permanent degradation of operational capacity and destruction of an asset, which should be treated as a major residual impact.

3. Firefighting and Emergency Response Risks Overlooked

Chapter 13 of the EES acknowledges the growing threat of bushfire in the region. However, Chapter 16 fails to adequately assess how the introduction of new vertical infrastructure will directly obstruct both ground and aerial firefighting operations.

In the Smeaton to Newlyn corridor, for example, proposed towers sited adjacent to and across Birches Creek will significantly impede access for both fire suppression and containment. Birches Creek is a natural break that has historically provided strategic access for firefighting units. The placement of transmission towers and associated infrastructure across this landscape will constrain the movement of crews, equipment, and machinery, undermining established bushfire management strategies.

More critically, the introduction of transmission towers exceeding 80 metres in height will permanently compromise aerial firefighting capability. Firebombing aircraft and helicopters require unobstructed low-altitude airspace to operate effectively, often flying rapid circuits across multiple paddocks, valleys, or watercourses. The creation of hazard corridors by these towers will force diversions, delay drops, and reduce the effectiveness of suppression efforts. In catastrophic fire conditions, such as those seen during the St Patrick's Day fires, even marginal delays in aerial or ground access can prove decisive in whether a fire is contained or escalates into a regional disaster.

The recent Mount Cole fires underscore this risk. These fires demonstrated the necessity of rapid and unimpeded aerial and ground access to halt fast-moving fronts in steep, complex terrain. Any delay, obstruction, or reduced aerial access increases the likelihood of fire escaping initial attack and threatening broader regions. By superimposing a new network of high-voltage towers across the landscape, the WRL project would multiply these risks.

Rather than strengthening fire resilience, the Project will embed new structural impediments that heighten vulnerability in future fire events. It is wholly inadequate for this heightened risk to be classified as "minor" and managed solely through Aeronautical Information Publication (AIP) notifications. The EES fails to provide a realistic assessment of how firefighting services will adapt to this new vertical infrastructure, nor does it quantify the compounded risks to life, property, and agricultural assets.

The Birches Creek case above is illustrative, not exceptional. Similar constraints will be repeated at multiple points along the alignment, creating a cumulative risk multiplier across the entire WRL corridor. Far from being incidental, the proposed towers introduce systemic barriers to bushfire management in a region already identified as facing escalating fire threats due to climate change.

4. Mitigation Measures Are Passive and Procedural

The EES relies heavily on notification systems (e.g. AIP Supplements) to alert the aviation community of project activities. While these may satisfy regulatory requirements, they do nothing to address the actual impact on farmers, who lose access to aerial spraying, have ALAs compromised, and face higher input costs or productivity losses.

Further, the EES offers no clear measures to assess or offset lost aviation access for farming operations. There is no commitment to:

- Compensation for loss of aerial access or crop yield impacts.
- Assessment of alternate operational solutions and compensation for higher associated costs (e.g. drone-based application).
- Re-design or relocation of towers to preserve critical flight paths or ALAs.

5. Lack of Engagement Has Led to False Assumptions Around Aerial Spraying

The EES makes critical errors in its assumptions around the use of aerial spraying, particularly in the highly productive Waubra to Ballan corridor (Section 2). Due to poor ground access in wet winters, many farmers across this region rely heavily on aerial application to manage crop protection, nutrient delivery and timely intervention during peak growth periods. This is not an occasional activity, it is a core operational tool that underpins yield reliability and crop quality in difficult seasonal conditions. The lack of direct engagement with local farming

businesses has resulted in this reality being completely overlooked. The presence of transmission towers and lines across these paddocks will, in effect, prohibit aerial access, particularly for fixed-wing aircraft, leading to reduced productivity, increased disease pressure, and unmanageable delays in crop management. The EES has not assessed these consequences nor accounted for them in its economic or agricultural impact modelling, further highlighting its disconnect from on-ground practice.

6. WRL Will Also Disrupt Emerging Aerial Technologies, Including Drones

In addition to traditional fixed-wing and rotary aircraft, the growing adoption of agricultural drones for precision spraying in high-value crops—including potatoes, vegetables, and other intensive horticulture—is transforming farm management practices across the region. These drones rely on unobstructed, low-altitude airspace to operate safely and efficiently, particularly when performing automated spray patterns, GPS-guided applications, or other precision tasks.

The erection of transmission towers and lines across productive paddocks will directly interfere with these flight paths, creating significant navigational hazards and rendering drone operations unsafe or impractical in affected areas. The EES fails entirely to recognise this impact, despite drones representing not a future possibility but a current and rapidly expanding technology critical to modern crop management.

This omission is particularly acute for the intensive production areas between Ballarat and Ballan, where GPS-enabled, pre-programmed drones are increasingly used to maximise efficiency, reduce chemical inputs, and minimise soil disturbance. Unlike manually controlled aircraft, these automated systems cannot simply be flown around fixed infrastructure without compromising coverage, accuracy, or safety.

By neglecting to account for these emerging technologies, the EES fails to capture the full spectrum of agricultural impacts. The WRL risks stifling innovation and undermining productivity gains at precisely the moment Victorian agriculture is embracing smart, low-impact, and technology-driven solutions. Any assessment that does not consider these impacts is inherently incomplete and inconsistent with the Terms of Reference.

9.3. VFF Recommendations

To address these significant failings, the VFF makes the following recommendations:

1. Classify disruption to aerial agricultural operations as a “major” impact, with corresponding mitigation, compensation and avoidance measures.
2. Map and protect ALAs and known aerial application corridors as constraints during route selection, not post-construction considerations.
3. Commit to consultation with aerial applicators and affected farmers to co-design EPRs that reflect operational realities.
4. Provide compensation to affected landholders where aerial application becomes unviable, either through direct compensation for productivity losses or alternate land management cost assistance.
5. Avoid tower placements near private airstrips, aerial spraying corridors, and known emergency aviation routes through rerouting or undergrounding where possible.

9.4. Conclusion

Chapter 16 of the WRL EES fails to meaningfully engage with the real-world aviation impacts facing agriculture, particularly in relation to aerial application and emergency services. Its reliance on desktop assessments, passive notifications, and regulatory minimums will not protect aviation-dependent farming businesses or communities in high-risk fire zones.

If the WRL proceeds in its current form, farmers will permanently lose critical operational capacity, with no meaningful redress. The VFF urges the Inquiry Panel to recognise this as a significant and unacceptable impact that must be rectified before any approval can be considered.

10. Response to Chapter 5 – Project Development

10.1. Overview

Chapter 5 of the WRL EES purports to provide a transparent and rigorous explanation of how the WRL's route was selected, how alternative options were considered, and how consultation informed the process. In reality, this chapter whitewashes a process marked by poor conduct, lack of transparency, and widespread disregard for landholders and local communities.

From the VFF's perspective and that of many farming families along the proposed corridor, this chapter is a disingenuous retelling of events. It describes a process that is theoretical, top-down, and proponent-led, rather than one that reflects genuine, collaborative or community-informed planning. It fails to address the profound and ongoing harm caused by the treatment of landownerds by AusNet since the project's inception.

10.2. Key Concerns

1. False Narrative of Genuine Community Consultation

Chapter 5 repeatedly claims that the route development process was "informed by stakeholder feedback" and "engaged local communities". This is not only misleading—it is fundamentally untrue and moreover offensive to the hundreds of landholders who have had no voice in the process.

Many affected farmers report they were never directly contacted by AusNet, even though their properties were clearly impacted. Others had AusNet employees appear unannounced, demanding access and using threats of compulsory acquisition or legal escalation to intimidate landholders into compliance. This is not engagement. It is coercion.

These stories are widespread and well-documented through VFF and local advocacy group channels. The reality on the ground is a stark contrast to the sanitised version presented in Chapter 5.

2. Route Selection Lacks Transparency and Strategic Integrity

The route development process described in Chapter 5 lacks meaningful transparency and strategic foresight. Decisions appear to have been made to suit technical convenience and cost minimisation for the proponent not to reflect agricultural land value, environmental constraints, cultural heritage or social licence.

The failure to consider agricultural land as a constraint rather than an opportunity—has led to tower placements across highly productive paddocks, near homes, and through culturally and environmentally sensitive areas.

Requests from landholders to explore undergrounding or alternate corridors have been routinely ignored or dismissed. In many cases, farmers learned more about the route from media reports or mapping leaks than from the project team themselves.

3. Failure to Build Social Licence or Earn Trust

The chapter fails to acknowledge the basic truth that AusNet has not earned the trust of the communities it seeks to impose this project upon. In many cases, the company has actively damaged relationships with landowners through:

- **Aggressive behaviour** during access negotiations.
- **Inconsistent and misleading communication**.
- **Unresponsiveness to feedback**, with landholders reporting repeated delays, unanswered calls, and broken commitments.
- **Refusal to provide clear answers** about compensation, tower design, or routing rationale.

This pattern of disrespect has left farmers feeling voiceless, isolated, and deeply disillusioned with both AusNet and the broader energy transition process.

4. Disregard for Long-Term Rural Community Cohesion

AusNet's conduct throughout the WRL project cannot be glossed over or downplayed. Attempts within the EES to sanitise these failures are not only a breach of proper process but have also exacerbated the mental health pressures experienced by landholders and local communities.

Chapter 5 completely fails to acknowledge the social and psychological toll of the project, effectively ignoring the very real consequences of repeated coercion, misinformation, and aggressive engagement practices.

The route development process has caused significant social fracturing and intergenerational distress. Families who have farmed the same land for generations now face a future dominated by steel towers, imposed without consent, without choice, and with minimal clarity. Misleading statements, "cheap salesmen" tactics, and inconsistent messaging by AusNet, combined with unannounced access attempts, coercive landholder interactions, and repeated police involvement, have created ongoing stress and anxiety across the corridor.

In many districts:

- Neighbours are divided over the project, straining long-standing community relationships.
- Community events and local initiatives have been overshadowed by tension and conflict arising from project engagement.
- Mental health concerns, including stress, anxiety, and emotional distress, have been documented among landholders and their families as they face ongoing uncertainty regarding property access, compensation, and future land use.

Section 93 compulsory access with code provisions, often applied contrary to legislative requirements, has intensified feelings of helplessness and disenfranchisement among landholders. These cumulative impacts—stress, uncertainty, and erosion of community cohesion—are absent from Chapter 5, yet they are material to any genuine assessment of social and economic outcomes.

The EES's failure to consider these human impacts is a significant oversight. The mental health consequences are not peripheral; they represent real, measurable harm to communities that have been subjected to repeated coercion, misleading communication, and aggressive engagement practices. Any legitimate assessment of the WRL's development process must recognise that social and psychological impacts are integral to the evaluation of project risks, and they cannot be treated as minor impacts incidental to the process.

5. Repeated Incidents of Aggressive Access Attempts and Community Backlash

The EES makes repeated reference to "ongoing consultation" and "landholder engagement," yet fails to acknowledge the widespread resistance that has developed precisely because of AusNet's aggressive and mishandled access practices across the corridor. In areas such as Allendale, Ballan and surrounding districts, there have been multiple recorded attempts by AusNet contractors to enter private farmland without proper notice, documentation, or adherence to basic biosecurity protocols.

These attempts have often occurred without prior appointments, and in several cases, contractors have arrived uninvited, entered paddocks without permission, and failed to clean vehicles or footwear despite the presence of livestock and seasonal disease risk. Farmers have rightly viewed this as not only a breach of trust, but a serious threat to animal health and on-farm biosecurity.

In response, community members across these areas have been forced to band together, organising mutual support groups, signage campaigns, and community patrols to collectively deny access to AusNet personnel until proper processes are followed. This is not "non-

cooperation"—it is responsible land management and lawful resistance to unprofessional and destructive behaviour by AusNet.

Perhaps most disturbingly, the VFF is aware of a serious incident in Allendale, where an elderly landholder was hospitalised on the 22nd of March 2022 following a distressing confrontation with AusNet representatives who had arrived without notice and acted in a threatening and demanding manner. This incident was deeply traumatising for the individual, the family, and the surrounding community, and it highlights the urgent need for accountability and improved conduct by project representatives.

None of these incidents are acknowledged in Chapter 5. Their omission points to a document more concerned with maintaining a façade of procedural integrity than addressing the real and harmful impacts on the people most directly affected by this project.

6. *Incorrect Application of Planning Frameworks*

The *Project Development and Assessment of Alternatives* section of the EES prepared by AusNet sets out the criteria used to rate constraints within the proposed corridors and routes. On page 29, the proponent provides a table outlining these factors. However, AusNet's treatment of agricultural land is inconsistent with established Government policies and frameworks that identify land in Section 2 of the WRL proposal as strategically important for agriculture.

1. Regional Growth Plans

The *Central Highlands Regional Growth Plan* (2016) underscores the critical role of agriculture in underpinning the region's economic prosperity. The plan highlights the area's reliable rainfall, highly versatile and productive soil types, and its proximity to major markets and processors, including McCain Foods, Golden Fries, Mars, and HakuBaku. The region also benefits from freight access via the Melbourne and Geelong ports.

Figures within the Growth Plan show that large areas of both Hepburn Shire and Moorabool Shire are rated at the highest levels for agricultural potential — Moorabool scoring 8–9/10 for versatility of production, and Hepburn identified as "very high" quality farmland. These assessments are further supported by the availability of reliable groundwater, storage infrastructure for surface irrigation, and a strong track record of intensive production systems.

The Background Report (p. 62) explicitly states:
"The plan identifies strategically important agricultural assets that should be protected from non-agricultural uses including urban encroachment."

The Growth Plan further emphasises that the productivity and versatility of soils within Hepburn, Moorabool, and Ballarat Shires require planning provisions that provide certainty by ensuring *"the primacy of agricultural activities in rural areas over potentially conflicting land uses."*

Importantly, the report notes that in a carbon-constrained economy, proximity to markets will become a growing competitive advantage:
"The retention of food resources close to growing markets in Melbourne's peri-urban region will become increasingly important over the next 30 years."

This guidance clearly demonstrates that the land impacted by the WRL proposal is not incidental or substitutable but of strategic significance to both regional and state food security.

2. Project SALAD (Strategic Agricultural Land and Development)

In 2020, PwC, on behalf of the Victorian Government, developed a framework for assessing land that may be considered strategically important for agriculture. The resulting report — *Project SALAD* — provides a clear, criteria-based framework to identify land that warrants protection.
The framework identifies seven criteria:

1. **Access to reliable and affordable quality water** – critical to almost all agricultural production, particularly horticulture.
2. **Lot size** – smaller parcels constrain productive capacity and limit expansion for most uses, though high-value enterprises may persist.
3. **Soil quality** – fundamental to many agricultural uses.
4. **Access to markets** – essential for perishable and high-volume commodities.
5. **Proximity to important industry clusters** – agricultural sectors often depend on access to transport hubs, processors, and supporting industries.
6. **Adjacent and nearby land uses** – recognition of competing land pressures and the capacity (or lack thereof) for substitution.
7. **Substitutability of land or product sources** – understanding whether agricultural production can realistically shift elsewhere without significant cost or loss of capacity.

Applying the SALAD framework, it is clear that the land within Section 2 of the WRL corridor meets multiple criteria for strategic importance. Reliable rainfall, strong soils, established irrigation resouirces, close proximity to major processors, and connectivity to markets place this region at the very top of Victoria's agricultural asset base.

Both the *Central Highlands Regional Growth Plan* and the *SALAD framework* demonstrate that the land targeted in Section 2 of the WRL proposal is not marginal or secondary farmland but strategically significant to the state's agricultural future. The failure of the EES to properly

recognise this fact undermines the credibility of its constraints analysis and demonstrates that the proponent's methodology has given insufficient weight to the protection of agricultural assets.

10.3. VFF Recommendations

1. **Suspend approval of the WRL** until a full audit of landholder engagement and route selection transparency has been conducted by an independent, non-AEMO body.
2. **Recognise and document in the EES the experiences of landholders** who were excluded, threatened, or misled by AusNet during the project development phase.
3. **Reopen route development processes**, with agricultural land properly treated as a constraint, and undergrounding explored wherever visual, social or productivity impacts are unacceptable.
4. **Mandate a new code of conduct for engagement with farmers**, with oversight from an independent landholder advisory panel.
5. **Reject any EES chapter that claims "effective consultation"** until landholders confirm that such engagement has actually occurred.

10.4. Conclusion

Chapter 5 is not an honest account of how the WRL was developed—it is a proponent-crafted justification for a flawed and harmful process. It fails to reflect the truth of how landowners have been treated, how communities have been bypassed, and how rural Victoria has been asked to bear the cost of a project with little to no meaningful input.

If the WRL is to have any legitimacy, it must start with respect, transparency and consent none of which are demonstrated in Chapter 5. The VFF urges the Panel to treat this chapter not as evidence of good process, but as a case study of how **not** to conduct major infrastructure planning in rural areas.

11. Appendices

VFF Submission on Draft 2025 Victorian Transmission Plan

1. Context and General Principles
2. Renewable Energy Zones (REZ) and Victoria's Energy Transition
3. Route Planning
4. Cost of the Proposed Projects and Economic Impacts
5. Social and Community Impacts
6. Recommendations
7. Appendix – Comments on Elements of the Draft Plan and Specific Issues

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White Paper: Renewable Energy and Transmission – Co-existence with Agriculture (Oct 2024)

I. Introduction

II. Understanding whether renewable energy is a benefit or constraint to farm business

- Lack of Regulatory Oversight
- Commercial Consent
- Co-existence & Conflict Tables (Wind, Solar, Transmission)
- Gaps in Guidance Materials

III. How to Achieve Co-location with Agriculture

IV. Comparative Examination of Solar Energy Siting (Madeline Taylor)

- Recommendations
- Conflict Resolution Approaches
- Safety Issues
- Positive Duty

V. Attachment 1 – Types of Conflict in Agriculture

VI. Attachment 2 – Transmission Lines and Irrigation

VII. Attachment 3 – Agriculture Impact Considerations for Approvals

White Paper: Environment Effects Statements – Improvements for Assessment of Renewable Energy Infrastructure and Mining on Farmland (Nov 2024)

I. Introduction

II. The Problem with EES and Planning Processes

- Standards and Information
- Environmental Impact
- Notice, Exhibition, Hearings and Scoping

III. Potential Solutions to Improve EES and Planning

- EES Guidelines
- When no EES is required
- Issues to be covered in Guidelines

IV. Conclusion and Recommendations

White Paper: Compensation and Payments for Landholders Affected by Transmission Lines in Victoria (Oct 2024)

I. Introduction

II. Current Compensation Framework

- Compensation Principles
- Compulsory Acquisition

III. Issues with the Compensation Framework and Process

- Negotiation Failures
- Valuation Issues
- Estimating Farm Impacts
- Taxation Issues

IV. Recommendations to Improve Compensation

- Move to Commercial Agreements
- Improve the LACA Framework

Letters to Government

- Letter to VicGrid CEO (Mr Alistair Parker)
- Letter to VicGrid Chief of Staff (Ilsa Colson)
- Supporting Correspondence with Victorian Government Departments

Part 6- Incident List

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Re: Submission on the Draft 2025 Victorian Transmission Plan

The Victorian Farmers Federation (VFF) appreciates the opportunity to provide this submission on the Draft 2025 Victorian Transmission Plan (the Draft Plan).

The VFF's submission is structured around:

- Context and general principles
- REZ and Victoria's Energy Transition
- Route Planning
- Cost of the Proposed Projects and Economic Impacts
- Social and Community Impacts
- Recommendations
- Appendix; Comments on elements of the Draft Plan and specific issues

Context and General Principles

"Without action to protect farmland and boost the agricultural sector, Victoria risks losing its local food supply."

This was the stark conclusion of the 2024 Parliamentary Inquiry into Securing Victoria's Food Supply, which underscored the essential role that farmland plays in the state's economy, food security, and regional identity. Victoria occupies just 3% of Australia's landmass, yet produces: 64% of the nation's milk, 46% of domestic sheep meat, and 25% of national horticultural produce. These figures are not just statistics they are proof that every hectare

of Victorian farmland matters. As climate and development pressures grow, we must treat agricultural land as a critical national asset, not as surplus to be sacrificed.

As a signatory to the Paris Agreement, Australia has also committed to "safeguarding food security" and fostering "low-emission developments in a manner that does not threaten food production." Transmission and renewable energy development must reflect these obligations.

The Victorian Farmers Federation (VFF) supports a smooth and just transition to renewable energy, provided it is market-driven, respects agricultural production, and is underpinned by genuine commercial consent from landholders. The transition must not come at the expense of farming businesses, land use flexibility, or long-term regional sustainability.

The VFF is energy agnostic—we support a balanced approach that embraces all forms of energy generation, including renewables, provided developments are well-sited, commercially negotiated, and deliver genuine benefits to local communities. A just transition must be built on fairness, transparency, and the protection of Victoria's productive agricultural land base.

Recent transmission planning has failed test. A small number of rural Victorians—farmers and neighbours are being asked to carry a disproportionate share of the cost, disruption, and emotional burden of major infrastructure, in the name of the public good. Meanwhile, the benefits of these projects are largely enjoyed elsewhere.

This imbalance has fuelled growing rural resistance, eroded trust in planners and developers, and stalled projects. But more importantly, it has left farm families—who are stewards of our land and food systems—feeling ignored, undervalued, and displaced.

A farm is not just a business. It is a home, a legacy, and a promise to future generations. Forcing infrastructure onto productive farmland without proper consent or compensation is not only unjust—it is strategically short-sighted.

The VFF supports a smooth transition to renewable energy one that is efficient, reliable, and founded on commercial consent from landowners. But this transition must be transparent, strategic, and respectful. Too often, farmers and rural communities are left out of meaningful decision-making and are expected to bear disproportionate costs for minimal benefit.

We reaffirm the following principles:

- While the market value of agricultural land may differ by region or land use, all farmland holds intrinsic value to its owners and is essential for producing food and fibre. No land should be seen as more expendable or more suitable for energy infrastructure simply because of its price or location.

- Decisions to host renewable or transmission infrastructure must remain entirely at the discretion of the landholder, based on informed, voluntary, and commercial consent.
- Environmental, social, and land use impact assessments should be undertaken independently and transparently, with findings shared in full and in plain language with landholders and neighbours.
- Consultation must begin early and be conducted genuinely, with openness and respect. Engagement must extend beyond formal checklists to build meaningful relationships with affected landowners, neighbours and communities.
- Transmission infrastructure should be strategically located to deliver the best outcomes for the Victorian network not to serve the interests of interstate users or private sector project proponents. This includes using modern, low-impact technologies, such as undergrounding in sensitive or unsuitable areas, and co-location with existing infrastructure corridors where possible. Victoria's transmission strategy must be future-focused, efficient, and designed to reduce the long-term burden on landholders, neighbours and regional communities.

Renewable Energy Zones (REZs)

The VFF acknowledges the intent of the REZ concept but highlights a critical planning flaw: transmission corridors like the WRL and VNI West do not intersect key REZs such as the Central Highlands. This is a paradox. If REZs are to function as hubs, transmission must actually connect to them. VicGrid has identified key areas of strategic importance for agriculture and food production including areas with extensive and secure irrigation, yet the fact that transmission projects still cross these areas demonstrates the lack of joined up approach to the plan and raises serious questions about the sustainability and impact of the broader plan.

Further, REZs are being defined before transmission corridors are finalised this puts the cart before the horse. The logical sequence is to plan the backbone transmission network using existing easements and strategic corridors, then identify REZs based on proximity and viability.

Until this alignment is resolved, landholders are being forced to accommodate generation without connection, and transmission without purpose.

Community Consent and the Misuse of Social Licence

The VFF acknowledges the inclusion of community engagement guidelines within the VicGrid Plan, particularly the emphasis on engagement plans to support "social licence." However, in practice, the concept of social licence has drifted significantly from its original intent.

Rather than ensuring genuine buy-in from local communities especially landholders directly impacted "social licence" has increasingly become a procedural formality. It often manifests as a series of box-ticking exercises designed to reassure regulators, investors and the public that community concerns have been addressed, while failing to secure meaningful consent or support from those most affected.

Crucially, the impacts of transmission infrastructure and renewable energy zones (REZs) extend far beyond individual properties. The declaration of a REZ brings with it fundamental changes to planning processes and overlays, which can override local voices and compromise the ability of rural communities to participate in decision-making in a meaningful way.

Accordingly, the VFF strongly recommends that the concept of community consent be embedded into the planning, declaration, and implementation of REZs. The burden of these developments is disproportionately carried by regional and farming communities, and as such, broad-based community consent—not just stakeholder engagement—must be a prerequisite.

Before any REZ is formally established, VicGrid must provide clear and transparent information to the affected community on:

- The scale and type of proposed developments (e.g., solar, wind, transmission corridors)
- The land area and tenure types required
- Buffer zone policies, including requirements for neighbour consent and compensation
- Tangible and enforceable community benefit-sharing arrangements

Without these elements—and without the foundation of genuine consent—confidence in REZs will continue to erode. The experiences of the Western Renewables Link, VNI West and Central Victoria REZs demonstrate the reputational, political and project delivery risks associated with community opposition.

Embedding a model of community consent from the outset will better align the VicGrid Plan with its own objectives of delivering certainty, transparency and long-term benefit to both the energy market and rural Victorians.

Route Planning and Infrastructure Priorities

Route selection for WRL and VNI West has been poorly explained and deeply flawed. Existing easements and infrastructure corridors have not been prioritised, and modern undergrounding technology is being overlooked, even in peri-urban or irrigated zones where overhead lines will cause maximum disruption.

A key example of poor planning and lack of coordination is the decision not to utilise existing infrastructure corridors, such as the Bendigo transmission corridor, which already hosts major energy assets. Instead, the proposed route for VNI West cuts through greenfield farmland, exacerbating community frustration and fuelling legal challenges, planning objections, and widespread opposition.

The VicGrid framework must explicitly prioritise:

- Reinforcing or upgrading existing corridors
- Co-locating with existing infrastructure or public land
- Undergrounding (undergrounding =HVDC in areas of high land value, landscape sensitivity, or land use complexity)

Without these tools, the community sees only imposition, not innovation.

Cost of the Proposed Projects and Economic Impacts

The VFF remains seriously concerned about the true cost of the projects outlined in the Draft Plan, including both direct infrastructure costs and long-term economic consequences for landholders and regional industries.

Independent modelling by Professor Bruce Mountain of Victoria University indicates that total project costs including associated capital works are significantly higher than suggested in the Draft Plan. Farmers face higher energy bills, taxes, and direct disruption to their land, operations, and planning certainty, all without meaningful benefit.

Transmission infrastructure, if imposed without consent and full compensation, imposes long-term productivity losses and investment disincentives on farming businesses—particularly those that rely on irrigation, precision agriculture, and livestock infrastructure. The viability of these businesses is undermined if land is lost, connectivity between paddocks is severed, or biosecurity and logistics are disrupted.[1]

These impacts are real and cumulative and must be reflected in the government's cost–benefit analysis not treated as collateral.

Social Impacts and Community Breakdown – WRL and VNI West

Engagement on the WRL and VNI West projects has been a disaster, and the consequences are visible on the ground:

- Lost trust, confusion, and frustration
- Landholders left in limbo for years

[1] MacDonald | A Comparison of Electricity Transmission Technologies: Costs and Characteristic p213

- Entire communities fractured and opposing one another
- Land devaluation, uncertainty, and loss of investment confidence

Despite VicGrid's stated commitment to a "new approach," these projects continue to be rolled out under legacy RIT-T processes. In some cases, proponents present plans as final while still claiming to be consulting. This is neither fair nor credible.

The lack of tangible benefits for impacted communities makes matters worse. "Benefit sharing" must be more than slogans it must deliver visible infrastructure, resilience upgrades, or local energy price relief.

The VFF is increasingly concerned by the Victorian Government's growing legislative powers to compulsorily acquire easements for transmission infrastructure.

Rather than facilitating the transition, this expansion of acquisition powers without consent entrenches landholder resistance and inflames regional opposition. It sends a clear message that communities are expected to comply not participate. Far from accelerating progress, this approach is counterproductive: it undermines trust, delays project delivery, and increases legal and social conflict.

If the Government continues down this path, it risks jeopardising its own 2045 net zero targets by alienating the very communities whose cooperation is essential to achieving them.

The VFF is also concerned about the growing use of caveats, easements and planning setbacks associated with renewable energy projects that extend beyond the host property and impact neighbouring landowners without consent or compensation. These restrictions can affect neighbouring farmers' planning rights, insurance liabilities, biosecurity protocols, and future development options, despite them having no commercial agreement with the project proponent. It is unacceptable that infrastructure on one property can create de facto constraints on surrounding properties, effectively externalising the costs of renewable energy development. The VFF strongly opposes any planning framework that allows neighbouring landholders to be impacted by caveats or setbacks imposed by a third party. These matters must be clearly regulated to ensure that non-host landowners retain full autonomy and legal clarity over their own land.

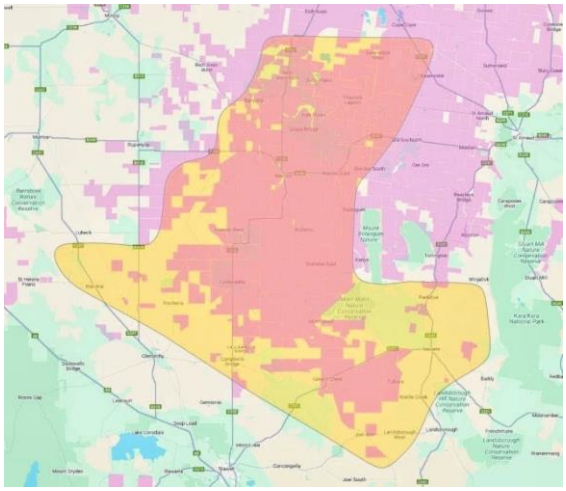
Commercial and Community Consent

The Victorian Farmers Federation (VFF) believes that community engagement in renewable energy and transmission planning must move beyond tokenistic "social licence" models toward a genuine standard of community consent grounded in transparency, trust, and commercial consent. Social licence, as it currently operates, has drifted from its original intent of securing meaningful community buy-in. It now too often serves as a procedural checkbox designed to reassure investors and regulators, while leaving impacted landholders and neighbours feeling ignored, coerced, or misled. The VFF asserts that renewable energy

zones (REZs) must not be imposed on communities without their consent and understanding, particularly given the significant and long-lasting impacts these projects have on planning laws, land use, and rural amenity.

The failure to obtain this kind of informed and voluntary consent has already contributed to project failures and delays across WRL and VNI West, driving up costs and undermining the energy transition. Respect for landholder and community commercial consent is not an optional courtesy—it is a critical enabler of project success. A shift to consent-based planning will help restore confidence, reduce conflict, and ensure the energy transition is delivered with not at the expense of rural Victoria.

Grampians Wimmera REZ



The areas shaded in red represent properties where landholders have indicated they do not wish to host renewable energy projects. As a result of the poorly planned and executed VNI West project, the Wimmera–Grampians REZ now faces significant local opposition, placing the zone at risk and offering limited viable scope for future renewable energy expansion.

The map clearly illustrates the widespread breakdown in community support for VNI West and highlights the deep mistrust that has emerged between local landholders, project proponents, and government agencies. It also underscores how pushing forward with poorly conceived and badly executed projects not only risks further community alienation, but also endangers the credibility of the broader renewable energy transition and jeopardises Victoria's ability to meet its 2045 net zero emissions target.

Transparency

Commercial consent and transparency must be foundational to all transmission and renewable energy development. No landholder or neighbouring property should be subject to planning overlays, buffer zones, or setbacks without their knowledge, consent, or compensation. The current approach where neighbouring farms can be effectively constrained by infrastructure located on adjacent land is unacceptable and contrary to principles of fair planning and property rights.

Transmission infrastructure, given its permanent and invasive nature, must only proceed through commercially negotiated agreements, not imposed easements or ministerial acquisition powers.

Similarly, renewable energy projects must not be allowed to impact neighbouring properties' insurance, liability exposure, or operating conditions (e.g. fire risk, chemical use, water access) without clear, prior notification and meaningful mitigation including financial compensation where impacts cannot be avoided. A socially sustainable energy transition cannot succeed without upholding the commercial and legal rights of all affected landholders not just those who host infrastructure directly.

Environmental Impacts

Environmental assessments must not be developer-driven. They must be conducted by independent professionals, engaged by government or third parties, and accountable to affected landholders. Otherwise, assessments risk being dismissed as box-ticking.

While renewable energy is often promoted as environmentally beneficial, the localised environmental impacts of large-scale renewable energy developments and transmission infrastructure are frequently overlooked. These projects can lead to the clearing of native vegetation, disruption of wildlife corridors, and fragmentation of habitats especially in ecologically sensitive areas such as the Central Highlands and parts of Western Victoria. The construction phase alone introduces soil compaction, erosion risks, and sedimentation in waterways, while long-term operations may interfere with biodiversity through increased noise, altered water flows, and artificial lighting. In the case of transmission lines, tower pads and access tracks often cut through remnant vegetation, and biosecurity risks can be heightened through increased vehicle and contractor movement across farms. These impacts are further compounded when environmental assessments are commissioned and controlled by project proponents, leading to community distrust and legitimate concerns over transparency and integrity.

Understanding, Minimising and Compensating

The Victorian Farmers Federation (VFF) strongly advocates for a strategic and principled approach to transmission planning—one that prioritises avoidance, delivers genuine mitigation, and provides fair and transparent compensation.

Central to this is the recognition that undergrounding transmission infrastructure is not merely a cost decision but a strategic investment, particularly in areas of high agricultural value, cultural significance, or intensive land use. International precedent from the UK, Spain, and Italy demonstrates that undergrounding is regularly used in sensitive landscapes to reduce conflict, accelerate delivery, and protect long-term land use.

The Mott MacDonald report[2], commissioned in 2025, reinforces this by showing that while undergrounding is more capital-intensive, it results in lower long-term social, economic, and legal costs—benefits which are not captured by current least-cost engineering models. Overhead transmission lines fragment farmland, interfere with irrigation systems, reduce productivity, and damage land values. In contrast, underground cables while disruptive during construction allow full recovery of land use with minimal ongoing impact. The VFF believes that a fair transition must start with genuine commercial consent not engagement under the shadow of compulsory acquisition.

A strategic compensation framework must enable meaningful collaboration with landholders around micro-siting, alignment shifts, and farm-specific adjustments. Compensation must not be driven by arbitrary timeframes or conditional sign-ons, but should reflect the proxy value of commercial negotiations, plus a solatium for the non-negotiable nature of transmission infrastructure. This should extend to neighbours, not just hosts, especially where property devaluation, land use impacts, or safety buffers are relevant.

The VFF calls for a consistent buffer zone policy similar to that used for generation projects with formal compensation entitlements. Further, long-term viability of agriculture must be supported through access to three-phase power, and compensation frameworks must be reviewed over time to address technological incompatibility, operational interference (e.g. GPS disruption), and farming system evolution. Landholders deserve clear and binding project timeframes, including decommissioning plans, recognising that many farm businesses are intergenerational and deeply tied to the land.

A major failing of the Draft Plan is that it appears to rely solely on engineering costs when evaluating route options. The social, agricultural and long-term operational costs imposed on farmers and rural communities are not meaningfully included

This distorts planning decisions and entrenches public opposition. The failure to integrate:

- Farm access disruption
- Drone, GPS and irrigation interference
- Use limitations from height and chemical restrictions
- Livestock and biosecurity risks
- Planning uncertainty and financial loss

The current process underestimates the true cost of these projects. These costs must be properly assessed and landholders must be fully compensated, not through minimum legislative baselines, but via negotiated commercial agreements reflective of real impact and market value.

[2] 100110238_001-rev-j-electricity-transmission-costs-and-characteristics_final-full.pdf

Transmission infrastructure poses a significant threat to intensive agricultural operations, especially in regions where irrigation systems such as centre pivots. These systems rely on unobstructed circular movement across entire paddocks, and the placement of towers or easements within these areas renders them partially or entirely inoperable, leading to production losses, reduced efficiency, and underutilised capital investment. For high-value irrigated crops, horticulture, and dairy systems, where land use is highly integrated and intensive, even minor disruptions can significantly reduce profitability. The Draft Plan does not adequately address how transmission will be routed to avoid this impact or how affected landholders will be compensated for lost productivity and long-term changes to their farming systems.

Alternatives and Emerging Technology

Undergrounding transmission infrastructure should be recognised as a strategic investment, not merely a capital expense. In areas of high agricultural sensitivity, cultural importance, and community density, undergrounding significantly reduces the long-term disruption to landholders, farm operations, and regional economies. These are often regions where intensive farming systems, including irrigation, centre pivots, and high-throughput livestock enterprises, depend on unobstructed land access, biosecurity integrity, and spatial continuity.

While undergrounding (which when refereed to in this document is assumed to be HVDC) can carry higher initial capital costs typically in the range of €8–15 million per kilometre (A$13–24 million/km) for 220–400 kV lines in Europe the total cost of ownership over the life of the asset may be lower than for overhead lines in sensitive areas. For example, National Grid UK reports[3] undergrounding costs for 400 kV lines between £17 24 million per kilometre (A$32–45 million/km), while European TSOs such as Terna (Italy) and Red Eléctrica[4] (Spain) apply undergrounding in urban, agricultural and environmentally sensitive areas to avoid land conflict and project delays.[5]

These higher upfront costs are often offset by:

- Lower ongoing compensation obligations
- Reduced legal disputes and easement enforcement
- Faster project delivery due to lower community resistance
- Minimal long-term disruption to agricultural productivity and land use

If Victoria is to deliver a renewable energy transition that is both effective and socially sustainable, transmission planning must prioritise undergrounding in areas where overhead

[3] 'Undergrounding' electrical transmission cables - House of Lords Library
[4] download.terna.it/terna/Terna_Climate_Change-related_Disclosures_8dcad96a2bdb5dd.pdf
[5] New Ten-Year Network Development Plan highlights power transmission and storage needs to meet the Energy Transition targets

infrastructure would cause major and lasting disruption to farming systems, community cohesion, or cultural heritage. This approach supports long-term value, protects social licence, and ensures infrastructure is built not just quickly but wisely.

The 2025 Mott MacDonald report[6], commissioned to assess the comparative costs and characteristics of electricity transmission technologies, provides clear and independent evidence supporting the Victorian Farmers Federation's concerns about the long-term impacts of transmission infrastructure on farming communities.

The report confirms that while underground cables (particularly at 400 kV) are more expensive to install than overhead lines (typically 4 to 5 times more costly) this cost comparison only considers capital and operational costs, and not broader social, environmental or economic impacts on landholders. Importantly this comparison did not include the cost of higher compensation requirements when overhead lines are constructed.

In regions with high agricultural value or environmental sensitivity, undergrounding is routinely adopted in the UK and Europe as a value-adding investment, not a cost burden.

For Victoria, this reinforces the VFF's position that in areas of intensive farming, irrigated cropping, or landscape sensitivity, undergrounding offers a more socially sustainable and economically defensible option.

Impact on Agricultural Production

Overhead lines have substantial and ongoing effects on farming systems:

- They restrict the use of large machinery and irrigation systems (especially centre pivots).
- They create permanent land fragmentation, interfere with livestock movement, and limit aerial operations such as spraying.
- Access tracks and clearances often disrupt paddock layouts and crop planning.
- Visual and operational impacts also reduce land value and investment confidence.

By contrast, underground cables though more disruptive during construction allow for near-full land use recovery post-installation, with only moderate restrictions (e.g., no deep-rooted crops or heavy excavation). For most farming systems, this is a far less intrusive and more acceptable long-term outcome.

[6] 100110238_001-rev-j-electricity-transmission-costs-and-characteristics_final-full.pdf

Strategic Use of Technology Builds Trust

The Mott report supports the VFF's advocacy for a flexible, modern and community-sensitive approach to infrastructure planning. It notes that European jurisdictions frequently apply undergrounding in:

- High-value farmland or significant impacts to agricultural businesses
- Tourism or heritage landscapes
- Urban or peri-urban interface zones

This strategic deployment of technology fosters community buy-in, shortens project timelines, and reduces long-term compensation liabilities.

The MacDonald findings validate the VFF's position that Victoria's transmission planning must:

- Move beyond narrow engineering "least cost" modelling;
- Incorporate total project costs, including land use disruption, compensation, and social and environmental impact;
- Mandate undergrounding in farming regions with intensive land use, irrigation systems, or cultural significance;
- And prioritise use of existing corridors and easements before carving new lines through productive farmland.

Conclusion;

The VFF supports renewable energy. But the energy transition will fail—technically and politically if it continues to be rolled out at the expense of those living on and working the land.

The Draft Plan can and must be improved. The VFF offers the following recommendations:

- *Embed landholder consent and strategic corridor use at the heart of VicGrid's future planning*
- *Realign REZ and transmission development so they work together not in isolation*
- *Prioritise upgrades to existing easements and undergrounding in areas with high levels of community opposition.*
- *Compensation frameworks that in event that projects cannot be avoided or mitigated are able to be reviewed and adjusted as farming systems change and evolve over time.*
- *Require truly independent environmental and land use impact assessments*

- *Create meaningful, negotiated compensation frameworks based on commercial principles*
- *Rebuild trust through transparent engagement and planning grounded in community and industry needs*

Appendix; Direct Responses to Vic Grid Plan

Response to 1.2 – Why We Need a New Approach to Planning Energy Infrastructure

The VFF agrees that Victoria needs a new approach to planning energy infrastructure. However, the current process—especially the experience with the Western Renewables Link (WRL) and VNI West—has shown that the new approach is not yet delivering the reform that is urgently needed.

Despite promises of better engagement, the consultation surrounding WRL and VNI West has been a clear failure by any objective standard. Communities have described the process as "opaque, dismissive and deeply frustrating" (The Guardian, Oct 2023), and even regional MPs have described it as a “shambles” (Ballarat Courier, May 2023).

The reality is this: communities do not believe they’ve had a voice. Landholders affected by WRL and VNI West have faced inconsistent information, last-minute consultation, and little ability to influence routing decisions.

More importantly, they have not seen tangible benefits—only disruption and uncertainty. Without real, visible investment in community infrastructure, energy security, or local economic benefit, trust continues to erode.

The impacts on agricultural land are not abstract—they are material, long-term and in many cases irreversible:

- Loss of irrigation and drainage function
- Reduced land value and capital investment potential
- Enterprise constraints from easements and no-go zones
- Mental health stress and intergenerational uncertainty

Without a joined-up approach that integrates energy planning with land use, agricultural productivity, and rural economics, Victoria risks building a transmission system that actively undermines the very regions that should be leading the energy transition.

If this continues, projects will continue to under-deliver, face social and legal resistance, and ultimately put the state’s 2045 net zero target at risk. Transmission infrastructure cannot be treated as an isolated technical challenge. It must be planned with the people, industries and landscapes it crosses front of mind.

To succeed, this new approach must go beyond words—it must deliver:

- Trust-based consultation with real opportunities for change

- Infrastructure that aligns with existing corridors and avoids high-value farmland
- Undergrounding where appropriate to protect communities and farming systems
- Meaningful, localised benefit-sharing—not just project-level profits

Until that happens, Victoria's energy transition will remain off-track in the very regions it most needs onside.

Response to 1.4 – The Role of Renewable Energy Zones

The VFF supports the concept of Renewable Energy Zones (REZs) as a way to coordinate generation, reduce duplication, and deliver local benefits. However, there is a fundamental disconnect between the intent of REZs and the reality of current transmission planning.

The paradox is this: Victoria's largest planned transmission projects—Western Renewables Link (WRL) and VNI West—do not pass through, nor meaningfully connect to, key REZs such as the Central Highlands. This raises serious questions about the logic behind route selection and the ability of REZs to deliver their promised benefits to host communities.

Without transmission lines that physically intersect with REZs, the following occurs:

- The energy generated in REZs cannot be reliably exported, undermining their economic viability.
- The communities hosting REZ generation miss out on critical grid investment and reliability improvements.
- Transmission infrastructure is instead imposed on communities with no generation projects nearby, who carry the burden without benefit.

Furthermore, there appears to be no long-term spatial plan for transmission corridors that genuinely link REZs to each other or to major load centres. Instead, infrastructure is being developed in isolation, often duplicating effort, increasing landholder conflict, and driving up project costs.

If REZs are to function as intended—minimising environmental and social impacts while delivering local economic benefit—then transmission planning must:

1. Ensure that new lines are routed *through* REZs, not around them.
2. Utilise existing corridors and infrastructure where possible to reduce land disruption.
3. Deliver visible, grid-based benefits to REZ host communities, such as voltage stability, storage access, and investment in energy resilience.

Victoria cannot claim to be planning a strategic energy future while building transmission that bypasses the very zones it says are central to that future. To restore credibility and deliver fairness, the planning process must be realigned with the REZ model in practice not just in principle.

Response to Step 3 – Transmission Network Planning and Constraints

The VFF acknowledges the importance of assessing network constraints and modelling system needs, but we are concerned that the process described here continues to reflect backward planning rather than forward strategy.

Despite the extensive modelling effort described, the proposed Western Renewables Link (WRL) and VNI West appear to have been selected without proper consideration of existing transmission easements, corridors or modern design approaches. These projects have been planned as if the only solution is new, overhead infrastructure on private farmland, regardless of its social, agricultural, or environmental cost.

This is, quite plainly, a case of putting the cart before the horse.

Rather than upgrading and expanding Victoria's existing easement network, or co-locating new infrastructure within existing corridors (e.g. near Bendigo or in zones adjacent to existing REZs), the Draft Plan proposes entirely new corridors through regions where transmission infrastructure has never existed, and where it faces substantial landholder opposition.

This contradicts the stated goal of minimising community impact and does not reflect international best practice, where:

- Existing infrastructure is prioritised before creating new corridors;
- High-voltage lines are co-located with transport or utility corridors where possible;
- And where undergrounding is considered in densely populated or high-value agricultural zones.

The VFF urges VicGrid to recognise that the success of the transmission rollout will depend on the extent to which the state is willing to use and enhance existing assets—not simply carve new ones through contested landscapes.

A modern transmission network must also take into account:

- Advancements in conductor and pole technology that allow for narrower corridors and greater load capacity;
- The potential for high-capacity underground cable systems, particularly in areas where above-ground infrastructure faces environmental, social or planning conflict;

- And the opportunity to future-proof corridors for multi-user, multi-decade use, rather than relying on outdated single-purpose lines.

Until existing infrastructure and easements are fully assessed and prioritised—and until VicGrid adopts a genuinely joined-up planning approach—community trust will continue to erode, and project delivery will remain at risk.

Response to 5.4 – Agriculture and Other Industry Engagement

The VFF acknowledges that VicGrid has undertaken sector-wide engagement activities, but these efforts have not translated into meaningful outcomes for farmers directly impacted by transmission infrastructure. In fact, the real-world experience of landholders along the Western Renewables Link (WRL) and VNI West corridors has been appalling—characterised by a lack of transparency, inconsistent information, poor communication, and disregard for on-the-ground farming systems.

AusNet's engagement on the WRL project has been particularly damaging. Landholders report:

- Being presented with pre-determined routes under the guise of consultation;
- Receiving conflicting and incomplete information about access, easements, construction, and reinstatement;
- Having no meaningful say in how their land or operations will be affected.
- Neighbours who live in close proximity to proposed towers have in some cases had no correspondence or contact with Ausnet for over five years.
- Landowners report illiegal entry and bullying tactics by Ausnet employees, where complaints are met with silence.
- Threats and trespassing by transmission company employees are becoming increasingly commonplace, the mental health impacts on farmers especially during drought is severe.

This experience has led to a complete loss of trust in the process, not only with the proponent but with government institutions responsible for oversight. VNI West is following a similar trajectory—despite VicGrid's promises of a "new approach."

The consequences of this failed engagement are not abstract. Farmers are reporting:

- Reduced investment confidence, particularly in irrigation infrastructure, precision systems, and livestock facilities.
- Loss of productive capacity, due to fragmentation of paddocks, access restrictions, and interference with biosecurity or machinery movement.

- Mental health and family stress, stemming from years of uncertainty and feeling dismissed or ignored.

While the VFF welcomes the attempt to segment land use impacts by enterprise type, we reject any implication that dryland grazing or broadacre cropping are inherently "compatible" with transmission infrastructure. All farming systems rely on whole-of-enterprise continuity, including:

- Free access to paddocks and laneways
- Undisturbed spraying and sowing paths
- GPS guidance systems (which are disrupted by towers)
- Livestock welfare, including movement and mustering

Even on grazing properties, these disruptions are real and cumulative. Compatibility must be determined by landholders themselves, not assigned through high-level mapping or broad industry assumptions.

What is missing from this process is a genuine willingness to change plans in response to feedback. Until impacted landholders see tangible changes—such as route alterations, undergrounding in high-impact areas, or improved compensation terms—engagement will continue to be seen as hollow.

In summary:

- The engagement described in Section 5.4 has not been reflected in the experience of those directly impacted.
- Trust has been lost, and without visible course correction, it will not be rebuilt.
- The economic viability of many farms is at risk—not because of renewables themselves, but because of how poorly the infrastructure rollout is being handled.

If VicGrid wants to avoid repeating the failures of the past, it must embed landholder-driven design, route flexibility, and enforceable protections into every project—not just promise them in post-hoc summaries.

Table Co-existence

	Co-existence	**Constraints**
Grains	*Physical*	*Physical*

	Payments are made to compensate for loss of productive area from hosting turbines. *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents.	Tower construction damages soil (compaction) Tower footings are permanent impacts on soil and drainage. Towers are a barrier to efficient machinery movements. Roadways and turbine bases sterilise land from production. Spread of weeds or disease from poor biosecurity control. *Regulatory* Towers restrict use of machinery around the towers. Impacts on efficient use of machinery in easements. Impacts use of aerial spraying. *Financial* Increase in CIV (basis of farm rates). Increased use of fuel and chemicals. Impact of chemicals on grain quality / shipment acceptance. *OH&S* Access to areas within withholding periods. (chemical exposure) Risks from blade strike and debris, including damage to machinery.
Livestock	*Physical* Where payments are made to compensate for loss of productive area from hosting turbines. *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents.	*Physical* Loss of aerial spraying or aerial mustering. Spread of weeds or disease. *Financial* Increase in CIV (basis of farm rates). Impact of chemicals used on animal health and acceptance of shipment. Loss of production (injury, death, mismothering). *Regulatory* Towers restrict use of machinery around the towers. Impacts on efficient use of machinery in easements. Impacts use of aerial spraying. *OH&S* Use of 'mustering' tools such drones or helicopters by energy companies without the understanding of how

		livestock react can lead to causing risk to livestock and humans. Risks from blade strike and debris, including damage to machinery.
Dairy	*Physical* Likely to require more significant payments to compensate for loss of productive area from hosting turbines. *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents.	*Physical* Loss of aerial spraying or aerial mustering. Spread of weeds or disease during access. Interference with movement of livestock to dairies. Impact with strip feeding and stock containment areas. *Regulatory* Towers restrict use of machinery around the towers. Impacts on efficient use of machinery in easements. Impacts use of aerial spraying. *Financial* Increase in CIV (basis of farm rates). Impact of chemicals used on animal health and acceptance of shipment. Loss of production (injury, death, mismothering). *OH&S* Use of 'mustering' tools by energy companies causing risk to livestock and humans. Risks from blade strike and debris, including damage to machinery.
Horticulture (tall)	*Physical* Rarely built on horticulture areas as footprint unlikely to be fully compensated for (commercial consent). May reduce frost risk (if operating) *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential	*Physical* Loss of productive area to turbine bases and access easements. Potential restrictions on use of horticulture structures. Loss of aerial spraying. Spread of weeds or disease during access. *Regulatory* Towers restrict use of machinery around the towers. Impacts on efficient use of machinery in easements. Impacts use of aerial spraying. *Financial*

	constraints on their operations for consideration of commercial consents.	Increase in CIV (basis of farm rates). Impact of chemicals used on animal health and acceptance of shipment. Significant reduction in production value due to loss of productive area. *OH&S* Risks from blade strike and debris, including damage to machinery.
Horticulture (small)	*Physical* Rarely built on horticulture areas as footprint unlikely to be fully compensated for (commercial consent). *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents.	*Physical* Loss of productive area to turbine bases and access easements. Potential restrictions on use of horticulture structures. Loss of aerial spraying. Spread of weeds or disease during access. *Regulatory* Towers restrict use of machinery around the towers. Impacts on efficient use of machinery in easements. Impacts use of aerial spraying. *Financial* Increase in CIV (basis of farm rates). Impact of chemicals used on animal health and acceptance of shipment. Significant reduction in production value due to loss of productive area. *OH&S* Risks from blade strike and debris, including damage to machinery.
Intensive Animal Industries	*Physical* Location of turbines and access at significant distance from shedding. *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents.	*Physical* Restrictions on the location of shedding. Spread of weeds or disease during access. *Regulatory* Biosecurity practices. Impacts on onsite burials post disease or smothering event. *Financial* Increase in CIV (basis of farm rates). Significant risk if access leads to mass death event. *OH&S* Risks from blade strike and debris, including damage to machinery.

		Risk from zoonotic disease.
irrigation	*Physical* Rarely built on irrigation areas as the footprint and the change in effectiveness of irrigation system as unlikely to be fully compensated for (commercial consent). *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents.	*Physical* Impacts on the use of centre pivot and lateral irrigation. Impact on drainage. *Financial* Significant reduction in productivity if unable to irrigate.

Additional Points for Clarification;

- **Landholder Rights and Responsibilities**
  There is a lack of clear, enforceable guidelines outlining what landholders are obligated to permit—and what they can reasonably refuse—through all phases of project development, operation, and decommissioning.
- **Government Responsibilities Across Project Lifecycles**
  Government must clearly articulate its obligations at each stage of the renewable energy and transmission lifecycle, including planning, installation, maintenance, repair, and decommissioning. This should include long-term oversight and responsibility, not just facilitation.
- **Need for an Independent Ombudsman**
  An independent Renewable Energy Ombudsman must be established to handle disputes, complaints, and regulatory breaches related to renewables and transmission projects on private property.
- **Mandatory Biosecurity Protocols**
  All renewable energy and transmission projects must operate under **mandatory**, not voluntary, biosecurity protocols. These protocols should be developed in consultation with and approved by the VFF to reflect industry standards.
- **Mandatory Property Induction**
  All personnel entering farming properties for project-related work must complete a **VFF-approved induction** to ensure compliance with agricultural biosecurity, safety, and operational protocols.

- **Fire Risk from Wind Towers**
  Multiple incidents of wind turbine fires have been reported. Given such fires are often uncontrollable until burnout, clear legal liability and compensation mechanisms must be established for damage to neighbouring land and assets.
- **Turbine Collapse and Structural Failure**
  In cases where wind towers collapse or suffer structural failure, developers must be held liable for site remediation, reinstatement, and compensation to affected landholders.
- **Fire Risk from Solar Installations**
  Solar farms are emerging as a new fire risk. It must be clear who holds legal and operational responsibility for fire response, and what training and protocols are in place for local firefighting services.
- **Decommissioning Bonds for Wind Projects**
  Wind farm developers must be required to lodge a financial bond to cover full costs associated with the removal and safe disposal of turbines at end-of-life.
- **Dispute and Appeals Process**
  A transparent and accessible appeals process must exist for landholders to challenge project approvals, conditions, or impacts—especially regarding wind and transmission infrastructure.
- **Battery Storage and Toxic Smoke Protocols**
  With battery installations comes the risk of toxic smoke and explosive fire. Clear emergency protocols and declarations of liability must be publicly accessible and regulated.
- **Impact on Rural Firefighting Capabilities**
  The presence of large-scale infrastructure, including turbines and solar farms, can restrict aerial firefighting and firebreak access. These risks must be accounted for in planning and operational approvals.

Incident List

Western Renewables Link (WRL)

Victorian Farmers Federation

- ***Myrniong Farm – August 2024***
  AusNet workers were caught on camera cutting padlocks to access a farm without permission. When asked if entry was authorised, a worker replied, "We cut the padlock off, yes," citing statutory land access rights under legislation.
  Gold Coast BulletinThe Courier
- ***Farmers' Rally – September 2023***
  During the "Stop AusNet's Towers" rally, landholders allege that AusNet personnel entered farms while farmers were away protesting in Melbourne.
  RedditThe Monthly
- ***Ballarat Corridor – March 2022***
  Farmers blockaded access to properties near Ballarat to prevent AusNet surveyors from entering. The police were called amid tense confrontation.
  ABC+1
- ***Stonehut Lane, Bunding – February 2022***
  In response to repeated, late unannounced access attempts by AusNet, landholders blocked entry using a water tanker—a highly charged standoff ensued.
  (Note: internal reference unavailable)
- ***Moorabool Residential Land – October 2021***
  Council and community concerns were raised after AusNet reportedly entered residential land without consent, even where voluntary access had not been granted.
  (Note: internal reference unavailable)
- ***Toolern Vale Incident – Circa 2021***
  A landholder requesting the surveyors return later due to concern for pregnant mares was confronted and fell during the engagement. Police launched an investigation.
  9Now
- ***$500 Gift Card Offer – Date Unspecified***
  A farmer was offered a $500 gift card in exchange for property access under

misleading terms granting AusNet long-term, extensive intrusion rights—leading the farmer to decline.
Reddit

- ***Ballarat–Bendigo Corridor – 2023***
  VFF condemned AusNet for entering farms without prior contact or permission, including erecting "danger" signs in paddocks, raising concerns about biosecurity, crop damage, and property rights.
  VFF
- ***Allandale Incident – Date Unspecified***
  AusNet field officers attempted forced entry onto properties in Allandale. Residents intervened, calling police. One landholder suffered a medical emergency due to the stress of the situation, prompting the arrival of an ambulance.
  pissoffausnet.com.au

Summary Table of Incidents

Time / Date	***Location***	***Incident Details***
August 2023	***Kingston/Smeaton***	***Entering properties without permission***
August 2024	***Myrniong Farm***	***Padlock-cutting and entry without permission***
September 2023	***Farmer's Rally***	***Access while farmers were protesting***
March 2022	***Ballarat Corridor***	***Farmer blockade against unannounced access attempts***
February 2022	***Bunding (Stonehut Lane)***	***Blocked with water tanker after repeated intrusion attempts***
October 2021	***Moorabool residential land***	***Report of property entry without consent***
Circa 2021	***Toolern Vale***	***Distressing confrontation; farmer injured***
Undated	***Various***	***Misleading compensation offers (e.g., gift card quid pro quo)***

Time / Date	*Location*	*Incident Details*
2023	*Ballarat–Bendigo Corridor*	*Unauthorized signs and entries into paddocks*
Undated	*Allandale*	*Forced access led to a landholder's serious stress and ambulance called*
August 2023	*Smeaton*	Two documented incidents of Ausnet contractors trespassing on private property of a neighbouring property. Complaint made directly to Asunet from owners with no contact and no acknowledgement from Ausnet

Newlyn

Land access disruptions

There were no reports of AusNet crews specifically blocking or disrupting farming operations in Newlyn itself. However, local farmers have been active in interfering with AusNet's work elsewhere. For example, in March 2022 Newlyn farmer Robert Lockhart rushed to help block AusNet surveyors working on a neighbouring Kingston property. Lockhart said he had to literally "drop tools" on his own farm to join the blockade, noting this was "detrimental to how my business operates, but it has to be done"abc.net.au. (Lockhart's farm lies within the proposed corridor, so his actions reflect Newlyn-area resistance.)

Unauthorized entry by AusNet

We found no specific incidents in the Newlyn area of AusNet agents entering private land without permission. (In general the company has said it follows formal access agreements.)

Community protests and opposition

Local opposition has been highly visible. By late 2022 potato farmer Anthony Fraser (from Newlyn) had mown a huge **"PISS OFF AUSNET"** message into a hillside near Blampied, strongly signaling Newlyn-area disapprovaltheguardian.com. Fraser told media "we're still going strong down here, everyone's against it"theguardian.com. AusNet even canceled a planned in-person community forum in Newlyn in late 2023 "due to a protest environment," moving the meeting online instead ausnetservices.com.au. In sum, Newlyn locals have

organized loud opposition – from roadside signs to public meetings – though no case of AusNet trespassing onto Newlyn farms was documented in the sources.

Smeaton

Land access disruptions

In July 2021 Smeaton residents threatened to physically block survey work. Smeaton farmer Will Elsworth announced that local landholders would **"lock the gate"** to stop AusNet crews from entering farms in the proposed routeabc.net.au. He warned that farmers would force AusNet to pursue formal easements in court (a process he estimated would take "three to five years") rather than allow unfettered accessabc.net.au. This was a clear attempt to disrupt AusNet's land access. By contrast, we found no reports that AusNet itself forcibly entered any Smeaton properties without permission.

Unauthorized entry by AusNet

The sources did not document any specific case of AusNet personnel entering Smeaton farmland without landowner consent. (The broader region did see disputes – for example, several media outlets later reported AusNet crews apologized for accessing Victorian farms to put up safety signs – but no specific Smeaton cases appeared in the reviewed sources.)

Community protests and opposition

Smeaton farmers joined wider regional protests. In particular, by late 2023 many farmers "along the proposed route near Ballarat" – which includes Smeaton – had **locked their gates** on AusNet's survey teams, effectively halting workabc.net.au. As one ABC report noted, after refusing a token payment offered by AusNet, the Myers family and "most other farmers along the proposed route near Ballarat" locked their gates in a united standabc.net.au. This regional protest would have involved Smeaton-area growers as well. Beyond the gate-locking, no large public rallies were recorded specifically in Smeaton, but the strong stance by locals like Elsworth highlights Smeaton's organized opposition to the project.

Kingston

Land access disruptions

Kingston saw direct confrontations. On **9 March 2022**, dozens of local farmers and residents blockaded AusNet surveyors at Ben and Louise Charleson's farm north of Kingston, refusing entry to conduct ecological studiesabc.net.auabc.net.au. The blockade – a "Mexican stand-off" that even drew police – effectively prevented AusNet personnel from accessing the propertyabc.net.auabc.net.au. As Charleson said at the time, "we're not going to let this project happen easily, if at all," and he warned that if AusNet returned, "we'll all band

together" to shut them out again abc.net.auabc.net.au. These actions halted surveys on that farm and were a clear disruption of AusNet's land access.

Community protests and opposition

Kingston has been a center of organized protest. For example, the *Kingston Avenue of Honour* committee mobilized against threats to local heritage. In 2025 a community campaign flyer warned that the WRL route would "cross directly over Kingston's…arched bluestone bridge and a majestic 130-year-old Algerian Oak," and noted that "AusNet says the Algerian Oak is in the way and must be removed"kingstonavenueofhonour.org.au. Local residents planned a dramatic protest for *20 August 2025*, lining up to "hold hands around the oak's perimeter – one person for every year of its life" in front of the Kingston Hotelkingstonavenueofhonour.org.au. This organized rally (with petitions and media coverage) exemplified Kingston's resistance.

Kingston farmers also joined larger regional rallies. At a **March 21, 2023** tractor protest north of Ballarat, Kingston canola farmer Ben Charleson publicly lamented that AusNet spokesmen "didn't stay to listen" to community concernsabc.net.au. He told ABC News, "We don't seem to be getting any answers and we're sick of it," vowing that locals "will continue to fight" the project abc.net.au. (Charleson had been one of the landowners at the 2022 blockade.)

CONFIDENTIAL

Victorian Farmers Federation

White Paper

Environment Effects Statements – Improvements for assessment of renewable energy infrastructure and mining on farmland

November 2024

Contents

I. Introduction

This paper provides a brief overview of the opportunities to improve how Environment Effect Statements (EES) are prepared for agricultural land.

The Environment Effects Act governs the preparation of EES Statements. The Act itself is from 1978 and uses a very broad meaning of the term 'environment'.

The Act is brief and authorises the preparation of guideline(s) to determine how the objectives of the Act will be delivered. Section 10 of the Act establishes the ability to have guidelines. At Section 10(2) it allows guidelines to set out different procedures for different kinds of works or use any matter or standards published by an authority or body.

II. The problem with EES and planning processes

Despite the ability to have multiple guidelines in place, including guidelines specific to types of proposals or to address specific standards there is currently only a single EES guideline in place.

The review of these guidelines has not been inclusive of the views of the agriculture sector.

This guideline does not seek to differentiate between proposals where the landholder is also the proponent and where the proponent fails to gain landholder consent.

This is significant as proponents are required to identify whether they are the landholder. The process seemingly assumes that the landholder is the proponent and therefore:

- Has given commercial consent to the process;
- Is funding the preparation of the statement so will have access to all draft reports and statements for checking for accuracy and impacts on their useability of their land; and
- Will be ensuring that the property is not negatively impacted by the proposal.

Renewable energy generation and storage proposal are often undertaken by a company with a lease on land (commercial consent). There are no regulatory requirements on proponents to provide landholders with detailed information on the potential impact of the proposal on their farm operations. There is little regulatory oversight of the fairness of these contracts. Landholders are often not given access to the technical studies or the opportunity to ensure co-location benefits are delivered. In most instances the VFF needs to call for Agriculture Victoria to be on a Technical Reference Group and often the representative is not a technical expert in the type of farming undertaken on the site.

For mining and transmission, the landholder has no commercial consent. They do not get to see any studies or reports. There is no landholder representative on a technical reference

group to ensure that the process is given full and proper consideration to the impacts of the proposal on farm businesses.

At the end of a multi-year process that excludes the landholder, farmers are given a month to digest thousands of pages of reports to understand what the impact on their land and livelihood will be. Exhibition is often over summer where farmers are working long hours harvesting crops and their lawyers and agronomists are on leave, increasing the stress of the process.

Proponents are restricted from showing reports to impacted landholders in a draft format. This is a risk for the landholder in that they are unable to highlight issues or concerns to be addressed and for the proponent as they have no opportunity to address landholder concerns prior to exhibition.

Standards and information

VFF's paper on co-existence and conflict between renewable energy and agriculture demonstrates that most standards used in the assessment process are developed by industry bodies using international research that does not consider the machinery used in Australian Agriculture or the impact of other regulatory systems –such as safety standards, on co-existence or conflict. Cauliflowers may grow under solar panels, but can you safely operate the machinery needed to water, feed and harvest them?

The on the ground impacts demonstrate that the application of theoretical standards in EES considerations leads to perverse outcomes for agriculture. The failure to monitor the actual results of desktop assessments post operation is driving the not only the loss of social license in rural communities but the loss of faith in the regulatory processes in place.

Transmission projects highlight the problem of the EES not properly considering agriculture impacts. This can be due to the failure to address the absence of commercial consent and the need to ensure forced access will not lead to loss to production and farm profitability. The VFF's Paper on compensation has indicated that for horticulture production the direct corridor cost (without wider severance and disturbance) is conservatively in the order of $62,000 per kilometre of easement per annum or $3.750 million per kilometre of 100m wide transmission easement in a 60-year operational life.

On pure economics the EES process should be considering the economic impact of a route that traverses 50km through horticulture versus extensive livestock (0.1875bn versus 0.042bn). Allowing a system that fails to consider this impact and ensure that the proponent not the landholder is bearing the burden of the loss of production attributable to the infrastructure identifies the perverse outcomes of the current regulatory processes, including the EES.

The EES is enabling companies to apply minimal impact with farm operations to all commodity production systems. Victoria produces nearly a quarter of Australia's food and fibre on approximately 1.5% of Australia's land mass. This demonstrates that the productivity of Victoria's agricultural land must be given proper consideration.

Environmental Impact

The current system needs to be improved to ensure environmental impact frameworks include impacts on individual farm businesses. The EES process cannot assume that the proponent will be considering this when they are not the landholder. A public company must actively seek to maximise its profits to shareholders. They will act to transfer costs to others in the absence of regulatory oversight.

The environmental impact and rehabilitation assessments often use adaptive management. It is not appropriate for a third party to damage the property of another without the ability to return it to full productivity.

Notice and adequate exhibition; Hearings and scoping.

As the EES Guidelines do not foresee situations where the proponent is not the landholder, they fail to ensure that impacted landholders are given materials in a timely manner. The content of the guidelines needs to be reviewed to overcome the following problems.

- How to ensure that the TRG has an agriculture specialist that understands the operating / on farm issues relevant to the consideration of farm business impacts. EES are being exhibited without the proper QA assurance.
- The Guidelines preclude landholders from viewing draft documents so they can give the proponent feedback on the assessment of their production or the likely effectiveness of control measures.
- The guidelines fail to consider co-ordination to achieve procedural fairness where proponent is not the landholder. They fail to ensure the exhibition period is for a long enough period and at the right time to allow directly impacted landholders to understand the impacts on their property. Exhibition over harvest which is a busy time for farmers and where advisors are often on leave.
- The Guidelines have no requirement for direct notice to impacted landholders.
- The Guidelines have no requirement for the proponent to give property specific information to landholders or support their ability to engage with the process. Eg LAC Act requires reasonable costs to be reimbursed.
- The Guidelines treat farmers as a community of interest where the impact will be different for different farm businesses.
- The Guidelines do not ensure proponents should be required to discuss the feasibility of mitigation measures with landholders prior to finalisation of the statement, including meeting reasonable expenses occurred to prepare a response.
- The Guidelines for the hearings do not envisage the need for impacted landholders to raise impacts in a commercial in confidence basis.
- Where the proponent is not the landholder, and landholder consent is not given, the Guidelines do not ensure the proponent should be responsible for ensuring landholders have access to technical support and representation at the hearings.
- The guidelines give no description of when an agriculture specific environment report would assist in scoping. The NSW Land Use Conflict Risk Assessment tool is an example of how to ensure the proponent has considered agricultural impacts.

- The Guidelines fail to outline how impacted landholders' views and concerns will be incorporated into scoping the study – especially when they are not the proponent.
- There is a need for the DT&P to ensure that they have sufficient knowledge of agriculture productions systems to ensure that the scoping process is sufficient to ensure consideration of impacts on agriculture, including potential impacts to farm businesses.
- There is a need for the DT&P to ensure that the TRG has the technical knowledge to consider if the EES has properly addressed agriculture impacts. The Act itself does not limit a TRG to government bodies.

III. Potential solutions to improve EES and planning projects

The existing guidelines are seen as not giving full and proper consideration of the impact of the proposal on agricultural land.

For an EES on agricultural land to fully provide "*an assessment of a projects potential effects on the existing environment (including identified future trends such as changes to the climate[1])*" it is important that the nature of the agricultural use and the inter-relationship with its physical systems is known. This is essential if the continuation of existing land uses and the potential displacement of land uses is to be achieved in accordance with relevant land use considerations.

This is even more essential for the circumstances where the proponent is not the landholder and where Government can force access. It is essential that the EES process gives timely access to information to the landholder so that they can contribute to its review and ensure it gives an accurate description of the impacts on the farm business and human rights to property. The EES should demonstrate the level of the impact and the issues that need to be addressed in the compensation process, and those that will be addressed through mitigation of impacts. It should foreshadow the need for additional payments where control measures fail.

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[1] extract from the EES Guidelines 2022 *Environmental effects An EES should provide an assessment of a project's potential effects on the existing environment (including identified future trends such as projected changes to the climate). The assessment should address effects on: • physical systems including potential changes to geology and soils, landform, landscape, land stability, hydrology and quality of surface, ground and marine waters; • ecological communities, populations or habitat of indigenous species of flora and fauna and ecosystem processes supporting biodiversity; • Aboriginal cultural heritage and historical heritage places and values; • continuation of existing land uses and the potential for displacement of land uses taking into account relevant planning scheme provisions; • opportunities for future land uses supported by strategic land use policy; • economic aspects including employment, business and industry viability and economic well-being at local, regional and national scales; • social aspects including amenity (related to air quality, noise, vibration and traffic and visual changes), continuation of social and recreation activities, access to social infrastructure and community cohesion; • human health for example related to changes in air quality and the noise environment or changes to public safety; and • climate change, including greenhouse gas emissions and the ability of communities and ecosystems to adapt to climate change.*

EES Guidelines

The EES Guidelines state *"The examination of alternatives for a project, in an EES, should include a screening of feasible alternatives as part of the project planning or design process, leading to a preferred alternative or alternatives. Preferred alternatives should offer clear potential to minimise and/or avoid significant environmental effects whilst meeting the objectives of the project."* The examples in the current guidelines fail to ensure that the economics of the project has been assessed in the situation where forced access by the Government is proposed. If the route is adding 0.162 billion of economic loss per 50 kilometres, and that cost has not been factored into the project cost, it is essential that the EES directs that this cost must not be transferred to the landholder but met by the proponent.

The Environment Effect Act provides a simple solution. Section 10(2)a states that *guidelines may set our different procedures for different kinds of works.*

S10(2)a would allow the existing guidelines to include specific procedures for mining and stone extraction renewable energy and transmission, water and gas pipelines projects in relation to the type of studies and reports that are required to ensure impact on agricultural land is considered. Specific processes for access to documentation and representation on technical reference groups could be given to impacted landholders that are not the proponent. This section would also allow a standalone guideline to be created for EES projects on farming land.

S10(2)b enables guidelines to refer to any matter or standards published by an authority or body. Neither authority or body is a defined term in the EE Act or in the Interpretation of Legislation Act. Neither is prefaced by the term statutory.

DTP or VicGrid could therefore create standards that outline the issues to be considered in an EES for transmission or renewable energy on farming land, and additional steps for when there is no commercial consent. They could ensure that the guidelines address all the shortcomings in the current process as listed in this document. Standards in a special act, such as the Land Access Code under the Electricity Industry Act could be referred to. This is why it is essential that the Electricity Industry Act places operational constraints and controls on all Transmission Network Service Providers (TNSPs).

It could also be argued that the VFF could publish standards and seek their reference or use in relation to EES procedures. Our preference is to work with Government to create processes that give fair consideration of issues.

If no EES is required

The current EES guidelines allow for guidance to be placed on projects that do not require a full EES. This enables conditions / standards to be set, and if the proponent fails to meet those standards / conditions a full EES would be required. The VFF believes that a full EES is required for projects on agricultural land, especially when the proponent is not the landholder. Any 'fastracking' of these projects must be premised on landholder agreement that full compensation can be made for project impacts, preferably by commercial consent.

The test of the effectiveness of the action would be an EES that involved the landholder in determining the impact of the proposal on their farm business. It would reinforce the need for proponents and governments to understand the potential costs on farm businesses in projects such as the Victorian Transmission Plan so that routes were not selected where full and proper compensation on just terms would jeopardise the business case for the project if compensation is paid.

Types of issues to be covered in EES guidelines

The current guidelines have a narrow description of the projects potential effect on the existing environment, and a narrower interpretation by proponents and Technical Reference Groups, who rarely have an expert in the type of agricultural production occurring.

The following is a brief list of key questions or considerations that are not prompted by the guidelines:

- Ensuring specific guidance in how to consider agriculture – site characteristics; property / business impacts; how to avoid / mitigate those impacts; what needs to be considered during construction, operation, rehabilitation (stages) and decommissioning.
- Ensuring EES documents address business impacts rather than desktop planning zone-based studies. Soil based production is not footloose and cannot simply relocate to another building. This should include requirements that rehabilitation ensures full production, all footings and sub surface works are fully removed, and soil health is restored including its structure, organic matter and microbial properties.
- How do we get greater rigour around ensuring alternatives are discussed in relation to minimise / avoid impacts on ongoing productive agricultural use?
- Should cost be the basis for selecting the preferred project where the landholder (not the proponent) will be bearing the costs? Is this a scenario where guidance should be given as to how these impacts are to be compensated for?
- How do we ensure that ability to rehabilitate post construction and post decommissioning includes full productivity.
- Need for guidance where proponent is not the landholder and there is an incentive to maximise profit by minimising costs by transferring negative impacts (costs) to other parties.
- How to improve the standard of considerations to potential changes to soils and drainage?
    - How do improve consideration of land use impact beyond a zone? Do we need to demonstrate why you cannot just move to another location for soil-based industries?
    - Should there be a prompting document so that agriculture is recognised in relation to social and economic aspects?
    - In relation to renewables, should the climate change impact of food miles / food security be considered. How is the concept of maladaptation and the water-food-energy nexus in the Sustainable Development Goals.

- Opportunity for agriculture guidance – what are the cumulative impacts? Issues relating to use of technologies and burden when projects mean landholders cannot use technology (market access; cost of production; regulatory compliance)
- Should a directly impacted landholder where consent has not been given be seen as a generic stakeholder?
- Why isn't there direct consideration of landholders that are not proponents? There should be specific requirements to engage, including provision of any report or study pertaining to their land in a draft form for checking.

IV. Conclusion and Recommendations

Creating better guidance to the issues to be considered in EES and planning approvals for transmission projects on farmland is critical to the ability to assess the impact of renewable energy and transmission, mining, (including rare earth minerals) and projects that generate or store energy to both the broader agriculture industry and to individual farm businesses. Transition to renewable energy is an internationally recognised need. However, there is not support for transition at any cost.

The United Nations (UN) document *Water, Food and Energy* states that *Sustainable agriculture is critical. The integrated systems of land, soil and water are being stretched to breaking point. Efficiency measures along the entire agrifood chain can help save water and energy, such as precision irrigation based on information supplied by water providers, and protection of ecosystems alongside agriculture and energy production can ensure environmental integrity.*

Australian agriculture is sustainable. It is investing in smart agriculture that lowers emissions intensity and water use. The use of this technology is often restricted or prohibited by regulations relating to renewable energy and transmission, or even in some planning provisions.

We must move beyond the currently regulatory rhetoric that is driving the loss of social license through failure to understand where there is a land use land use conflict between agriculture and renewable energy that is leading to the loss of agricultural land.

The VFF has been advocating for improvements to ensure that Victoria is a world leader in demonstrating how planning and environmental regulations and approvals process can deliver true co-location of energy and agriculture.

VCAT in *Helios Volta Holdings* used the term co-location to describe the balance between solar farm and agricultural land uses being achieved where co-location is evident, that is where the facilities were '*subservient to agriculture…(and) acting to support ongoing agricultural activities within productive areas*'. This is a similar concept to the "in conjunction with" test in planning.

Recommendations

1. **That Department of Transport and Planning, in conjunction with DEECA and the VFF prepare an EES Guideline to be utilised for projects on agricultural land and include specific arrangements for when the proponent is not the landholder. The Guidelines will seek to rectify the issues and concerns raised by the agriculture sector in relation to the EES process, including but not limited to, the issues raised in this paper.**

2. **That the EES Guidelines refer to the following documents or processes that are subject to recommendations in relation to conflict and co-existence with agriculture and compensation papers:**
   - **renewable energy and transmission assessment guide that outlines how co-location with agriculture can be achieved and to identify potential conflicts**
   - **with existing agricultural land uses so that proposals have eliminated the conflict.**
   - **DEECA and Energy Safe Victoria guideline on how to design energy generation, transmission, distribution or storage on farms to ensure co-location with agriculture without the need for permits or spotters;**
   - **DEECA Guideline on construction, maintenance and removal of energy generation, transmission, distribution or storage on farms to ensure minimal impact on soil health, soil fertility and drainage.**
   - **DEECA Guideline for the calculation of compensation for land access for Energy and Mining projects to ensure the calculation of business impact from the infrastructure or safety and other related regulations stemming from the presence of the infrastructure including but not limited to the impact on the use of machinery or production systems normal to that industry so that an annual payments can be made to at least the impact of the losses to the business . This should include:**
     - **Training and guidance for all experts involved in calculating compensation payments.**
     - **guidelines on how to value severance and disturbance in the Victorian farm context – especially to ensure that ongoing impacts are recognised.**
     - **A check list for farmers to discuss with valuer during an assessment – need to ensure the valuer has the right information.**
     - **The use of a 20 percent to allow for uncertainty in estimating impacts on future farm operations.**
     - **Regulatory oversight to ensure all contracts and written agreements give full information to landholders to enable the calculation of impact and ensures the proponent or the Government is responsible for ensuring rehabilitation and decommissioning of infrastructure occurs and ensures additional compensation to be calculated where conditions change, or additional restrictions are put on farm operation.**

CONFIDENTIAL

Victorian Farmers Federation

White Paper

Renewable Energy and transmission - Co-existence with Agriculture

October 2024

Contents

I. Introduction

This submission provides a brief overview of the factors that farmers consider when determining the impact of renewable energy generation, storage or transmission on their farm business.

Failure to understand the restrictions that renewable energy and transmission can have on agriculture is driving the loss of social license and landholder resistance to hosting infrastructure.

Energy experts and safety regulators do not always understand farming practices and farmers are rarely consulted in changing energy safety regulations.

As farming systems evolve to meet local physical, climatic and regulatory environments and each state has different safety regulations there is a gap our understanding of how to plan for renewable energy infrastructure that is seen as a benefit to the farm business.

II. Renewable energy impacts on farm businesses?

Renewable Energy and Transmission are predominantly located on farmland. Energy generators need landholder consent to gain access to farmland for wind or solar however transmission lines are planned based on compulsory acquisition of an easement.

The difference between what is promised and what is delivered was eroding the social license of renewable energy generators. This has been exacerbated by transmission planning processes that approve projects without understanding of impacts on landholders along the routes.

Over the past decade the VFF has seen the energy sector see farms as a single entity. Farms are complex. Different commodity types will have different interactions with renewable energy. Within commodity types there can be differences based on soils, climate, production system, machinery used etc.

There is increasing demand for farmland – for urban expansion, for plantation timber, for sequestration, for hosting infrastructure. Transition to a renewable energy future needs to be driven by a commitment to renewable energy co-locating with agriculture.

This submission seeks to highlight the issues that need to be addressed to ensure renewable energy generation, storage and transmission infrastructure is in the most appropriate location and uses the right technology, is designed to minimise conflicts with agriculture and ensures landholders are compensated for impacts to farm business.

Lack of Regulatory oversight

Renewable energy and transmission if predominantly located on farming land. For farmers to want to engage with the energy transition they need to understand what it means for their business and trust that the Government will ensure that there is regulatory oversight to ensure they are treated fairly.

The Australian Energy Infrastructure Commissioner's (AEIC's) Report to Minister Bowen highlights that energy proponents do not always act in a fair and reasonable manner. Without regulatory safeguards they act to maximise profits by transferring costs to others.

As most decision makers are not familiar with farm production the planning process is failing to ensure that the impacts to landholders from infrastructure are known, avoided where possible and compensated for where they are not.

What information is needed to determine commercial consent?

To achieve commercial consent from landholders and to minimise the loss of community support it is critical for proponents and decision makers:

- Understand the type of production in an area;
- Understand the potential conflict their proposal may have on the production system in place, including safety regulations;
- Be willing to design and locate infrastructure to minimise impact on land use;
- Understand the need to protect soil and to ensure soil structure and health is maintained;
- Ensure that the project is viable once full compensation / commercial consent is factored in.
- Develop land access, biosecurity, compensation and rehabilitation plans that reflect landholder feedback and requirements.

Currently there is very little attention paid to potential conflict or co-existence within energy companies. Without regulatory oversight to ensure generators disclose potential conflicts to landholders they will not do so as this would either reduce the likelihood of access to land being granted or would increase the price required to reach commercial consent. There is often no desire for companies to collect any data on operational experience from the farmer view. This drives the loss of landholder trust in companies and broader social license issues.

Table 1, 2 and 3 demonstrate the difference between energy why farmers question energy industry statements regarding compatibility of renewable energy infrastructure and agriculture. Predominantly energy companies and planning guidelines focus on the co-existence in relation to agriculture and constraints / costs to their business in relation to conflict – for example sheep will be promoted as the farming activity for solar, even if the existing use was livestock or horticulture.

Farmers look at the operational context and regulatory interactions in determining conflict or co-existence. Just because wheat can grow under a solar panel does not mean it can be safely and efficiently planted, fertilised and harvested under a standard solar array.

*Table 1 – indicative co-existence and conflict between wind turbines and agriculture systems.*1*

	Co-existence	**Constraints**
Grains	*Physical* Payments are made to compensate for loss of productive area from hosting turbines. *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents.	*Physical* Tower construction damages soil (compaction) Tower footings are permanent impacts on soil and drainage. Towers are a barrier to efficient machinery movements. Roadways and turbine bases sterilise land from production. Spread of weeds or disease from poor biosecurity control. *Regulatory* Towers restrict use of machinery around the towers. Impacts on efficient use of machinery in easements. Impacts use of aerial spraying. *Financial* Increase in CIV (basis of farm rates). Increased use of fuel and chemicals. Impact of chemicals on grain quality / shipment acceptance. *OH&S* Access to areas within withholding periods. (chemical exposure) Risks from blade strike and debris, including damage to machinery.
Livestock	*Physical* Where payments are made to compensate for loss of productive area from hosting turbines. *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential	*Physical* Loss of aerial spraying or aerial mustering. Spread of weeds or disease. *Financial* Increase in CIV (basis of farm rates). Impact of chemicals used on animal health and acceptance of shipment. Loss of production (injury, death, mismothering). *Regulatory* Towers restrict use of machinery around the towers.

[1] **Refer to Attachment one for detail on agriculture land use conflict and attachment two for detail on irrigation. Attachment four gives more detail on physical impacts of wind and transmission.

	constraints on their operations for consideration of commercial consents.	Impacts on efficient use of machinery in easements. Impacts use of aerial spraying. *OH&S* Use of 'mustering' tools such drones or helicopters by energy companies without the understanding of how livestock react can lead to causing risk to livestock and humans. Risks from blade strike and debris, including damage to machinery.
Dairy	*Physical* Likely to require more significant payments to compensate for loss of productive area from hosting turbines. *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents.	*Physical* Loss of aerial spraying or aerial mustering. Spread of weeds or disease during access. Interference with movement of livestock to dairies. Impact with strip feeding and stock containment areas. *Regulatory* Towers restrict use of machinery around the towers. Impacts on efficient use of machinery in easements. Impacts use of aerial spraying. *Financial* Increase in CIV (basis of farm rates). Impact of chemicals used on animal health and acceptance of shipment. Loss of production (injury, death, mismothering). *OH&S* Use of 'mustering' tools by energy companies causing risk to livestock and humans. Risks from blade strike and debris, including damage to machinery.
Horticulture (tall)	*Physical* Rarely built on horticulture areas as footprint unlikely to be fully compensated for (commercial consent). May reduce frost risk (if operating) *Regulatory*	*Physical* Loss of productive area to turbine bases and access easements. Potential restrictions on use of horticulture structures. Loss of aerial spraying. Spread of weeds or disease during access.

	Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents.	*Regulatory* Towers restrict use of machinery around the towers. Impacts on efficient use of machinery in easements. Impacts use of aerial spraying. *Financial* Increase in CIV (basis of farm rates). Impact of chemicals used on animal health and acceptance of shipment. Significant reduction in production value due to loss of productive area. *OH&S* Risks from blade strike and debris, including damage to machinery.
Horticulture (small)	*Physical* Rarely built on horticulture areas as footprint unlikely to be fully compensated for (commercial consent). *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents.	*Physical* Loss of productive area to turbine bases and access easements. Potential restrictions on use of horticulture structures. Loss of aerial spraying. Spread of weeds or disease during access. *Regulatory* Towers restrict use of machinery around the towers. Impacts on efficient use of machinery in easements. Impacts use of aerial spraying. *Financial* Increase in CIV (basis of farm rates). Impact of chemicals used on animal health and acceptance of shipment. Significant reduction in production value due to loss of productive area. *OH&S* Risks from blade strike and debris, including damage to machinery.
Intensive Animal Industries	*Physical* Location of turbines and access at significant distance from shedding. *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning).	*Physical* Restrictions on the location of shedding. Spread of weeds or disease during access. *Regulatory* Biosecurity practices. Impacts on onsite burials post disease or smothering event.

	Financial Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents.	*Financial* Increase in CIV (basis of farm rates). Significant risk if access leads to mass death event. *OH&S* Risks from blade strike and debris, including damage to machinery. Risk from zoonotic disease.
irrigation	*Physical* Rarely built on irrigation areas as the footprint and the change in effectiveness of irrigation system as unlikely to be fully compensated for (commercial consent). *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents.	*Physical* Impacts on the use of centre pivot and lateral irrigation. Impact on drainage. *Financial* Significant reduction in productivity if unable to irrigate.

Table 2 – indicative co-existence between solar panels and agriculture systems.[2]*

	Co-existence	**Constraints**
Grains	The nature of solar installations in Australia are in direct conflict with grain production in Australia. *Physical* Vertical panels at 35m widths and 35m clear zone at top and bottom to allow tractor turning. *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents.	*Physical* Tractors can be 5.5m high. Boom spray can be 30m wide. Traditional solar arrays would not allow the use of machinery. Spread of weeds or disease during access. *Regulatory* Inability to stubble burn. *Financial* Increase in CIV (basis of farm rates). Increased costs to manage weed and disease. Loss of income from cropping.
Livestock	*Physical* Sheep. Height of array provides shelter and shade. Cattle. Would require arrays that were wider and more elevated. *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents. Requires enforceability of commercial contract conditions (siting, decommissioning).	*Physical* Sheep can become caught in solar panels and supports leading to injury. Cattle can cause damage to systems from rubbing / pushing against poles. Potential for injury to livestock from corners or sharp edges of installations. Inability to use boom sprays or aerial spraying to manage weeds. *Financial* Increase in CIV (basis of farm rates). Increased costs to manage weed and disease. *OH&S* Increased risk in mustering (obstacles). Risks from personnel being in paddocks within a chemical withholding period.
Dairy	*Physical*	*Physical*

[2] *Refer to Attachment one for detail on agriculture land use conflict and attachment two for detail on irrigation. Attachment four gives more detail on physical impacts of wind and transmission.

	Unlikely to co-exist in traditional form due to the generic 'cattle' issues and the daily movement of cattle. If modified to create rooftop solar on dairies and containment yard shedding. *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents.	Cattle can cause damage to systems from rubbing / pushing against poles. Potential for injury to livestock from corners or sharp edges of installations. Inability to use boom sprays or aerial spraying to manage weeds. *Financial* Increase in CIV (basis of farm rates). Increased costs to manage weed and disease. Some weeds cause bloating in cattle that can lead to mortality. *OH&S* Increased risk in mustering (obstacles). Risks from personnel being in paddocks within a chemical withholding period. As cows are milked daily any residue from chemicals applied while livestock are active in the withholding period can enter the milk products.
Horticulture (tall)	*Physical* Agrivoltaics – that is array is designed to allow tractor operations, such as roofing on grow sheds or functioning as horticulture structures providing frost and hail protection. Hail protection. *Regulatory* Co-existence requires regulation that ensures enforceability of commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents. *OH&S* Manual harvesting – risks of injury from panels	*Physical* Restricts growth of vegetation. Restricts use of tractors for fertilising, spraying and harvesting. Reduced effectiveness of frost fans. restricts use of ladders for harvest. Cannot use netting structures (protect from loss from birds and bats.) Loss of productive land from footings. Potential microclimate impacts. *Regulatory* Inability to stubble burn. *Financial* Increase in CIV (basis of farm rates). Increased costs to manage weed and disease. Loss of income from cropping.
Horticulture (small)	*Physical* Agrivoltaics – when designed to allow tractor operations only. Some protection from frost. *Regulatory*	*Physical* Restricts growth of vegetation. Restricts use of tractors for fertilising, spraying and harvesting. Reduced effectiveness of frost fans.

	Needs regulatory standards on disclosure of information to allow proper consideration of commercial consent. Requires enforceability of commercial contract conditions (siting, decommissioning).	Cannot use netting structures (protect from loss from birds and bats.) Loss of productive land from footings. Potential microclimate impacts. *Regulatory* Inability to stubble burn. *Financial* Increase in CIV (basis of farm rates). Increased costs to manage weed and disease. Loss of income from cropping. *OH&S* Injury from impact with solar panels when tending crops..
Intensive Animal Industries	*Physical* Agrivoltaics – Rooftop solar for shed based industries. Shelter for range chickens. *Regulatory* Needs regulatory standards on disclosure of information to allow proper consideration of commercial consent. Requires enforceability of commercial contract conditions (siting, decommissioning).	*Physical* Pigs are likely to interact with the structures – potential for injury to livestock and damage to infrastructure. Heightened risk and consequence from poor biosecurity management. *Regulatory* Biosecurity regimes may be compromised by land access. Biosecurity practices. Impacts on onsite burials post disease or smothering event. *Financial* Increase in CIV (basis of farm rates). Significant risk if access leads to mass death event. *OH&S* Biosecurity – poultry and pigs are highly zoonotic species with additional biosecurity requirements for animal welfare and disease risk.
irrigation	*Physical* Rarely built on irrigation areas as the footprint and the change in effectiveness of irrigation system (sensitive to minor level change) as unlikely to be fully compensated for (commercial consent). *Regulatory* Co-existence requires regulation that ensures enforceability of	*Physical* Can impact on co-existence where irrigation is used due to changes to sub surface drainage or level change. Unlikely to allow the use of efficient irrigation systems such as laterals or centre pivot. *Regulatory* Potential inability to use flood irrigation or overland drainage. *Financial*

	commercial contract conditions (siting, decommissioning). *Financial* Co-existence requires regulation that ensures hosts are provided information on all potential constraints on their operations for consideration of commercial consents.	Significant reduction in productivity if unable to irrigate. *OH&S* Risk from presence of electricity and water.

A safe work approach to infrastructure design requires project planners and commissioners to design projects so that existing land uses can continue to operate safely. The table below identifies the current range of issues that have not been included in the assessment of AEMO in the ISP or the Rit-t, and are important to whether the Victorian Transmission Plan Guidelines and SLUA will be successful in guiding renewable energy transition to occur with more co-location outcomes and fewer land use conflicts that are challenging to fully compensate.

The VFF believes that if this cannot occur it requires clear consideration of the long-term costs to the landholder and the broader economy throughout the VTPG process. As transmission does not require commercial consent it is critical that project planners and regulators understand the nature of conflicts between transmission and agriculture and how overhead transmission line can constrain agricultural production on farms.

Table3 – indicative conflict between transmission and agriculture systems.[3]*

	Conflict / constraints
Grains	*Physical* Tower construction damages soil (compaction) Concrete construction trucks compact soil. Reduces yield. • Farmers use tramlines to reduce impact on soils. Changing operations to avoid having empty chaser bins under the lines etc increases costs and soil compaction and reduces yields. Tower footings are permanent impacts on soil and drainage. Towers are a barrier to efficient machinery movements. This increases inputs and generally lowers productivity. • Difficult to use wide machinery such as boom sprays. These can be damaged if they impact pylons. Concern with spray arm raising if one side impacts the ground. Wires (interference) can impact accuracy of Smart Agtech. Loss of crop from access (not on tramlines) *Regulatory* Tower and wires restrict use of machinery including tractors and associated equipment, aerial spraying, drones, stubble burning etc.

[3] *Refer to Attachment one for detail on agriculture land use conflict and attachment two for detail on irrigation. Attachment four gives more detail on physical impacts of wind and transmission.

	• Machinery over 5m high will require permits and spotters. This may be denied in hot weather (summer) impacting on harvest. Spotters add significant cost and will be difficult to source during harvest with existing labour shortages. Ausnet has reduced machinery height to 3m which will impact most farm machinery rather than maintain lines to safety standards. • Aerial spraying by planes or drones is not allowed near transmission lines. • Straight runs required for efficient use of fuel and chemicals. Changing operations to avoid having empty chaser bins under the lines etc increases costs and reduces yields. • Without GPS increases need to stubble burn. Cannot stubble burn near transmission lines. • Biosecurity (including chemical use). Concern regarding introduction of weeds and pests that will be harder to control due to restriction on tools. TNSPs use chemicals on the site that can impact on crop health and vendor declarations. *Financial* Increase in CIV (basis of farm rates). Use of chemicals impacting on crop health or ability to sell crop. • No till requires accurate GPS – even a few cm can mean the difference between killing the weed or the crop. Reduced production / profitability • Changing safety regulations are reducing area able to be farmed and therefore the earning capacity of the business. Increased use of fuel and chemicals. • The need to fence off easements (OH&S) reduces the efficiency of farming (grains producers remove fencing to have long runs) • If cannot use long boom sprays or fill chaser bins that will impact on emissions intensity and profitability. • Loss of *OH&S* • Many producers believe they will need to fence of the easement to manage safety risks from transmission lines and ESV and TNSP restrictions. • Chaser bins and boom spray wings can have varying heights – unsure about the ability to use.
Livestock	*Physical* • Construction can impact pasture and soil health. • Decommissioning of dams and stock watering in easement. • Impact on location / size of dams for stock watering. • Impact on cattle movements from access and use of drones / planes for inspection (tools used to muster – therefore can drive livestock into danger) • Impact of cattle movement from structures and fencing • Interaction between cattle and infrastructure, especially when spooked by aerial or ground inspections. • Introduction of new weeds or disease from access practices. • Impact on ability to plant trees for shelter and windbreaks. • Concern regarding interference with monitors and sensors. *Regulatory* Limits use of aerial spraying and aerial mustering. *Financial* • Use of chemicals impacting on animal welfare or ability to sell livestock.

	• Mismothering and animal welfare considerations leading to reduced number of livestock and condition of livestock leading to decreased returns. • Increased costs to manage weeds, • Additional costs of fencing (earthing) *OH&S* • Withholding periods of chemicals. • Safety risks from interactions with livestock from access.
Dairy	*Physical* • Construction can impact pasture and soil health. • Decommissioning of dams, effluent treatment ponds and stock watering in easement. • Impact on location / size of dams for stock watering and effluent treatment systems. • Impact on cattle movements from access and use of drones / planes for inspection (tools used to muster – therefore can drive livestock into danger) • Impact of cattle movement from structures and fencing • Interaction between cattle and infrastructure, especially when spooked by aerial or ground inspections. • Introduction of new weeds or disease from access practices. • Impact on ability to plant trees for shelter and windbreaks. • Stock move daily for milking. Increases risk from chemical use; physical access and biosecurity. • Will lead to creation of smaller paddocks when easements are fenced off leading to increased concentration of movements around fences – compacting soils and increasing OH&S risks. • Impact on laser graded or irrigated pasture. • Impact on siting of dairy and location of silage storage. • Concern regarding interference with monitors and sensors. *Regulatory* Limits use of aerial spraying and aerial mustering. May restrict B double access to dairy. *Financial* • Use of chemicals impacting on animal welfare or ability to sell milk products. • Mismothering and animal welfare considerations leading to reduced number of livestock and condition of livestock leading to decreased returns. • Increased costs to manage weeds, • Additional costs of fencing (earthing) and automated access gates. • Increased costs to store water for dairy washdown and for effluent treatment systems. • New access for dairy or permit processes. *OH&S* • Withholding periods of chemicals. • Safety risks from interactions with livestock from access.
Horticulture (tall)	*Physical* • Tower construction damages soil (compaction) Concrete construction trucks compact soil. Reduces yield. • Tower footings are permanent impacts on soil and drainage. • Towers are a barrier to efficient machinery movements. This increases inputs and generally lowers productivity.

	• Wires (interference) can impact accuracy of Smart Agtech. • Decommissioning of dams. • Impact on location / size of dams. • Introduction of new weeds or disease from access practices. • Impact on laser graded grow areas. • Disruption of rows impacting efficiency and increasing exposure to wind. • Changes to the type or efficiency of irrigation used • Impact on production of high value crops due to restrictions on the easement. • Tall crops / trees and horticulture structures prohibited. • Inability to use aerial tools and drones • Inability to use igloos and other structures in the vicinity of the easement *Regulatory* Tower and wires restrict use of machinery including tractors and associated equipment, aerial spraying, drones, burning of leaf matter etc. • Machinery over 5m high (including cherry pickers) will require permits and spotters. This may be denied in hot weather (summer) impacting on harvest. Spotters add significant cost and will be difficult to source during harvest with existing labour shortages. • Aerial spraying by planes or drones is not allowed near transmission lines. • Straight runs required for efficient use of fuel and chemicals. Runs will be disrupted by the easement and may need to divert around the easement when using taller machinery or chaser bins. Increases costs and reduces yields. • Biosecurity (including chemical use). Concern regarding introduction of weeds and pests that will be harder to control due to restriction on tools. TNSPs use chemicals on the site that can impact on crop health and vendor declarations. • Biosecurity (including chemical use) potential for significant impact on soils / productivity *Financial* Increase in CIV (basis of farm rates). Use of chemicals impacting on crop health or ability to sell crop. Reduced production / profitability, including increased use of fuel and chemicals. Changing safety regulations are reducing area able to be farmed and therefore the earning capacity of the business. • The need to fence off easements (OH&S) reduces the efficiency of farming • If cannot use elevated pickers or fill chaser bins that will impact on emissions intensity and profitability. *OH&S* • Many producers believe they will need to fence of the easement to manage safety risks from transmission lines and ESV and TNSP restrictions. • Increased compliance cost – harvesting fruit and nuts at a height.

Horticulture (small)	*Physical* • Tower construction damages soil (compaction) Concrete construction trucks compact soil. Reduces yield. • Tower footings are permanent impacts on soil and drainage. • Towers are a barrier to efficient machinery movements. This increases inputs and generally lowers productivity. • Wires (interference) can impact accuracy of Smart Agtech. • Decommissioning of dams. • Impact on location / size of dams. • Introduction of new weeds or disease from access practices. • Impact on laser graded grow areas. • Disruption of rows impacting efficiency and increasing exposure to wind. • Changes to the type or efficiency of irrigation used • Impact on production of high value crops due to restrictions on the easement. • Inability to use aerial tools and drones • Inability to use igloos and other structures in the vicinity of the easement *Regulatory* Tower and wires restrict use of machinery including tractors and associated equipment, aerial spraying, drones, burning of leaf matter etc. • Aerial spraying by planes or drones is not allowed near transmission lines. • Straight runs required for efficient use of fuel and chemicals. Runs will be disrupted by the easement and may need to divert around the easement when using taller machinery or chaser bins. Increases costs and reduces yields. • Biosecurity (including chemical use). Concern regarding introduction of weeds and pests that will be harder to control due to restriction on tools. TNSPs use chemicals on the site that can impact on crop health and vendor declarations. • Biosecurity (including chemical use) potential for significant impact on soils / productivity *Financial* Increase in CIV (basis of farm rates). Use of chemicals impacting on crop health or ability to sell crop. Reduced production / profitability, including increased use of fuel and chemicals. Changing safety regulations are reducing area able to be farmed and therefore the earning capacity of the business. • The need to fence off easements (OH&S) reduces the efficiency of farming • If cannot use elevated pickers or fill chaser bins that will impact on emissions intensity and profitability. *OH&S* • Many producers believe they will need to fence of the easement to manage safety risks from transmission lines and ESV and TNSP restrictions.
Intensive Animal Industries	*Physical* Restriction of shedding in the vicinity of the easement. Effluent ponds and treatment systems disallowed near easement. Impact on location / size of dams for stock watering, washdowns. *Regulatory*

	Pigs and poultry have specific biosecurity arrangement and the need for specific washdowns and hygiene practices. Impact on ability to bury livestock on site (emergency response) *Financial* • Shedding. Potential loss if access led to mass mortalities. Increase in CIV (basis of farm rates). Use of chemicals impacting on free range livestock.
Emergency Response	*Regulatory* Concerns regarding safety egressing under powerlines in thick smoke given SoPs regarding safe access to easements. Concern that farm houses, sheds and places of last resort may be left undefended due to restricted access by ground and air resources.

Gaps in current guidance materials

The available material for planners to assess agricultural impacts / co-existence is predominantly written by organisations without operational understanding of farming such as the Clean Energy Council (CEC) *Australian Guide to Agrisolar.* These guides are a good start, but they do not understand the machinery used and the interactions with energy safe regulations. By saying ground solar is compatible with horticulture they are not giving context to whether the standard ground solar installation allows crop management or harvest by tractors.

This leads to the need to understand conflict, co-existence and co-location and to embody that knowledge in renewable energy planning and approvals processes.

III. How to achieve co-location of renewable energy infrastructure with agriculture.

Co-location

Co-location is a term used by VCAT in *Helios Volta Holdings.* VCAT found the balance between solar farm and agricultural land uses is achieved where co-location is evident, defined as where solar facilities are '*subservient to agriculture…(and) acting to support ongoing agricultural activities within productive areas*'. This is a similar concept to the "in conjunction with" test in planning, where the new use is secondary to the primary use of the land.

Madeline Taylor in Planning the Energy Transition: A Comparative Examination of Large-Scale Solar Energy Siting on Agricultural Land in Australia approvals in Australia are undertaken in the planning system, with differences in each state.

The VFF believes a key shortcoming of the current regulatory system in Victoria is the clear gap of understanding on how to ensure renewable energy generation, transmission or storage is 'subservient' to agriculture, especially when there is no commercial consent.

Renewable energy is predominantly located in the Farming Zone the following decision guidelines should be applied to proposals.

1. *'Whether the use or development will support and enhance agricultural production.*
2. *Whether the use or development will adversely affect soil quality or permanently remove land from agricultural production.*
3. *The potential for the use or development to limit the operation and expansion of adjoining and nearby agricultural uses.*
4. *The capacity of the site to sustain agricultural use.*

These applications are primarily assessed in Melbourne by DTP staff on behalf of the Minister for Planning. There is very little policy guidance or practice notes to assist urban planners apply these tests.

There is very little guidance to the energy industry or regulators on how energy infrastructure may restrict agricultural production. Madeline Taylor in *Planning the Energy Transition: A Comparative Examination of Large-Scale Solar Energy Siting on Agricultural Land in Australia* states that "*Solar energy development land requirements have led to concern over the lack of strategic land use planning, resulting in potential impacts on agricultural soil quality, soil drainage, and future agricultural production*." ... *"Despite solar energy development increasingly being sited on agricultural land there is a lack of Australian comparative legal studies specifically examining large-scale solar energy regulation on agricultural land."*

The failure to address inherent conflicts between renewable energy and agriculture for projects with commercial consent has led to significant delays to transmission projects as project planners have not understood the implications of their proposal on farm businesses.

The VFF has discovered that there are even fewer studies that investigate the actual co-existence, colocation or conflict between renewable energy (including transmission) and agriculture, including an understanding of the machinery used and the safety and other regulatory framework that farmers must comply with. The only guideline available to decision makers is from the Clean Energy Council. It uses European research, often from university trials to determine compatibility. It does not consider safety regulations or the ability to operate farm machinery.

The VFF has assessed Energy Safe regulations and publications from TNSPs in relation to operational restrictions and spoken to farmers to understand what this means for their farming practice. After four years of seeking clear answers on can you place a crop in a chaser bin without the need for two spotters farmers are yet to receive an answer.

There is an urgent need for guidelines to be produced for the Australian regulatory context. Wind turbines and overhead powerlines can restrict the use of drones and air operations on farms. Solar development is often incompatible with the use of tractors (cropping) and transmission also restricts the height of machinery and may require whole of farm drainage and operation if irrigation systems need to be altered.

The challenges Taylor discusses in relation to planning for solar energy are even greater in relation to transmission where the landholder is unable to give commercial consent. Government promoting renewable energy without understanding inherent land use conflicts between renewable energy and agriculture has led to failure to have the appropriate regulatory structure to ensure the design and approval of renewable energy and transmission does not lead to competition between uses and perverse outcomes for agricultural land.

It is misleading for companies to produce materials that are not honest relating to potential impacts. Pamphlets with a tick against cropping where the existing machinery used would require monthly permissions for use and spotters.

Taylor states that "*Strategic, comprehensive, and holistic planning is thus key to the successful and sustainable implementation of both onshore and offshore renewables and the realisation of co-benefits.*" Government cannot rely on the energy industry providing reliable information on the impact of their proposals on farming. That will not deliver co-benefits.

Farmers would not be resisting renewable energy and transmission if Government was ensuring that the regulatory processes for were ensuring renewable energy facilities, including transmission, delivers a secondary income for agricultural landholders to improve economic resilience and dual use of land to achieve co-location of energy and agriculture. A payment to reduce losses incurred is not a co-benefit.

Proper consideration of avoiding land use conflict and designing for co-benefit is essential if we are to achieve a regulatory system that delivers co-location outcomes. Attachment 3 includes learnings from renewable energy and transmission projects for inclusion in approvals guidelines.

Recommendation

It is recommended that the government work with the VFF to create a renewable energy and transmission assessment guide that outlines how co-location with agriculture can be achieved and to identify potential conflicts with existing agricultural land uses so that proposals have eliminated the conflict.

How to assess and resolve conflict issues between renewable energy and agriculture.

Despite more than a quarter of a century in developing renewable energy facilities on farming land the Government has failed to monitor whether the approvals processes properly resolved impacts of proposal on agriculture or worked to ensure regulatory oversight of private company activities on private land.

The AEIC *Community Engagement Review* for Minister Bowen looks at the potential process improvements for projects where there is already commercial consent from the landholder. The Albanese Government stated that *Communities and landholders deserve better engagement, which is why the Government has accepted in principle all nine recommendations made by Commissioner Mr Andrew Dyer. These include:*

- *reducing unnecessary community engagement (where infrastructure will not ultimately be located) by improving the way project sites are selected*
- *increasing early local collaboration*
- *revising planning and approval processes to be more transparent and streamlined when it comes to community feedback*
- *motivating developers to ensure best practice engagement*
- *improving complaints handling*
- *keeping communities better informed on energy transition goals, benefits and needs; and*
- *equitably sharing the benefits of the transformation.*

These high-level objectives cannot be achieved without understanding what is driving the concern of the agriculture sector. What are the learnings for site selection? What information to landholders need?

Table 5 summarises knowledge gaps in what needs to be resolved to deliver co-existence or preferably co-location for different agriculture commodity systems. Co-existence is based on recognition that farm production has been reduced and that commercial arrangements are required to choose to host energy infrastructure. Co-location is the preferred outcome where the energy infrastructure has been designed to mitigate the impact on farm operations.

Table 4 – indicative co-existence and co-location between transmission and agriculture systems.[4]*

	Co-existence	Co-location
Grains	Option to run livestock in corridor – but would require fencing needing a permit and earthing. Would impact on efficient movement of machinery. Annual compensation payments or commercial consent required to negate business impacts. Needs regulatory standards on disclosure of information to allow proper consideration of commercial consent. Requires enforceability of commercial contract conditions (siting, decommissioning).	Would require significant redesign to ensure that farm productivity was not reduced. This would include micro siting of towers at the edge of paddocks and ensuring access ways are narrow and act to minimise soil compaction. Restrictions on use of traditional post and wire fences. HVDC at edge of property / road reserve would be more likely to achieve co-locations as overhead would require significantly higher towers which would require deeper foundations with impact on soil and drainage. Co benefit payments required to cover residual impacts. The current figure is close to the impact per annum from direct easement impacts on businesses but is not a 'benefit'.
Livestock	Potential for compatibility with design. Annual compensation payments or commercial consent required to negate business impacts. Needs regulatory standards on disclosure of information to allow proper consideration of commercial consent. Requires enforceability of commercial contract conditions (siting, decommissioning).	Co-location would require micro siting of towers to reduce impacts on farm operations Co benefit payments required to cover residual impacts. The current figure is close to the impact per annum from direct easement impacts on businesses but is not a 'benefit'.
Dairy	Potential for compatibility with design. Needs regulatory standards on disclosure of information to allow proper consideration of commercial consent. Requires enforceability of commercial contract conditions (siting, decommissioning).	Co-location would require micro siting of towers to reduce impacts on farm operations. Including ensuring free movement of dairy cattle (without fencing); clear zones to dairies, dams and effluent bonds. Co benefit payments required to cover residual impacts. The current figure is lower than the impact per annum from direct easement impacts on businesses but is not a 'benefit'.
Horticulture (tall)	Option to run livestock in corridor – but would require fencing needing a permit and earthing. Would impact on	Would require significant redesign to ensure that farm productivity was not reduced from restrictions on the easement and the footprint of the pylons

[4]*Refer to Attachment one for detail on agriculture land use conflict and attachment two for detail on irrigation. Attachment four gives more detail on physical impacts of wind and transmission.

	efficient movement of machinery. Significant impact on profits.	HVDC at edge of property / road reserve required as overhead would require significantly higher towers which would require deeper foundations with impact on soil and drainage. Co benefit payments required to cover residual impacts. The current figure is significantly lower than the impact per annum from direct easement impacts on businesses but is not a 'benefit'.
Horticulture (small)	Option to run livestock in corridor – but would require fencing needing a permit and earthing. Would impact on efficient movement of machinery. Significant impact on profits.	Would require significant redesign to ensure that farm productivity was not reduced from restrictions on the easement and the footprint of the pylons HVDC at edge of property / road reserve required as overhead would require significantly higher towers which would require deeper foundations with impact on soil and drainage. Co benefit payments required to cover residual impacts. The current figure is significantly lower than the impact per annum from direct easement impacts on businesses but is not a 'benefit'.
Intensive Animal Industries	Compatible if transmission located distant from shedding or livestock and is designed to avoid conflicts.	Would require significant redesign to ensure that farm productivity was not reduced. This would include micrositing of towers away from shedding and truck access. Co benefit payments required to cover residual impacts.

Recommendations

DEECA, ESV, ESC and DTP should sponsor longitudinal studies documenting the impact on farm production from renewable energy and transmission.

DTP should undertake regular reviews of planning and EES approvals processes and guidelines to ensure these processes minimise on farm impacts.

VicGrid should review the Victorian Transmission Plan and SLUA based on information from the longitudinal studies.

How to reduce confusion over safety.

Much of what the energy industry calls 'misinformation' about agriculture impacts stems from inconsistent and unclear safety regulation. Energy Safe Victoria has regulations that are unclear in their application to agriculture. They seem to be designed around the occasional use of a cherry picker or crane near powerlines. Terms like it is an offense to expel material in the direction of a transmission line could have a literal interpretation that prohibits the use of a header to harvest a crop.

The ability of Ausnet to lower the clear zone from 5m to 3m on farms rather than undertaking maintenance to resolve sagging lines shows a failure to understand farm operations. Safe work outcomes are more likely to occur where workers are involved in the process.

The VFF believes ESV must engage the agriculture sector when considering regulatory change. They should ensure TNSPs to engage with farmers when they create their company rules on what is allowed in the easement and that this does not transfer compliance costs on to farmers.

This is both a safety and a compensation issue. If farmers are not told when rules change then they are not able to adapt their OH&S procedures. When the safety rules change and then impact on the use of production systems and machinery common to the industry, then there needs to be a mechanism to ensure the farm business is compensated for the business disruption.

Safe Work Australia's *General Guide for working in the vicinity of overhead and underground electric lines* states that the proponent has a duty to ensure *so far as is reasonably practicable, the plant or structure is without risks to health and safety. Designers and manufacturers of electrical equipment or installations must ensure they are designed and manufactured so electrical risks are eliminated or, if this is not reasonably practicable, minimised so far as is reasonably practicable.*

Recommendations

DEECA and Energy Safe Victoria should be ensuring that energy generation, transmission, distribution or storage on farms should be designed in such a way to:

- **Ensure that normal farm operations can continue without the need for permits or spotters;**
- **Ensure that the infrastructure is constructed to have minimal impact on soil health and fertility and drainage and that the structure (including sub surface) can be fully removed from the site with have minimal impact on soil health and fertility.**

The need for a Positive Duty

Currently there are no positive duties on energy companies to ensure that landholders are fully informed regarding the operational issues relating to their infrastructure.

Each company can create their own guidelines or requirements relating to safety and these are not provided to all landholders. This leads to increased confusion and concerns that safety compliance costs are being transferred to landholders. Legitimate questions or concerns are not responded to or dismissed as misinformation.

Attachment 4 includes examples of confusing and conflicting guidance from TNSP's.

Recommendation

DEECA and Energy Safe Victoria should ensure that when energy regulations applied to farms impact on the use of machinery or production systems normal to that industry, that annual payments are made to ensure impacts on farm businesses are minimised. This ensures a signal is sent to TNSPs to invest in technology that avoid these impacts and keeps farmer safe.

IV. Attachment 1 – Detail on types of conflict in agriculture

Size of Machinery – physical, regulatory financial and OH&S issues

Different production systems use different sized equipment. This is increasing.

The infrastructure designed has a duty of care to design energy infrastructure to allow the ongoing use of machinery.

The tractor below has 8 steps to the cabin. Tractors can have different attachments of varying heights and widths – a sprayer, an air seeder, a combine harvester etc. This equipment is often over 5m – especially when an antenna is present. At harvest there are trucks (chaser bins) that when full can exceed 5m in height.

Energy Safe Victoria can require permissions to operate machinery between 5m and 8m. They are not ensuring that the design of transmission on farms allows a clear zone that allows for the use of machinery.

Ausnet as the TNSP has been allowed to reduce the clear zone for operation of machinery to 3m, which passes the compliance cost and the safety risk on to the farmer.

The boom spray below is close to 30m wide. This reduces the emissions intensity of the production system. The tractor alone would not be able to operate in conjunction with a traditional solar panel array.

With a wide boom spray attached it is important to keep the ground level and avoid structures and vegetation for the safe operation. If an operator entered a paddock and cause damage (ruts and elevated edges) then one wing tip can get caught and cause the other wing tip to elevate (like a see saw).

Boom Spray – Horsham Source: LJ Gervasoni

Technology – GPS. Regulatory, Financial and OH&S

Australian agriculture is reducing emissions intensity through smart technology. Soil moisture probes to identify the level of water required, GPS to allow minimum til – allowing targeted use of chemicals - e.g. spraying of the weed, not the crop. Transmission companies are saying that there is low interference – 5 or 10cm. Farmers see that as significant as the plant may only be 2cm away from the weed.

GPS agriculture allows detailed mapping of yields and inputs. This data helps drives sustainable production. It is critical that for renewable energy and transmission to be compatible with agriculture that there is no restriction on its ability to be used or its functionality.

GPS technology will also enable autosteer. This can improve OH&S outcomes but needs certainty in accuracy of signal.

Antennae on tractors add approximately 40cm to vehicle height.

Antennae on machinery. Source LJ Gervasoni

Technology – drones. Regulatory and financial

Drones are becoming a key tool in agriculture. They can apply chemicals; they can assess paddocks for hazards. Some companies are restricting the use of drones in the vicinity of their assets which will increase the competitive disadvantage of farmers hosting renewable energy infrastructure. Companies are using drones for inspections but restricting landholder use.

Aerial (planes and helicopters). Regulatory, OH&S.

When transmission lines were constructed across farms the landholders were told there was only 2 things they couldn't do – build under them or plant trees.

Many farmers believe they can operate under and around transmission as that was their practice and they were not told they could not do it or were compensated for this impact on their business.

Guidelines for VNI West and WRL are confusing. They are prohibiting use by farmers but allowing use by others. Is this a safety issue or a training issue?

In relation to wind turbines landholders within 1.5km of a turbine have raised concerns about the impact on their ability to use aerial operations due to restrictions on insurance policies. The planning

process has ignored those concerns by referring to CASA. A clear approach is needed that focuses on operational safety no matter who the operator is. Renewable energy generation and transmission should be ensuring projects are designed so that all machinery and practices in the area are not restrict the infrastructure and where this cannot be avoided the ongoing business impact is compensated for.

Biosecurity – weeds. Physical, regulatory, OH&S.

Weeds can have significant impact on biodiversity, production, animal welfare and safety. Poor hygiene practices can lead to the transfer of weeds on to properties. This then requires remedial action by landholders to eradicate the weed before it spreads. Each weed will have a different impact.

For an example wheel cactus. This is a species closely related to the prickly pear. It can spread easily and is very difficult to eradicate. It is a fruit fly vector, and the cactus spikes can injure humans and animals.

Wheel cactus is not usually grazed by stock because of its stout spines. In dense patches, the plant could hinder access to water and reduce food available for fauna.

Treatment requires injection of a restricted herbicide into the plant requiring PPE for chemicals as well as barriers to stop the penetration of PPE and clothing by the spikes.

This chemical can impact on crops and livestock and requires withholding periods.

Failure to practice good hygiene or deviation from the easement can lead to the spread of a harmful weed that is difficult to eradicate and impact production.

Biosecurity – disease. Physical, regulatory.

Different production systems have different issues relating to preventing the spread of disease to crops, livestock or humans, or on the ability for human interaction to introduce risk (eg swill feeding or leaving meat scraps near livestock.

Farmers are concerned regarding hygiene practices and may require additional processes – such as foot baths. In a disease outbreak additional requirements may need to be implemented. Stock standstills may reduce the ability of landholders to move livestock before a chemical is applied.

Farmers may also be concerned about leaving food scraps on the property that can spread disease to livestock or cause animal welfare issues.

Biosecurity exclusion zone – Meredith. Photograph LJ Gervasoni

Safety – withholding periods. OH&S, regulatory.

Agricultural chemicals often have requirements for use – both in the application and restrictions on contact with for a period post their use. Farmers may know not to allow any access to a paddock due this period – but how will other parties know what chemicals were used and the precautions in place.

Farmers with existing transmission lines have asked Ausnet staff what chemicals they just saw them apply to their farm. They are often told to 'F O' and are therefore unable to gauge risk to themselves, their livestock or their crops.

Agriculture Victoria has information on common withholding periods.

Ability to sell produce – withholding periods. OH&S, regulatory, physical.

Farmers need to fill in vendor declarations when they sell produce. These vendor declarations can include knowledge of who was on the farm or what chemicals have been used. If a farmer has not been told that an herbicide has been applied near the powerlines and they declare the chemical has not been used, they may have their whole shipment refused if the chemical shows up in a test sample.

The landholder is also liable for significant penalties for selling produce that is contaminated with unacceptable chemical residues so it is critical that energy companies seek prior consent to the use of any chemical on the easement.

Animal Welfare – withholding periods. OH&S, Financial

Like human safety, the health and wellbeing of livestock can be affected if they are kept in a paddock after a chemical can be applied. The risk of ingesting the chemical is greater for livestock left to graze in that paddock.

Animal welfare – mismothering and stampede. OH&S, regulatory, physical.

There are times of the year when livestock can be disturbed. Access by land or air without precautions can lead livestock to flee – which can cause injury. Stressed livestock can lead to spontaneous abortion or the desertion of offspring. Livestock can charge humans when approached by strangers or are startled. Contact with offspring can change scent leading to abandonment. In the case of solar panels spooked livestock can be injured by interactions with panels.

Animal welfare – interaction with structures. Physical.

Injuries can occur between infrastructure and livestock. Any sharp edges or gaps can lead to cuts and entanglements to livestock. Cattle are prone to using support structures as scratching poles. Fleece or longer haired species can become entangled.

Livestock can be startled by loud noises, including weather events. When spooked this can lead to collisions with infrastructure at speed, with the risk greater in darkness.

Underground drainage and laser levels. Physical. Financial.

Many farms have significant in ground infrastructure (drainage) to ensure crops are not waterlogged in wet conditions or from irrigation. Many farms have also been graded or laser graded to ensure efficient flow of water across the site.

The direction of farming and type of irrigation able to be used is dictated by the underground drainage. A transmission line that requires a change in irrigation type can require the complete replacement of drainage (two-year impact on production) with broader impacts where the direction of planting is altered. Long runs will then become short runs and the likelihood of some areas being taken out of production.

Underground drainage can be significantly impacted by footings leading to changed flows of water.

Construction and footings can change levels. Even a millimetre or 2 can impact on the efficiency of a laser graded paddock.

Soil compaction and health. Physical, financial.

Energy companies often have little understanding of soil health and the importance of this to farming systems. Agriculture Victoria information on soils that demonstrate that rehabilitating soils is more than filling a hole.

Soil fertility stems from an interplay of soil structure (type of top and subsoils) and texture; soil biota; and soil ph and sodicity. Farmers actively manage their soils – to increase organic matter, to ensure friability, to encourage healthy biota and to reduce risks from waterlogging, erosion or compaction.

It is common for farmers to spend generations working on improving their soil health. This can include minimising vehicle access by using defined paths. Construction vehicles such as bulldozers and concrete trucks can lead to significant compaction of the soil that can take decades to reverse.

Concrete footings replace soil and change soil conditions that can impact on soil health. Rehabilitation plans rarely address how footings will be removed.

Tramline changes due to vegetation or linear in ground infrastructure across a paddock. Source Google maps

Reduced cropping at base of Portland line (landholders not informed of Ausnet's policy). Image Google Maps.

Irrigation. Physical, regulatory, financial.

Irrigation is a significant tool in many production systems. Irrigation can be via a formal irrigation district (public infrastructure), such as Bacchus Marsh, Shepparton or the Macallister. Irrigation can also be direct access to groundwater, rivers or dams, such as in the red ferrosols around Ballarat or dairy production in South West Victoria.

The ability to use irrigation systems can be impacted by drainage and landform and layout. A change of irrigation due to transmission may mean that a paddock that has been drained for east – west furrows will now need to be farmed in a north – south furrow. This will require the total replacement of drainage and can lead to inefficient layouts.

Examples of east – west and north-south furrows based on sub surface drainage. Source – Google maps

Irrigation systems are often multi bay units that use may be obstructed by pylons. Some systems are several hundred metres in length. Some irrigators have an end of system gun.

Single bay lateral move sprinkler irrigator without gun. Source LJ Gervasoni

Gun irrigation systems are common in western Victoria. These expel a stream of water from a single point.

Gun irrigation at Blampied. Source LJ Gervasoni

Attachment 2 provides additional detail on irrigation systems.

Limitation to structures

Some renewable energy and transmission projects create confusion over a range of structures, including fencing. Guidance allows timber paling fences but restricts farm fencing- wood post and metal wire. Earthing is required for this fencing which is well below the 5m safety clear zone.

It is common for landscape and flood overlays to require open post and rail fencing.

Fencing is critical to livestock production systems. Fencing is likely to be required for transmission lines given current interpretation of Energy Safety regulations and the priority to provide safe workplaces.

In response to climate change the use of structures as shade and shelter is becoming more prevalent in animal production.

Structural integrity and fire Physical, Regulatory, OH&S

Wind turbines can shed blades or attachments to blades. These can fly several hundreds of metres and represent a physical threat to humans, livestock and structures. The material can cause a hazard if obscured by pasture or crop to livestock, humans and to machinery, including on neighbouring properties. Wind turbine fires are a concern for surrounding landholders, especially if occur during high fire risk periods.

Wind turbine attachment embedded in paddock and crumbled metal during construction of Golden Plains Wind Farm – photo Russell Coad.

Firefighters' attempts to control the blaze were considered ineffective. *(Supplied: Maddison Makeham)*

Wind Turbine fire – winter. Portland.

V. Attachment 2 Transmission lines and irrigation

Irrigation type is chosen to suit the nature of the farm (size, shape and topography) and the type of production. Irrigation requires in ground or channel drainage. Changing the type of irrigation can require significant changes to drainage system and farmed area.

Types of Irrigation Systems

Centre pivot and Lateral Move

- Irrigation system used for many crops and pastures. Uses a sprinkler system which is appropriate for crops that need regular watering.

Centre pivot systems have a series of wheeled towers, typically anchored at the centre of the field, with sprinklers or drip lines mounted on the moving structure. As the pivot rotates around its central point, it evenly waters the crops in a circular or semi-circular pattern.

Centre pivot irrigation – Source Google Earth

Centre pivot and lateral move systems consist of the following components:

- span is the pipe and framework between two towers
- tower supports the spans and contains drive mechanisms and wheels
- outlets are the points at which water exits the main pipes

- emitters are attached at outlets either directly or on rigid or flexible droppers — (water is applied to the plants through emitters)
- droppers are rigid or flexible small diameter pipes that allow emitters to be placed closer to the ground.
- Farm drainage and furrows are designed around the irrigation infrastructure in place. Changing systems can have farm wide implications.

Land area: A typical centre pivot system in the Shepparton Irrigation Region (SIR) has a span of 300 to 400 meters long and irrigates 28 to 50ha. However, they can be as short as a single-span 35 meter unit or as long as 800 meters with 18 to 20 towers irrigating approximately 200ha.

However, the large systems have high average application rates at the outside of the circle that may exceed the infiltration rate of the soil and consequently cause run-off.

- **Land shape:** Centre pivot systems irrigate a circle, which covers 78% of a square. This can be an issue on dairy farms with limited available land. End guns used on centre pivots to irrigate square properties are not recommended (see below). Lateral move systems can be an option to irrigate rectangular areas, but cannot divert around structures (towers or trees).
- **Land slope:** Centre pivots can irrigate significantly undulating land. Some minor earthmoving may be needed to connect depression areas and provide drainage for runoff from rainfall events. In some cases, where the development of border check irrigation would require significant cut and fill, the cost per hectare of installing a centre pivot can be lower than border-check irrigation.
- **Soil type:** Centre pivots are able to irrigate any soil type. However, sprinklers should be selected to suit soil infiltration characteristics, as excessive average application rates can cause runoff. It is desirable the pivot irrigates one soil type or soil types with similar infiltration characteristics.

Lateral move

Lateral move systems share similar technology to pivots and are suited to large rectangular areas — up to 200 ha. Lateral move irrigation is favoured for large paddocks are the laterals move continuously along the field's length and covers 98% of the paddock.

Laser Grading

Irrigated and non irrigated areas may be laser graded to gain most efficient crop and pasture production from irrigation or rain events.

Even a few millimetre change in land grade can disrupt the optimal operation. Foundations and soil compaction from roads or construction can impact the effectiveness of production.

Spray Gun

Can be at the end of a lateral or on its own. Commonly used for crops such as potatoes – less compaction of soil. Expels water at height and distance.

Flood Irrigation

Flood irrigation is the method of distributing water over an entire field at one time and is common in irrigation districts where small, fragile plants like lettuce or spinach are grown, or dairy systems for pasture. It delivers consistent amounts of water without damage from waterlogging.

This method is used on small areas that don't need to be subdivided into sections or zones (like lateral systems do), but instead are covered by one large sprinkler head or series of sprinkler heads.

VI. Attachment 3 agriculture impact considerations for inclusion in approvals processes

Wind and Solar Energy and Farming

Learnings from wind energy

- Companies do not explain the width and level of compaction of access tracks that lead to significant impacts on production that negate payments.
- Companies do not include easements for power in information to landholders. These can have significant impacts on operation.
- Easements need to be specific to the proposal and should not be transferred to other bodies.
- The planning process often fails to identify airstrips and agricultural low altitude operations.
- Insurance to operate agriculture low air operations within 1 .5km of a wind turbine is difficult to obtain leading to 5 to 6 figure increases in annual costs to spray etc (including to neighbours)
- Require biosecurity washdown areas.

Learnings for solar energy

- Opportunities for grazing / shelter for sheep
- Proponents need to design systems for co-existence with cattle and other livestock
- Not compatible with cropping (machinery size)
- Agrivoltaics could be possible for some horticulture with design for height and width of machinery or vegetation.

Learnings from transmission

- There has been significant failure of Transmission Companies in relation to understanding the operational arrangements promised at acquisition at easement.
- There is no access code for existing transmission lines or regulatory oversight of TNSPs.
- The Electricity Industry Act does not ensure that companies access land within an acceptable regime.
- Energy regulators and transmission companies have not informed landholders of changes to rules, nor have they involved landholders in their development.
- Restrictions on height of machinery, irrigation, GPS and drone use and aerial operations have significant impact on farm operations.
- Guidance and information to landholders regarding fire operations and general safety under lines when there is smoke is not fit for need.
- Transmission companies are dismissive of landholder complaints or identification of impact on production.
- Transmission corridor planning in Victoria has not considered any on farm / production issues in route alignment.
- Some Transmission projects in Victoria have been developed with no active engagement with landholders.
- Rit-t and Multi criteria analysis criteria have not properly assessed agricultural impacts.
- Guidance on compensation has failed to consider ongoing impacts.

VII. Attachment 4 Examples of conflicting and confusing guidance from TNSPs (TCV and Ausnet)

Stubble burning

VNI west prohibits stubble burning. Ausnet allows it with a safety assessment (15 working days). What are the parameters that may make this unsafe? How can a safety assessment be expedited?

By prohibiting stubble burning TCV is effectively ensuring a crop cannot be grown in the vicinity of the easement as stubble burning is a necessary tool to manage disease and vermin, or when stubble is thick.

Drones

Ausnet allows allowed with a safety assessment – what are the key considerations? Ausnet use drones to check lines – so is it a safety issue or an operational training issue?
TCV prohibits all drones within the easement. Some livestock businesses avoid the use of drones seasonally due to the potential to spook cattle with safety and welfare impacts.
Drones are becoming a key tool in grains production systems production, safety and environmental benefits.

Irrigation

Ausnet allows boom and lateral irrigation to 5m with a safety assessment. What are the key considerations? Farms are developed around irrigation systems and a change in system can mean a change in irrigation system means replacement of all subsurface drainage and altering furrows which impacts the whole farm and often reduces productive areas as the system was chosen to suit the physical parameters of the property.

Height of crops

Limit to 3m. Corn can grow to 3.5m. What is the safety risk when machinery can be 5m in height?

Farm fencing

Farm fencing is predominantly metal. There are varying rules regarding the use of this material and the need / location of earthing. What is the risk? Should farmers be expected to bear additional costs to make essential infrastructure such as fences safe or should that be the requirement of the energy company?

GPS

There are two types of GPS used however information about operational impacts are generic. Some companies state that there is interference near the assets in certain circumstances. GPS agriculture is needed to reduce emissions intensity and to minimise stubble burning. Even being off by 1cm may mean the herbicide being applied to the crop rather than the weed.

Height of machinery

Some guidelines restrict machinery to 5m where most of the farm equipment in use is higher than that. There is confusion over grain bins. The bin might be under 5m empty, but with crop in the bin over 5 metres. If machinery such as a boom spray hits a rut on one side the opposite boom spray raises. Ruts could be caused by companies accessing the farm in wet weather.

Aerial operations

Ausnet prohibits air operations within 45 metres of wires which is then likely to extend outside of the easement. Fire bombers are allowed within this buffer but not polair, or air ambulance. TCV says no aircraft within the easement. What is the height of the easement? Has separate rules for firefighting.

Aerial operations are critical to many farms, including for weed management. In some instances, the cost of using aircraft will increase as short runs rather than long runs are required. These restrictions can impact on neighbouring properties. CASA regulations may allow flight near wind towers, however insurance to pilots is prohibitive within a kilometre of the turbine. This can increase costs by over $70,000 per annum without compensation.

VIII. Attachment 5 – description of physical impacts.

Footprint of wind turbines and access areas

Farmers have commercial consent in relation to wind turbine location on their property. There are instances where turbine location can lead to impact on neighbouring properties.

As wind turbines increase in height there can be an increase in the footprint of the pad under the turbine and to the level of compaction required on access road.

The construction pad below is 70m x 40m base area which is 0.28 of a hectare per turbine. Aerial images show a physical impact beyond the pad and road surface.

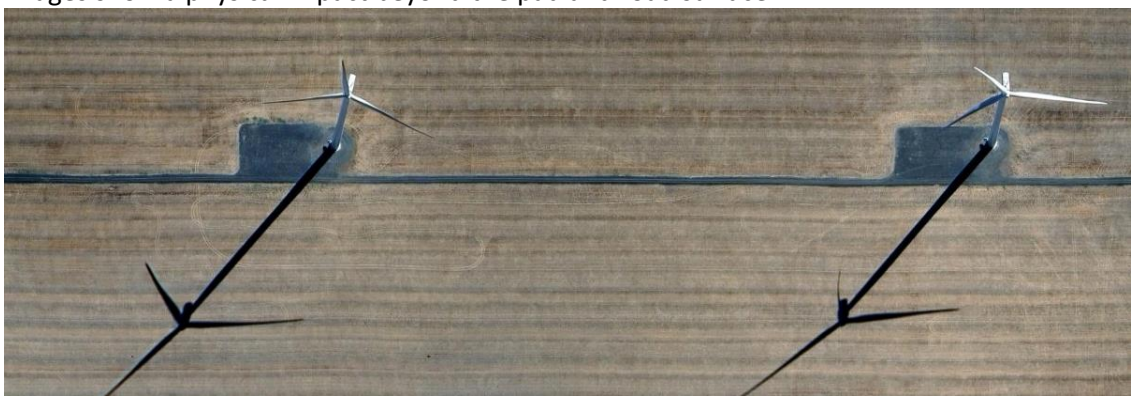


Image Google maps

The area of two 70m x 40m towers is 0.56 hectares. The roadway has a 30m wide compacted areas and a length between the two turbines of
30m wide road compaction x 420 metres between 2 turbines of 1.26ha.
The total land area not available to production is 1.82 hectares.

This land area demonstrates why commodities such as dairy or horticulture that have a higher return per hectare are unlikely to see a financial benefit in hosting wind turbines.

Image Google maps

Footprint of transmission lines

Energy companies often state that there are no impacts on production from hosting transmission lines. The VFF has looked at existing transmission lines and the statements made by SECV when acquiring easement access decades prior to the advent of Energy Safe Victoria. Transmission lines were built over dams and farmers were told the only things they could not do were to plant trees or build structures. No impact on use of planes, tractors and other machinery or irrigation.

ESV and Ausnet have failed to involve farmers in revision to energy regulations or TNSP guidelines. In most cases these have not been provided to landholders.

When examining the Portland Transmission line there are a range of responses including:

- Fencing off transmission lines to exclude from cropping

Google maps

- Cropping to the base of the structures (1980 rules)

Google Maps

- Transmission line and waterway leading to lost production on fertile riverflats and ability to allow regeneration of riparian vegetation.

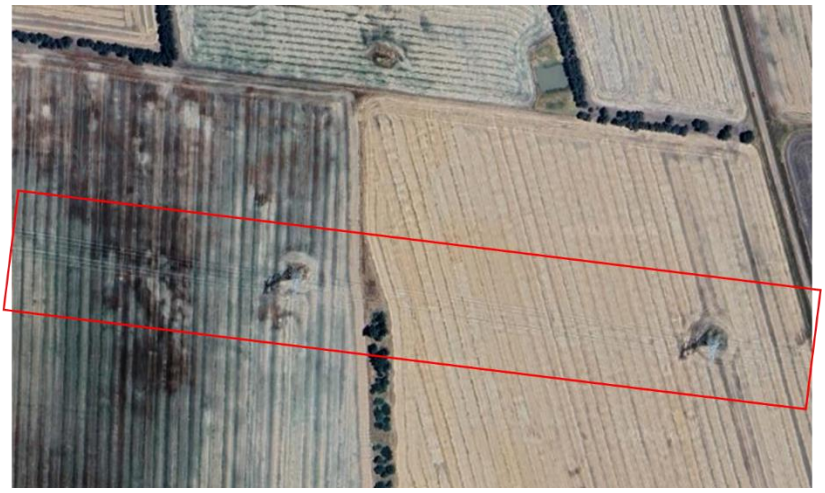
Google Maps

It is likely that farmers under existing transmission lines may have to alter their farming practices to meet the TNSP requirements which are more restrictive than the Energy Safe regulations.

Restricting machinery uses / requiring permits will lead to the potential inability to crop in the red box and impact on the efficient runs and direction of furrowing due to location of the transmission line in the paddock.
If a farmer needed to fence off the area of easement indicated by the red line below, then the area of land in the north of the paddock is unlikely to be cropped, especially if in separate ownerships.

500 x 100 m between pylons (5ha). Total area in easement across two paddocks 10hectares. Easement and sterilised land is 700wide. Length of easement is 1000.

Area not able to be cropped is 70ha.



As there were no restriction on tractor use and as drones and GPS agriculture were not used in farming the Portland Transmission Line alignment did not consider impacts of the route alignment on farm operations.

Under the current TNSP guidelines the alignment below would make cropping inefficient. Farmers have not been compensated for these impacts.

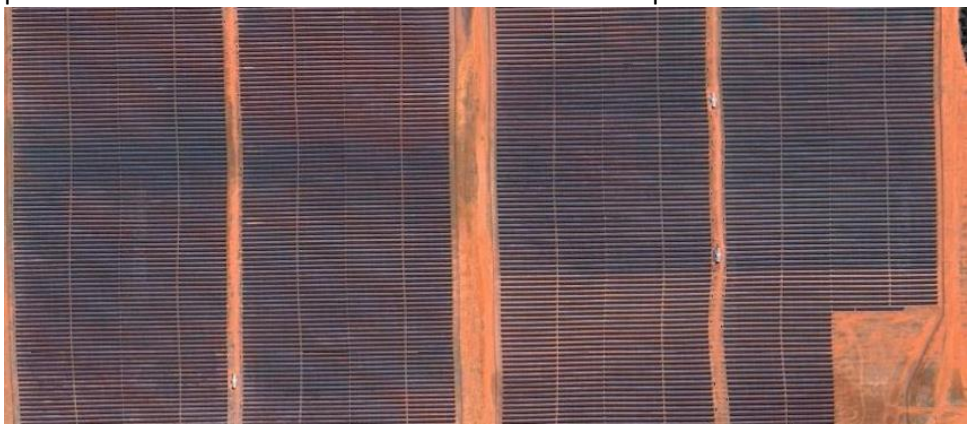
The image below shows red soils near Portland. As no restrictions on activities were discussed during easement acquisition horticulture production continues. It is likely that the farmer is not aware of the rules introduced by private company without discussion with the landholders may expose farmers to safety breaches from their current practices.

Maintenance activities can have impact on farm operations through additional road construction and compacted base areas for machinery uses.

Google maps

Solar

Traditional solar alignments are not generally compatible with crop or pasture (hay, silage) production. Tractors cannot be used in the area under panels.



Total width 850m Bay width 90m Narrow track width 10m. Wide track width 40m
Trials are being undertaken for horticulture under solar panels. This would result in the need to utilise smaller scale machinery than used in Australia and would have broader restrictions. Agriculture Victoria are undertaking a pilot project in Tatura.

 Solar for horticulture – taller structures, less cover, limited size of machinery.
4.5ha vineyard in France https://www.pv-magazine-australia.com/2023/11/01/agrivoltaics-and-the-art-of-farming-under-cover/

Belgian University KU Leuven has a pilot project underway pairing PV

CONFIDENTIAL

Victorian Farmers Federation

White Paper

Compensation and payments for landholders affected by new transmission lines in Victoria

October 2024

Contents

I. Introduction

This paper explores options to improve the current compensation framework when landowners are affected by the construction and operation of new electrical transmission lines. The focus is on the impacts that transmission lines have on farm production and operations.

The paper explores the current framework for compensating landowners, identifies issues and shortcomings and suggests possible reforms.

II. The current compensation framework

The construction of transmission lines on farming land can restrict the use to which the land can be put and disrupt farming practices. The construction of the transmission lines usually involves the acquisition of an easement on the land upon which the lines are constructed.

Transmission companies have published guides which outline the process for assessing compensation in the case of acquisition of easements for the construction and operation of transmission lines.

Compensation
The *Land Acquisition and Compensation Act 1986* (LACA) provides the legislative basis for providing compensation when land is acquired. This could typically be for the construction of a road, pipeline, transmission line or any other project requiring the acquisition of land. It is important to note that the LACA puts in place a generic compensation framework that is not specific to the construction of transmission lines or the acquisition of farming land.

The LACA sets out the general principles on which compensation is to be based:

- (a) the market value of the interest on the date of acquisition;
- (b) any special value to the claimant on the date of acquisition;
- (c) any loss attributable to severance;
- (d) any loss attributable to disturbance;
- (e) the enhancement or depreciation in value of the interest of the claimant, at the date of acquisition, in other land adjoining or severed from the acquired land by reason of the implementation of the purpose for which the land was acquired; and
- (f) any legal, valuation and other professional expenses necessarily incurred by the claimant by reason of the acquisition of the interest.

Compulsory acquisition
When agreement cannot be reached with the landowner the transmission company can seek to compulsorily acquire the easement to permit construction. This requires approval from the Governor-in-Council (in practice provided on the advice of the Minister)

Compensation is based on the valuation carried out by the Valuer General or qualified valuer – based on the general principles set out in the LACA.

The implication of this is to reduce the bargaining power of the farmer in determining compensation – it becomes a no option but to 'take it' situation.

III. Gaps in the compensation framework and process

In principle, a negotiated settlement is best

The primary issue is that compensation is determined based on the change in land value before and after the creation of the easement. There is no negotiated outcome between the landowner and the transmission company.

In the case of renewable energy such as wind and solar farms the energy company negotiates with the landowner over the payment to be provided to host the renewable energy infrastructure. These are commercial agreements between the two parties. If the landholder is asking for too high a price the energy company can locate its infrastructure elsewhere. Similarly, if the energy company is offering too low a price the landowner may refuse to host the infrastructure.

Ultimately, the landowner can choose whether to host the infrastructure or not.

The factors considered during a commercial negotiation are much broader than just changes in land values. The landowner can consider the full impact of hosting the infrastructure on their farm business and its development. For example, if a section of land can no longer be farmed as it had been, and the farmer is unable or unwilling to use it for alternative production – this 'lost' land can be factored into price asked to host infrastructure.

Under the compensation scheme established under the LACA this land would be valued based on its next best productive use even if the farmer is unable or unwilling to use the land in that way. Compensation would be substantially less than the farmer would receive under a negotiated payment.

Other factors such as the impact of the infrastructure on the farmer's lifestyle or amenity can be considered by the farmer when considering the payment, they would receive for hosting the infrastructure. These factors are not considered under the compensation scheme created by the LACA.

In principle, the VFF believes that a negotiated compensation outcome will lead to the fairest compensation outcome for farmers and landowners affected by transmission infrastructure.

Issues with moving to a negotiated settlement

The VFF acknowledges that there may be difficulties in moving to a commercially negotiated compensation settlement between landowners and infrastructure proponents. For example,

- Some landowners may hold out agreeing to maximise their compensation – delaying finalisation of the project.
- Negotiations may take place with no intention of coming to agreement.
- At the end of the day, transmission companies still have the option of using compulsory acquisition powers and so may not enter negotiations in good faith.

If moving to a negotiated outcome is not feasible, the VFF sees value in considering gaps and issues in the existing regulatory framework and considering how these can be overcome to make the existing system fairer for farmers and landowners.

Issues and gaps in the existing legislative framework

This section outlines issues and gaps in the current framework relating to:

- Valuation
- Estimating the financial impact on farmers and calculating compensation
- Severance and disturbance
- Dispute resolution
- Taxation.

Issues with valuation

In the absence of a negotiated agreement to host transmission lines, compensation is currently being progressed under the provisions of the LACA. Compensation is therefore to be provided on the basis of an assessment of the change in market value of the land due to restriction on the use of the land following the establishment of an easement and construction of transmission assets.

The determination of the impact of transmission lines on the 'market value' of the property can be difficult to estimate. The amount of compensation payable is meant to reflect the reduction in value of the farm based on the impact of the transmission line on the farm's productive capacity.

However, there are practical problems with the calculation of market value:

- Market value will be difficult to assess because of a lack of recent examples of this form of valuation.
- It can be difficult to determine all possible impacts to agricultural production at a point in time, for example, the ability to use future technology or production methods may not be possible.
- The value of the farm and farm business is impacted – not only the land subject to the easement. This may not be reflected in a per hectare assessments.
- Impacts may be ongoing over the life of the farm – once-off compensation may not recompense the landowner.

Of particular concern is the estimation of loss attributable to severance and disturbance. Severance is meant to reflect the reduction in market value of the land which is caused by land being severed from other land because of the easement. Disturbance refers to financial loss caused by disruption to the landholder and their business arising from the creation of the easement.

In practice, severance should be reflected in the calculation of market value impacts – as the severance impacts on the productivity of the land. However, it is not clear the extent to which valuers are able to take account of farm-wide impacts of severance. For example, there may be financial impacts resulting from loss of economies of scale or increased costs due to the need to move around severed parcels of land.

The extent to which these impacts can be taken into account when estimating compensation will depend on the guidance and information provided to the valuer to ensure they are aware of all impacts.

Disturbance reflects losses incurred by the landowner during construction or creation of the easement. It is generally considered to be a time limited impact. However, there can be ongoing disturbance impacts which may not be taken into consideration in the calculation of compensation. For example:

- Impacts from ongoing need to access the infrastructure once it had been built, such as for maintenance purposes.
- There may be ongoing impacts of construction, for example, soil compaction from the construction process or future changes.
- Future changes to regulations which may affect production methods allowed to be used around transmission infrastructure.

The issues with the calculation of market value, severance and disturbance appear to stem from the lack of specific guidance for valuers on how to estimate the impact of transmission lines on farmland. In particular:

- The valuer needs to understand farm types and production methods to understand the impact of transmission lines.
- Other experts may need to be consulted to obtain a full understanding of the impact of the easement and transmission infrastructure, for example, a business analyst with farming experience or an agronomist.
- Specific guidance and information are needed on how severance and disturbance impact farm production. This will vary from farm to farm – both in terms of location and type of farm.

Improving land valuation is only part of the problem under the existing LACA. One of the principles for determining compensation in the Act relates to 'the enhancement or depreciation in value of the interest of the claimant'. This goes beyond just changes in the value of the land, a farmer's interest in the farm relates to its value as an ongoing business. Compensation needs to reflect the change in the business value not just changes in land value. The VFF believes that a land valuer is not best placed to assess the f ongoing business impact as part of determining the value of the interest of the claimant.

The absence of processes relating to the need to consider going business impacts from the codification of the calculation of compensation in the Regulations leads to processes that fail to consider whether the principles of the Act have been achieved. The VFF believes there should be guidance as to when to consider ongoing business impacts; and how to determine who has the appropriate skill set to calculate this amount is required.

The VFF believes that where the LACA is applying to farmland then an agricultural business advisor is required to calculate the impact on the valuation of the farm business as a whole and the acquiring body must ensure the letter of offer includes details of how business impacts are proposed to be compensated for.

Estimating the financial impact on famers – determining compensation

The creation of the easement and the subsequent impacts on production and farming methods can have a significant financial impact on the farm business. These impacts are ongoing over the life of

the transmission asset – possibly over 50 to 60 years or more. Farmers should be fairly compensated for these impacts.

It is also important to note that each farm business is unique and the impact of building transmission assets on farmland need to be assessed on a farm-by-farm basis - a generic 'formulaic approach' will not properly capture individual farm impacts, the impact on the value of the business as going concern, and is therefore unlikely to result in appropriate compensation. Farm business impacts will vary widely across farms.

Direct impacts

The direct impacts of the easement are the possible fencing off of the easement, and/or change in production (for example it may not be possible to grow crops on the easement, but it may be possible to graze livestock) - (if the farmer is willing and able to do this, for example, they may not have the skills or equipment necessary to change production on a section of their farm).

Ideally, these direct financial impacts should be reflected in the market value of the easement and the farmer should receive compensation for these losses. However, as noted above there are difficulties in determining the market value of the easement land.

These direct financial impacts on famers are likely to be significantly underestimated because they do not include the cost of:

- erecting and maintaining exclusion fencing to keep in livestock.
- the provision of other infrastructure necessary for grazing, for example water troughs, facilities to load livestock onto trucks etc.
- changes to existing farm infrastructure still used for the original production (for example, modifying irrigation equipment or access points).
- loss of economies of scale which could impact overall returns on the land.
- not undertaking the highest value activity permitted with the transmission infrastructure – the farmer may not want to farm alternative products. For example, a vegetable farmer may not want to farm livestock. Hence the impact on their income and business is much greater than allowed for by the current regulatory regime.

A technical calculation vs a personal valuation

The calculation of compensation under the LACA is a technical calculation of the change in land values because of the creation of an easement and construction of transmission infrastructure.

It does not consider any special value that the landowner may assign to the land. For example, the farm may have been in the same family for generations – this generates a special value for the current owners that would not be reflected in the calculated compensation based on changed land values resulting from changes in allowed farming practices.

If compensation were based on a commercially negotiated outcome, it would take into account any special value attributed to the land by the current owner as they would not agree to the easement unless they were fully compensated – for both the direct business impact and the loss of any special value.

The VFF considers that the additional cost to the transmission company in compensating for special value will be small in the context of the total infrastructure cost. This cost would be passed on to energy users and so the additional cost per energy user would be minimal.

While the cost per user would be minimal, the benefits to the State in encouraging a wider, and quicker roll out of renewable energy sources would be significant. This would permit the State Government's objectives of moving to a greater proportion of electricity being generated by renewables and reducing greenhouse gas emissions to be achieved much more quickly.

A relatively small increase in compensation to reflect special value would lead to greater landowner willingness to host renewable energy projects and transmission infrastructure.

Landowner willingness to host infrastructure is likely to be high if fair compensation is paid because farm profitability is not particularly high and is very variable. For example. Forecasting by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) indicates that cropping farm businesses are forecast to have profits of $286,000 in 2024-25, compared with a loss of $4000 for beef farm businesses and a loss of $93,000 for sheep farms.[1]

Taking account of severance and disturbance

The impact of the easement is more than just the land covered by the actual easement itself. The quarantining of a section of land on the farm can have significant impacts on the farm business.

These impacts will vary from farm to farm and so an onsite farm specific assessment and evaluation is required to fully understand the impact of the easement on the ongoing operation of the farm.

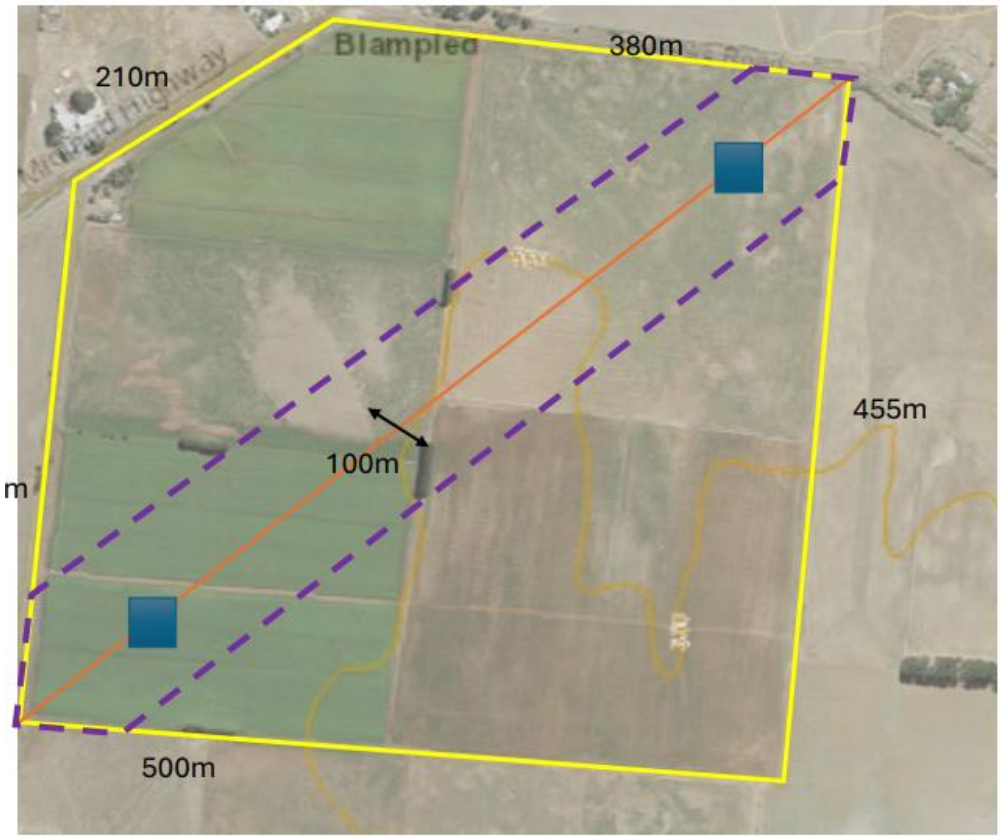
The location of the easement on the property can impact production beyond the area of the actual easement.

[1] https://www.agriculture.gov.au/abares/research-topics/agricultural-outlook/farm-performance-forecasts#cropping-remains-profitable-but-livestock-farms-face-challenges, accessed 11/10/2024.

Figure 1 – Easement parallel to boundary

In this case, as long as the remainder of the land can be accessed and farmed, is no severance or disturbance impact included in the estimated impact. The area of the easement may be lost of current production and suitable for another use, but the remainder of the land can still be farmed.

Figure 2 – Easement diagonal to boundary



However, the dissection of the paddock may mean that other areas of the paddock can no longer be farmed even though they are not part of the easement. For example, it may not be possible to drive machinery under the transmission line to get to the other side of the paddock or restrictions on irrigation mean that part of the land can no longer be used for horticulture. These impacts will affect the farming business for the life of the easement and transmission infrastructure.

These examples assume that there is an alternative product which can be farmed on the area of the easement. If no farming is possible, for example, the land cannot be accessed or there is no water source available the costs in terms of forgone income imposed on the farmer is even higher. In fact, the farmer may incur direct costs if they need to manage weeds or pest animals on the now unfarmed land.

Dispute resolution

Fairness relates not only to the size of the compensation payment but also the perception that there is redress if the offered payment is not considered adequate or there are other procedural disputes. Under the current LACA framework, there is scope to address disputes through the court system. However, the court system can be slow, costly and adversarial. This is unlikely to engender a belief among landholders that they are being treated fairly.

An alternative would be for the State Government to establish and independent, impartial dispute resolution mechanism, for example through a compensation ombudsman. An ombudsman, supported by an independent staff, would be able to mediate and arbitrate disputes between landowners and transmission companies.

Such a process is more likely than the court system to be perceived as fairer by landowners and hence they would be more accepting of the outcomes. In turn, leading to a quicker and less costly resolution.

Taxation issues

There is concern over how compensation payments may be treated for taxation. It is likely that compensation payments are taxable and depending upon individual circumstances taxation could significantly reduce the value of compensation to the landowner.

Lump sum compensation could be taxed at the landowner marginal tax rate or push them into a higher tax bracket.

IV. Recommendations to improve compensation

The VFF's preferred position would be to move to a system of commercial negotiation between the landowner and transmission company – consistent with the approach which exists for decisions about locating renewable energy projects.

However, if moving to a more commercially negotiated outcome is not feasible, the VFF suggests further options to improve the current LACA compensation framework to make it fairer and more acceptable to landowners.

In addition, the reform options outlined below would result in a greater landowner acceptance of hosting transmission infrastructure on their land – thereby assisting the State Government achieve its renewable energy and greenhouse gas reduction targets, and to do so more quickly.

Improving the LACA compensation framework

'Quick wins'

The quick wins in this section attempt to address some of the issues identified in the current compensation process without the need for legislative change – they can be implemented within the current framework.

Improving guidance

The key to ensuring fair and reasonable compensation is for the impact on farming to be well understood and for all the potential impacts being included in the assessment of compensation.

Valuers are trained and are members of the Australian Property Institute it is unclear how much specific instruction and experience they have on understanding and valuing farm impacts. Each farm is different, and impacts will vary from farm to farm, both in terms of farm location and type of farm. For example, the impact of transmission lines and easement is likely to be greater for a horticultural farm than one based on grazing livestock.

Critically, valuation of the 'interest' being affected, being the impact on business valuation, must be considered with clear direction that this must be considered, and clear guidance on how it should be considered.

The make a comprehensive assessment of the impact on the farm business the valuer needs to understand farm types, production methods and the impact of transmission lines on the farm and its productive capacity both now and into the future.

- **Recommendation 1: Engage with the Australian Property Institute to ensure there is adequate guidance on farm specific valuation for transmission lines in Victoria.**

The impact of severance and disturbance is particularly difficult to estimate. To do so accurately requires a thorough knowledge of the farm business and plans for development. Although issues such as disturbance should be considered as part of the market value assessment its importance, along with issues associated with severance require specific guidance for valuers.

It is important that all relevant experts, such as business analysts, agronomists etc are engaged to ensure the full impact of the easement is taken into account in all operations on the farm.

- **Recommendation 2: Produce guidelines on how to value severance and disturbance in the Victorian farm context – especially to ensure that ongoing impacts are recognised.**

Finally, as more and more projects are completed expertise and knowledge will develop and grow over time. It is important that these learnings are collected and disseminated to those involved in assessing and valuing the impact of transmission lines on farmland.

A community of practice, where valuers come together to share their insights and learnings would be an effective way to disseminate information and ensure consistency between valuers.

- **Recommendation 3: The Victorian Government to establish a community of practice for valuers involved in assessing compensation for transmission projects affecting farm businesses.**

Support farmers provide information

Given the need for valuers to have all possible information on the impact of the transmission line on the farm business it is important that landowners can best represent their interests.

To enable farmers to put the best case forward for compensation they need to know what information is required and have enough time to collect that information. Landowners are unlikely to have gone through this process before and so it is possible that they may be underprepared when visited by a valuer. Information provided by the landowner is critical to the valuer's estimate of compensation, hence landowners need to be well prepared.

A check list of points to raise and information required can help landholders prepare fully in advance of the valuer's visit and act as an 'aide memoir' during the meeting to make sure that all relevant points are discussed and taken into consideration.

- **Recommendation 4: Prepare a check list for farmers to discuss with valuer during an assessment – need to ensure the valuer has the right information.**

Address taxation issues

Taxation reduces the value of compensation to the farmer, noting that if the land had been sold as part of an ongoing farm business it would not have been subject to capital gains tax.

There is a process by which the Department of Treasury and Finance can approach the Commonwealth Government to have specific payments exempt from taxation. This process was used to provide tax exemptions for grants received by some businesses as support payments during 'shutdowns' because of the COVID pandemic.

- **Recommendation 5: The State Government to engage with the Commonwealth Government to ensure that compensation payments are tax free.**

Longer-term reforms

Longer-term reforms may also improve the compensation process – but they may require legislative change.

The LACA currently allows payment of a solatium of up to 10% of the compensation payment to allow for factors which are difficult to assess as part of the compensation package. However, given the uncertainties inherent in assessing the impact of transmission lines on agricultural land and the long life of the transmission asset the solatium should be increased. This can be considered a form of 'uncertainty compensation' for potential future impacts.

In addition, the solatium could also be used to compensate famers for the special value that they may have in the land that is not reflected in technical changes in land value.

This change would require amendment to the LACA.

- **Long-term Recommendation 1: Provide solatium of 20 percent to allow for uncertainty in estimating impacts on future farm operations and potentially to take account of special value.**

An independent and impartial dispute resolution mechanism would also encourage landholder acceptance of transmission infrastructure on their land. This would be better than the current system of recourse through the courts if compensation is disputed as this process and be costly and adversarial.

- **Long-term Recommendation 2: The State Government to establish an independent and impartial dispute resolution mechanism to arbitrate disputes relating to compensation payments and conditions.**

Conditions around the use of land around transmission lines and easements may change over time – generally becoming more restrictive. These future regulatory changes cannot be considered at the time compensation is offered at the beginning of the asset life. However, future regulatory changes could have a significant impact on farming practices, productivity, and farmer income.

A process to revisit compensation in the case of changed land use conditions and restrictions is required.

- **Long-term Recommendation 3: Put in place (e.g. in contracts, written agreements) provisions allowing compensation to be revisited if conditions change or additional restrictions are put on farm operation.**

11 June 2024

The Hon. Sonya Kilkenny MP
Minister for Planning and Outdoor Recreation
20/1 Spring Street
Melbourne VIC 3000

By email: sonya.kilkenny@parliament.vic.gov.au

Dear Minister,

Request for mandatory Agriculture Impact Study be required for EES projects where access to farmland can by granted by Government without consent of the landholder.

The Victorian Farmers Federation is concerned that the Government is failing to ensure a rigorous consideration of social, economic, and environmental impacts on landholders where a proponent is relying on Government powers of access, such as mining and transmission.

It is eight years since the VFF first wrote to the then Minister for Planning and then Minister for Resources regarding the need for the EES process to be improved following member concerns relating to the Fingerboards proposal.

Since then, the VFF has been advocating for terms of reference for an EES proposal impacting farmland to be ensure specific considerations for impacts on agricultural production and agricultural businesses to be considered, for landholders to be supported to prepared responses to exhibited EES documents and for Agriculture Industry representatives to be present on Technical Reference Groups.

The VFF had a position of the landholders right of veto in relation to mining for several decades. We now term this as 'commercial consent'. Stone resources and renewable energy generation activities require commercial consent. They provide a payment (including an annual payment for long term activities) that aims to make sure that beneficial use of the land for agriculture, including any impacts on production year on year, is made good.

It is concerning to landholders that the Government can allow third party access to farmland without due consideration of whether the costs to the landholder will be made good. One way to ensure decision makers have the information they need to consider whether landholders can receive fair compensation is to undertake an agricultural impact assessment for each individual farm holding.

Achieving this starts with an agriculture industry expert(s) on the commodity production systems impacted to be part of any EES Technical Reference Group for a proposal on farmland. Too often there is no agricultural knowledge included to ensure that EES scoping documents, terms of reference and draft studies properly consider how to avoid impacts on agricultural production and how to ensure fair compensation where impacts cannot be avoided.

Recent mineral sand EES documents have led to loss of agriculture sector trust in the EES process. We are concerned that the current process does not deliver a robust, transparent, and integrated assessment through which the potential agricultural effects to individual farm businesses can be rigorously assessed, including alternatives for key components of the project, and the effectiveness and acceptability of proposed measures to avoid, minimise, manage, and offset these effects.

The VFF has recently amended its renewable energy policy to include the need for improved agriculture impact assessment. The VFF is keen to work with you to develop guidelines for the preparation of an EES that applies to land zoned or used for production of food and fibre (agriculture). The VFF believes that the Terms of Reference for the VNI West EES and the operation of its Technical Reference Groups and community consultation processes should be a pilot for improvements to the process.

Please have your office contact Charles Everist, General Manager, Policy and Advocacy at ceverist@vff.org.au or Lisa Gervasoni, Senior Policy Advisor Land and Planning lgervasoni@vff.org.au to arrange an initial discussion.

Kind regards,

Emma Germano
President - Victorian Farmers Federation

CC: Lily D'Ambrosio. Minister for Energy and Resources

25 September 2023

Sarah Sheppard
Chief Executive Officer
Essential Services Commission
Level 8/570 Bourke St
MELBOURNE VIC 3000

By email: energyreform@esc.vic.gov.au

Dear Ms Sheppard,

RE: Better regulation of transmission network companies in Victoria

For several years the VFF has been seeking a land access code for transmission network companies to ensure that they act in a fair and responsible manner and are accountable for the consequences of their actions.

We are aware the ESC is finalising an enforceable code at present, but we remain concerned the ESC has not actively sought to understand the issues relating to agriculture and transmission, including on existing easements.

Given the recent actions of AusNet, where staff entered properties without landowner consent to erect safety signage, I am requesting an urgent meeting with the ESC prior to the finalisation of the guide to ensure that processes are put in place to avoid a similar situation reoccurring in the future.

The VFF is concerned the ESC is establishing a two-tiered system that treats landholders differently based on when transmission infrastructure was built and that the rights of landholders along existing transmission lines are being ignored.

That is why we have requested that the ESC provide the current rules applying to transmission to all landholders with an existing easement on their property and then seek feedback on what that means for their farming operations, and to report of the engagement they have had with transmission network companies.

VFF members inform us the last time they were told about rules regarding transmission lines was when they received compensatory arrangements from the State Electricity Commission some 40, 50 and 60 years ago. Our members commonly report on interactions with transmission company representatives entering their land and refusing to answer even the simplest question that farmers require to maintain farm biosecurity and compliance with agricultural and trading regulations.

Whilst transmission companies may argue they have good practices in place and that regulation of their activities is not required, AusNet's failure to maintain their Ballarat to Bendigo transmission line and subsequent need to access land without landowner consultation highlights the need to regulate these behaviours.

A regulatory system should never empower a company to not only fail to maintain their asset to ensure safety standards are met, but also allow them to transfer the costs of making the line safe on to the people who live and work under these lines.

Please have your office contact VFF Senior Policy Advisor Land & Planning Lisa Gervasoni – lgervasoni@vff.org.au to arrange a suitable time to discuss these matters further.

I look forward to meeting with you in the near future to discuss how we can work towards achieving an access code that is fair to the farming communities who have been forced to host this infrastructure.

Yours sincerely,

Emma Germano
President
Victorian Farmers Federation

The Hon Lily D'Ambrosio MP
Minister for Energy and Resources
Level 16, 8 Nicholson Street
EAST MELBOURNE 3002

By email: lily.dambrosio@parliament.vic.gov.au

Victorian Farmers Federation

1 May 2023

Dear Minister,

RE: Victorian transmission network planning

We write to point out the concerns of Victoria's farming community towards transmission network planning across the state and seek an opportunity to meet with you to discuss these concerns further.

The VFF believes that an immediate halt to all planning for the VNI-West and WRL projects must be undertaken and that the planning powers for all transmission network planning be vested in and executed directly by the Victorian Government. In addition, we request that a state-wide plan for renewable energy and transmission, that accounts for issues of agricultural production, be developed by the government.

The conduct of AEMO's consultation processes has not only raised questions about the appropriateness of the proposed VNI-West project, but also the appropriateness of AEMO as the planner for transmission projects for and on behalf of the Victorian Government.

It is clear that AEMO's view on transmission planning is completely blinkered by the requirements it has to place energy consumers at the centre of investment decisions. This view has no regard for the interests of communities, landholders, businesses and families that are directly impacted by the construction and operation of transmission towers, who bear costs that are not accounted for under the existing cost benefit arrangements.

Without viewing planning from an holistic perspective, adverse outcomes of increasing food prices, diminishing food security and impacting regional economies remain a huge risk.

Despite your order requiring the use of multi-criteria analysis for the proposed project, the VFF is concerned the analysis relied upon to underscore the VNI-West project and the Option 5 corridor not only fail to account for these costs, but has been biased, and that a pre-determined outcome has already been arranged.

The multi-criteria analysis fails to account for the true costs of transmission projects, the impact on agriculture and the need to consider fair, just and equitable commercial consent and compensation arrangements. The criteria cannot be relied upon and the VFF rejects them. A new methodology must be created that seeks to understand the impact of the transmission proposed on agricultural production. To continue on this basis will confirm that transmission planners do not value agricultural land, instead seeing it as vacant land waiting to host infrastructure for energy consumers.

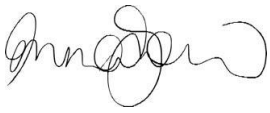
We ask that you investigate the issues raised in the submission prepared by Professor Bruce Mountain and Professor Simon Bartlett AM which challenges the very premise of the proposed VNI-West project. Their expert analysis not only outlines the reasons for which the VNI-West/WRL is not required, but also sets out reasons for which AEMO should not have the responsibility for transmission planning on behalf of the Victorian Government. This tenet is central in the mind of the VFF.

The VFF is committed to working with government and the energy sector to find answers to the policy challenges arising from the need to build new transmission networks.

We would appreciate the opportunity to meet with you, at your earliest convenience, so we can have direct discussions on the agricultural sector's concerns surrounding transmission network planning, and how we can better work to overcome these challenges.

Please have your office contact Executive Assistant Delshea Sobhee by email executiveoffice@vff.org.au to have a suitable time arranged.

Yours sincerely,



Emma Germano
President

Gerald Leach
Chair VFF Energy & Transmission Taskforce

18 September 2023

Victorian Farmers Federation

Leanne Hughson
Chief Executive Officer
Energy Safe Victoria
By Email info@energysafe.vic.gov.au

Dear Leanne,

Concerns regarding open engagement with farming communities hosting transmission lines

I am writing as it is increasingly clear that Energy Safe Victoria has failed to consider the safety and property rights of farmers who have been compelled to host transmission infrastructure.

I seek an urgent meeting to discuss ways to ensure that farming communities, especially those hosting renewable energy and transmission are seen as a key stakeholder of ESV and are treated with respect through active engagement with agriculture sector in your work.

The Corporate Vision Statement is silent on rural communities; however, your stakeholder engagement framework seeks to actively bring stakeholder voices into decisions that affect, impact, or interest them.

I have included two examples from this year where ESV has made decisions that directly impact our members without any engagement.

Ausnet Services – 3m high restriction
Our members are committed to their safety and the safety of their workers. They want to know what the regulatory restrictions on their farming activities are, that they are evidence based, and that they are engaged in any processes to change them. That is why there is such concern that Energy Safe Victoria allowed Ausnet Services to fail to change the regulatory minima for machinery on farm without consideration of that impact on the ability to farm rather than ensuring rectification was undertaken.

We are concerned that failing to allow input from landholders as well as failure to give warning of any safety issue does not uphold the values of acting with impartiality and uphold the importance of unbiased, equitable treatment in a way that is transparent, accountable, open, and trustworthy. Nor does it demonstrate active engagement with customers to improve safety outcomes.

Fire safety
Our members sought the detail of standard operating procedures relating to fighting fires under powerlines. Farmers are the most directly impacted party by these procedures, and as many of them are active CFA volunteers, they are aware of the restrictions and believed that to care about the safety of Victorians that this information needed to be made available to everyone.

Despite questing the guidance and being very clear on its purpose the guidelines produced without engagement with agricultural industry, failed to answer any of the questions raised. The VFF now refers members to New South Wales and Queensland documents that describe the restrictions and the basis of

the risk. This guidance is both a failure of an evidence-based approach to deliver safety outcomes and a level of disrespect for the farming community.

Not allowing rural landholders the information they need to actively plan for safe access and egress from their property when there is smoke in the air does not demonstrate a level of care for their safety or demonstrate respect for their lives and livelihoods. In major fires there can be significant smoke in the air for weeks. With Workplace Manslaughter laws does smoke in the air mean children can not pass under the powerlines to go to school, or that you cannot work on your farm. If it is so unsafe that it impacts your daily activities isn't that a sign of unsafe infrastructure?

Additionally, farmers are concerned that they will be a no-go zone in a major fire, and that fire is more likely to occur due to time lost on new starts to get approvals to access the fire by ground or air. Like tractors, fire trucks are over 3m in height so no appliance will be allowed on farms where Ausnet has failed to ensure regulatory safeguards are met.

The emergency management system now considers consequences, communication and community connection. This framework may assist ESV in understanding that farmers are a key stakeholder in relation to generation and transmission of energy. They need well communicated information that reflects how they live and work. They need to trust that regulators like ESV understand the consequences of their regulatory decisions and that they actively seek to avoid impacts through design and management standards.

I look forward to meeting with you in the near future to discuss how we can work towards achieving electrical safety on farm that does not restrict the production of food and fibre.

Kind regards,

Emma Germano
President - Victorian Farmers Federation

18 September 2023

Victorian Farmers Federation

Sarah Sheppard
Chief Executive Officer
Essential Services Commission
By Email energyreform@esc.vic.gov.au

Dear Sarah,

Need for better regulation of transmission companies in Victoria

For several years the Victorian Farmers Federation have been seeking a land access code for transmission companies to ensure that these companies act in a fair and responsible manner and are answerable for the consequences of their actions.

We are aware that the Commission is finalising an enforceable code at present but are concerned that the Commission has not actively sought to understand the issues relating to agriculture and transmission, including on existing easements. Given the recent actions of Ausnet I am requesting an urgent meeting prior to the finalisation of the guide to ensure that processes are put in place to avoid this situation reoccurring in the future.

We are concerned that the Commission is seeking to set up a two-tiered system based on when the transmission was built. We are concerned that the Commission has not sought to understand the issues with existing transmission lines.

That is why we have requested that the Commission provide the current rules applying to transmission to all landholders with an easement on their property and then seek feedback on what that meant for their operations, and what engagement they have had with transmission companies.

We hear from our members that the last time they were told about rules regarding the lines was their compensation letter from the SECV 40, 50 and 60 years ago. We hear that when they approach a contractor who has accessed the property, they refuse to answer even the simplest question that the landholder needs to ensure regulatory compliance.

Transmission companies argued that they had good practices in place and did not need regulation. The position of Ausnet to not maintain their Ballarat to Bendigo Transmission lines in a safe state and then create access guidelines, with no consultation with landholders, to a level of 3m without a permit identifies the need for regulation of their behaviour.

If there is a safety issue at 3m then they should be making sure every landholder is made aware of that. No fire truck or tractor operating in Victoria is under 3m in height. When the easements were acquired using compulsory acquisition there was no limits but in place on the use of machinery.

A regulatory system should never empower a company to not only fail to maintain their asset to ensure safety standards are met, but also allow them to transfer the costs of making the line safe on to the people who live and work under these lines.

It is essential that transmission companies are regulated whether it is an existing line or a new line.

It is essential that transmission lines are designed and maintained to allow the safe operation of emergency and farm vehicles under them.

It is essential that before transmission companies change rules that there is an independent review of the appropriateness of the change and the potential for the calculation of additional compensation to make good the additional harm caused by the action.

I look forward to meeting with you in the near future to discuss how we can work towards achieving an access code that is fair to the farming communities who have been forced to host this infrastructure.

Kind regards,

Emma Germano
President - Victorian Farmers Federation

Victorian Farmers Federation

The Hon Lily D'Ambrosio MP
Minister for Energy, Environment and Climate Change
lily.dambrosio@parliament.vic.gov.au

3 September 2020

Dear Minister D'Ambrosio,

Need for a strategic plan for renewable energy and transmission which considers impact on agriculture

As you are aware there is often significant concern in agricultural communities about 'large scale' renewable energy generation and the impact of transmissions lines on farms a long way from the source.

That is why in 2019 the VFF adopted a renewable energy policy that looked at encouraging farm scale renewable energy and calling for a state wide strategic plan for renewable energy production and transmission. This policy was shared with the Government during the drafting of the Solar Guidelines in the planning scheme and is attached for your information.

As you are aware there is a current proposal to construct a high voltage power line and associated utility installations from renewable energy facilities in Northern Grampians and further west to Metropolitan Melbourne. The 'corridor' alignment traverses highly productive agricultural land in grains, livestock, dairy, horticulture and intensive animal industries. As indicated in the VFF Renewable Energy Policy, it is not only the 'generation footprint' which can have impacts on agricultural production.

The concerns being raised by our members regarding the Western Victorian Transmission Line Project demonstrates the need for a state-wide strategy that looks at where renewable energy is best located, areas not suited for large scale conversion of agricultural land to energy generation and principles to guide transmission infrastructure.

In June VFF contacted the proponent suggesting the need for a land access document to be created and are still awaiting a response. The VFF seeks your support to recommend that the energy sector works with the Victorian Farmers Federation to prepare land access guidelines and consultation principles. The water sector guidelines prepared in the millennium drought for pipeline projects are attached as an indicator of what can be achieved.

The VFF is pleased that Minister Wynne has required an EES to be prepared as it gives a level of surety on process and considerations. The VFF will write to Minister Wynne to request inclusion on any TRG or SRG for the project.

The requirement for an EES does demonstrate that renewable energy and transmission can have a range of environmental impacts that need careful consideration – and these considerations should be foreshadowed in a strategic document which guides assessment processes.

Victorian Farmers Federation

The VFF would be pleased to discuss our concerns and potential solutions with you. Please have your office contact Luke Hooke at lhooke@vff.org.au any queries.

Kind regards,

David Jochinke
President - Victorian Farmers Federation