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Kiersten Fishburn Secretary Department of Planning and Environment 4 Parramatta Square 12 Darcy Street Parramatta NSW 2150

Submitted online.

Dear Kiersten

Draft energy policy framework

Transgrid welcomes the opportunity to comment on the NSW Government's draft energy policy framework to support NSW's transition to renewable energy.

Transgrid operates and manages the high voltage electricity transmission network in NSW and the ACT, connecting generators, distributors and major end users. Our transmission network is at the heart of the National Electricity Market and is vital to achieving NSW Government net-zero emissions targets, by connecting geographically and technologically diverse, low-cost renewable generation to customers.

Transgrid supports the NSW Government's objective, in its draft energy policy framework to provide communities, councils and the energy industry with clearer guidance on how the impacts of renewable energy projects and transmission infrastructure will be assessed and managed. Our view is that the draft framework has the potential to promote more timely investment in the critical energy infrastructure, while at the same time balancing the needs of landholders, the environment and local communities to secure and maintain community and stakeholder support for the infrastructure. We strongly believe that real and genuine community and stakeholder consultation and engagement is paramount to a successful transition to net-zero.

Transgrid notes that the draft energy policy framework consists of the following five guideline documents:

- 1. Wind Energy Guideline
- 2. Transmission Guideline
- 3. Solar Energy Guideline
- 4. Benefit-Sharing Guideline
- 5. Private Agreement Guideline

Trangrid's feedback is in response to the proposed Transmission Guideline and our comments on this Guideline and the associated Technical Supplement for Landscape and Visual Impact Assessment are attached in Annexure A.



Most importantly, to ensure the Transmission Guideline is as effective and streamlined as possible, we recommend the following changes to the Technical Supplement:

- Greater clarity on how dwellings within the setback distance will be assessed and the exemptions that will apply: as currently drafted, there are differing interpretations as the requirements are covered in several sections.
- Reconsideration of the requirements for preliminary visual impact analysis as part of the scoping report. The level of project detail (e.g., tower locations) will not be known at the time of the scoping report. This analysis would result in delay, inefficiency (rework for the Environmental Impact Statement), and would also likely create unnecessary concern for landholders and stakeholders (as the route would be further narrowed for the Environmental Impact Statement). Therefore, any benefits of this preliminary analysis are far outweighed by the potential risks and consequences.

Thank you for the opportunity to provide a submission in relation to the draft energy policy framework. If you require further information, please contact Suzanne Westgate, General Manager of Land Property and Approvals at <u>suzanne.westgate@transgrid.com.au</u> or 0436 426 049.

Yours faithfully

Craig Stallan Executive General Manager – Delivery



Attachment A: Detailed response to Transmission Guideline and Technical Supplement

In this attachment, Transgrid provides its detailed response to the Transmission Guideline component of the NSW Government's draft energy policy framework, including the Technical Supplement for Landscape and Visual Impact Assessment.

Transmission Guideline

Topic and Section	Comment
Application of the Guideline (Section 1.2)	The Guideline should only apply to projects where the Planning Secretary's environmental assessment requirements (SEARs) are issued post the final Guidelines being published. As it is currently written, there is a risk of:
	 creating re-work and delays to critical infrastructure projects
	 project budgets not having allocated funding for rework (if there are changes from this current draft version)
About transmission	Suggest the following amended wording:
infrastructure (Section 1.4)	 'Despite the restrictions, a range of activities and land uses are able to continue in most parts of an easement-with little to no disruption including agricultural activities (such as cropping and grazing), provision of public open space and some recreational activities.'
	 On page 10, it should be clarified that the high voltage transmission network in NSW is owned by the Electricity Transmission Ministerial Holding Corporation (ETMHC), then leased to Transgrid.
Regulatory process (Section 1.5)	Include reference to the process for Priority Transmission Infrastructure Projects (PTIP) as this is relevant to some major transmission projects.
NSW planning framework (Section 2)	 Suggest the following amended wording: "except on land reserved under the National Parks and Wildlife Act 1974 and under certain conditions" should be redrafted as "except on land reserved under the National Parks and Wildlife Act 1974 <u>unless</u> certain circumstances <u>apply</u>". Development may be carried out without consent on land reserved under the National Parks and Wildlife Act 1974 where the circumstances <u>under the National Parks and Wildlife Act 1974</u> where the circumstances under 2.44(1)(a)-(d) of the Transport and Infrastructure SEPP apply.
Foundational principles (Section 3.1)	• On page 17, Principle 2 does not recognise there may be legal constraints to using public land which can create project inefficiencies and increase cost and delay e.g. state forest dedications that need to be revoked.
	 Principle 3 should be amended to state "Projects should avoid and minimise social impacts to the extent possible". There will be circumstances where it is not possible to avoid or minimise social impacts completely.
Route selection process (Section 3.2)	It is essential that all stakeholders have a clear understanding of the route selection process and associated engagement. The process shown in the flow chart (Figure 5) does not clearly align with the text and certain terms are not defined in the Guideline. Transgrid supports early engagement with landowners in the options development and route selection process. Transgrid would welcome further discussion on this aspect of the Guideline to ensure the process is clear, practical and sets accurate expectations for all stakeholders.
Corridor refinement and project design	"As part of this process, proponents should undertake on-ground assessment and engagement with all relevant stakeholders."

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Topic and Section	Comment
(Section 3.2.2)	• The Guideline should acknowledge that best endeavours will be made to engage with landowners and access properties where required, however this may not be possible in all cases. The Guideline should acknowledge this, to ensure there are no unintended consequences/delay when access is not possible. E.g. where stakeholders have expressed an intention not to be contacted or where it is not safe for the proponent to engage.
	 "Final project design including the positioning and siting of the transmission infrastructure and associated easements will be further refined during the preparation of the EIS".
	There is a misalignment in the level of project detail available at the EIS stage. Final detail of transmission structure locations is not typically known during preparation of the EIS and prior to approval, rather is only known during detailed design (post-approval).
Community and stakeholder engagement (Section	• We request the Guideline make more reference to the importance of transmission projects to achieve the energy transition and undertaking them as efficiently and effectively as possible under the CSSI provisions.
4)	• Section 4 states that the department's role is to <i>"exhibit the EIS for public comment for a minimum of 28 days"</i> . To give weight to the department's own efficiency measures, for PTIP CSSI transmission projects, this should simply say: <i>"28 days"</i> .
Agricultural land use (Section 6.1)	• The reference to Transgrid's Easement Guidelines should recognise that Transgrid works with landowners to mitigate and minimise impacts on agricultural land use.
	• While the following statement may be correct: <i>"For this reason, the cumulative risks and impacts to agricultural land and productivity due to transmission infrastructure are typically very low"</i> , this can be a sensitive topic and some landholders may disagree. Suggest amending to, <i>"while there may be some exceptions, are typically assessed to be low-very low"</i> ,
Undergrounding (Section 6.2)	• 'While underground infrastructure typically requires a smaller easement (see Figure 3), these easements prevent other productive use of the land, such as ongoing agricultural use, which would otherwise be possible with above ground lines.'
	Undergrounding does not limit all agricultural use and grazing of cattle, sheep and other livestock can occur on easements. Recommend amending to "such as some agricultural (including horticultural) uses,"
	 'Once installed, the land above underground transmission infrastructure must be also kept clear of vegetation so that access can be provided for excavation in the event of a fault or any other maintenance requirement. In such an event, locating and repairing underground cables can be a complex and time-consuming exercise, requiring highly specialised equipment and expertise.'
	The land above underground transmission infrastructure must be kept clear of many vegetation types (eg, trees and large shrubs would not be allowed within the easement of underground cables due to potential problems with roots (which can dry out the cable thermal backfill material and damage the cable). Certain vegetation and agricultural crops with shallow root systems may be allowed to return to the easement although these may need to be



Topic and Section	Comment
	removed if the ground is required to be excavated for cable repairs. Recommend amendment to clarify this.
	• The Guideline should acknowledge that the construction of underground cables takes longer, which delays the benefits to consumers and emissions reduction benefits.
Bushfire risk (Section 6.3)	 Reference to spacers on lines in relation to transmission lines to prevent bushfire risk is incorrect - suggest delete. Spacers on lines are used on distribution lines.
	• The Planning for Bushfire Protection 2019 (RFS) standard does not apply to transmission infrastructure. Further, transmission infrastructure does not have an Asset Protection Zone.
	• 'and maintaining the easements underneath powerlines so that they are cleared of potential fuel sources.' Suggest delete and replace with 'and maintaining the vegetation to provide adequate safety clearance from the conductors to the vegetation and thereby preventing any potential ignition of vegetation.' For transmission lines, the focus is on preventing any ignition of fires from vegetation in close proximity of the line, rather than protecting the infrastructure by reducing bushfire fuel load.
	• The "ISSC3 - Guide for the Management of Vegetation in the Vicinity of Electrical Assets" applies to distribution assets not transmission assets but some of the principles are applicable.
	• In the event of a bushfire, transmission lines can be quickly shut down for safety reasons (if deemed necessary by the Rural Fire Service). This greatly reduces the risk of fire spreading and causing significant damage to infrastructure. It also allows on-the-ground and aerial firefighting activities to be carried out with significantly less risk.
Electric and magnetic fields (EMF) (Section 6.4)	• Recommend the Guideline state the 'reference level' for general human exposure to electric field levels is 5kV/m set by International Commission on Non-Ionizing Radiation Protection (ICNIRP). The ICNIRP 'criteria' which should be referenced for compliance is the EMF "basic restrictions" levels.
	• The Guideline should clarify that while electric field levels directly beneath transmission lines may exceed the reference level of 5kV/m, proponents should demonstrate that the development does not reasonably exceed the "basic restriction" levels for public exposure.
Aviation (Section 6.5)	• The Guideline states that "proponents are encouraged to install overhead powerline markers to increase the visibility of powerlines where required/identified as high risk". This statement should reference markers installed in accordance with AS3891.
	• Proponents must consider designated air routes and aerial agricultural activities during the project design as much as possible – We note there may be limited opportunity to mitigate aviation impact once a route has been identified or finalised. Suggest amending the above to refer to 'route selection' ie. Proponents must consider designated air routes and aerial agricultural activities during route selection as much as possible.
Access arrangements and acquisition agreements	• While Transgrid's policy is to obtain consent for entry onto property where possible, on occasion Transgrid may opt to use its powers under the <i>Electricity Supply Act 1995</i> to enter land and construct works.



Topic and Section	Comment
(Section 7)	This section should clarify that easements will obtained by agreement where possible and the description of the compulsory acquisition process should be expanded to confirm that the compulsory acquisition of easements is a mandatory process but an appeals process exists where the interest holder disagrees with amount of compensation determined by the Valuer General.
	• States in relation to compensation "This payment must include the market value of the land subject to the easement, loss due to severance and disturbance (including potential impacts to the affected property), and reasonable costs and expenses." This should be reworded to reflect that the Just Terms Act requires the assessment of compensation to be undertaken with reference to the matters outlined in section 55, which may include a claim for loss due to severance and disturbance.
	 "Proponents should identify those residences proposed to be subject to any agreements in the EIS."
	Suggest this should not a requirement for the EIS as the details may not yet be confirmed, and there may be landholder sensitivities or privacy considerations.
General comment	Figure 6 in the Guideline does not represent existing transmission structures in NSW. Consider replacing these with a more accurate representation of high voltage transmission structures that are used in NSW. Transgrid is happy to assist the Department on this.

Transmission Guideline: Technical Supplement for Landscape and Visual Impact Assessment

Topic and Section	Comment
Purpose (Section 1.1)	• State clearly in this section that the Technical Supplement only applies to transmission projects (ie those that are SSI/CSSI).
Application of the Technical Supplement (Section 1.2)	 Suggest a definition be provided for transmission corridor. Substations differ significantly from transmission lines and structures in terms of visual magnitude. It is unclear how this Guideline applies to other elements of a transmission project such as substations or temporary elements such as construction compounds or worker accommodation sites. (Substations are mentioned in the context of <i>'re-siting'</i>, and <i>'ancillary sites such as substations'</i> is mentioned in selecting additional viewpoints, however all methodology appears to refer to towers.) Greater clarity is needed on how the assessment methodology applies to substations.
General requirements (Section 1.3)	 "The proponent must engage with the community, including the indigenous community, as early as possible and throughout the preparation of the assessment to verify the outcomes and to consult on any measures proposed to mitigate impacts." It may not always be possible to 'verify' the result of a technical assessment (and could also add substantial time and cost to the visual assessment). Suggest removing the requirement to 'verify the outcomes'.

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Topic and Section	Comment
	• Further guidance would be beneficial to clarify the expectations for engagement with the indigenous community in relation to the approach to categorising and analysing landscape character and visual impact.
General requirements (Section 1.3)	" so that the design can be effectively informed by the community's input" This statement oversimplifies the process and may set unrealistic expectations. Community input (particularly in greenfield areas) may advocate that the transmission line should be located elsewhere or underground. Depending on the location of the nodes that need to be connected and the scale of the project, neither may be feasible options. Suggest amending to "so that community input can be taken into account".
Approach to Assessment, Dwellings (Section 1.4)	 'proposed dwellings that are subject to a development application that has been lodged prior to an application for the transmission proposal but is yet to be determined' The footnote refers to legislation that relates to the scoping report and also EIS, however it is assumed this sentence is referring to the scoping report. Suggest the wording be amended to make it clear what 'an application for the transmission line proposal' is referring to ie. the scoping report. Dwellings that do not yet exist should be given a lower visual sensitivity and not be subject to the setback distances.
Approach to Assessment, Dwellings (Section 1.4)	In selecting a route that minimises overall visual impacts, consider if impacts to permanently occupied dwellings should be considered equal or otherwise to impacts to intermittently occupied dwellings. For example, it may be preferable for a transmission line to be closer to an intermittently occupied dwelling (e.g., weekender or dwelling used for work purposes such as a shearer's quarters, accommodation for workers, etc) in order to also maximise the distance from permanently occupied dwellings with primary views toward the proposed transmission line.
Visual Impact Assessment Framework, Setbacks (Section 3.1) Impact Agreement	 'A sensitive receiver will trigger a high visual impact if it is located within the relevant setback distance' We assume this is only for non-easement affected private views and should be made clearer in the text. 'Any agreed mitigation must be subject to an impact agreement.'
(Section 3.2)	Suggest delete. There are a number of ways this can be achieved, and these should not be limited. Alternatively, clarify that impact agreements apply to transmission projects and if so, include impact agreement in glossary. It is also noted that the tower locations and designs are unlikely to be finalised prior to approval and therefore it would not be possible to negotiate impact agreements at the EIS stage - therefore should not be a requirement at this stage.
Visual performance objectives (Table 9)	 Suggest amending dot point in High Impact section to acknowledge that adjusting the alignment could result in increased visual impacts for other receivers. I.e "all reasonable efforts have been made to avoid the impact and alternative project designs <i>or alignments</i> are not feasible or would be unlikely to materially reduce the impact <i>or would result in increased visual impacts to other receivers</i>". Sentence referring to road users is unclear. Consider use of the term 'views from public roads' rather than 'road users'.
Residual impacts	Where a transmission project is seeking approval for a project footprint rather than a specific alignment, it is not practical to present detailed mitigation measures and



Topic and Section	Comment
	an assessment of residual impacts in the EIS, as these may change depending on the final tower locations.
	We request detailed mitigation measures be included in post-approval management plans, once detailed design has been completed.
Visual impact assessment (Section 3.2) – Vegetation screening and landscaping plans	To manage expectations, please note that typically the responsibility for long term maintenance of screening vegetation is the landholder's responsibility.
Dwelling Entitlement (Section 3.3)	• There are no specific legislative requirements (ie. under Part 5 of the <i>Environmental Planning and Assessment Act 1979</i>) requiring the approval authority to consider visual impacts on dwelling entitlements for all State Significant Infrastructure projects
	• Transgrid agrees with the statement regarding dwelling entitlements that 'their uncertain nature including where and when a dwelling may be constructed, if at all, make the application of the visual assessment tools challenging.'. Assessing impacts to dwelling entitlements on long linear projects is not considered practical and any impact assessment would be subject to many assumptions (with no way of identifying the accuracy of the assumptions). The impact assessment is likely to be highly subjective and of limited value and therefore, inclusion of the assessment of dwelling entitlements is not supported.
	 Further, while King v Minister for Planning; Parkesbourne-Mummel Landscape Guardians Inc v Minister for Planning; Gullen Range Wind Farm Pty Ltd v Minister for Planning [2010] NSWLEC 1102 contemplates the assessment of visual impacts on dwelling entitlements in the context of a wind farm approval, the basis for this assessment is confined to the facts (i.e. was specifically required by the Director Generals Assessment requirements issued for that project).
	In addition, the case expressly notes that the loss of 'subdivision potential' (in circumstances where no subdivision application has been lodged with or approved by the relevant consent authority) should not be a factor for consideration. While the assessment of impacts on dwelling entitlements is not supported, to the extent this section remains it should also be clarified that impacts on future subdivisions should not be considered.
Scoping Report Requirements (Section 4.1)	• The Guideline assumes a greater level of design and scope detail at the scoping report stage than is often possible for most projects. For example, it refers to <i>'proposed or indicative tower locations'</i> . Given there is still extensive environmental studies and engagement to occur post the scoping report, it is not efficient or beneficial to nominate a centreline and tower locations at this stage and it would also create unnecessary concern and confusion for stakeholders. Tower locations can change multiple times throughout the detailed design and construction process.
	• The methodology presented could be undertaken post the scoping report and still achieve the same outcome in the EIS.
	• There will be limitations with respect to the accuracy of the sensitive receivers layer. Some validation of the publicly available residence data will be possible using satellite imagery, but it may not be possible to identify derelict structures or distinguish between sheds and dwellings, as engagement with individual



Topic and Section	Comment
	landowners is unlikely to be feasible over a ~4-6 km wide corridor (assuming that the corridor under consideration ranges in width from 1-3 km).
Scoping map (Section 4.1)	'The location of public viewpoints and private receivers (including whether they are easement affected)'.
	Whether the receiver is easement affected won't be known at scoping stage. Suggest changing the terminology to <i>'receiver within study corridor'</i> .
Environmental Impact Statement	• 'All public viewpoints and private receivers identified in the scoping report need to be assessed in some level in the EIS.'
Requirements (Section 4.2)	The Guideline should provide flexibility for the corridor/study area to change from the scoping report to the EIS as typically a corridor is narrowed further from Scoping Report to the EIS. The Guideline should clarify that if a viewpoint was identified in the scoping report and the corridor was subsequently changed/narrowed so that viewpoint is no longer relevant, there would be no need to include that viewpoint in the EIS.
	 This section should also re-confirm that easement-affected dwellings and parallel lines are excluded.
Environmental Impact Statement, Representative receivers and	'Representative viewpoints should be selected and assessed in lieu of multiple dwellings.' and 'Representative viewpoints should only be used for views from the public domain along public roads.'
viewpoints (Section 4.2)	It is not clear when representative viewpoints can be used. Suggest this should be clarified.
Assessment for receivers within the setback (Section 4.2)	This section should clarify that representative viewpoints and "representative photomontages" can be used for receivers located within the relevant setbacks (that require assessment). Due to the large and linear nature of transmission infrastructure, there would be substantial time and cost implications if a photomontage is required for every receiver within the setback area.
Environmental Impact Statement, Proportionate visual impact assessment (Section 4.2)	• The wording in this section and in Figure 9 indicates that all moderate or higher (assume only non-easement affected dwellings although unclear) will need field visit and photomontages. This could have substantial time and cost implications.
	• If a high impact is identified through a simple assessment, suggest the Guideline provide flexibility to progress directly to a detailed assessment. For dwellings that are highly impacted, it is unlikely that an intermediate assessment would yield a different result.
Environmental Impact Statement, Calculating magnitude (Section 4.2)	• 'Existing screening should be considered effective, and a cell is not occupied if:
	existing vegetation would substantially screen (to the point where transmission towers are barely discernible through vegetation) elements of the project such that any residual view would be very intermittent'.
	This is considered a high standard for existing vegetation screening effectiveness. The screening examples provided don't allow much visibility. It is noted that the effectiveness of screening is somewhat subjective and may be open to different interpretations by stakeholders.
	We request Figure 13 be revised to allow for less screening, on the basis that the type of screening typically expected of mature eucalypts in NSW is preferred over solid blocks of vegetation that may not be characteristic of the local landscape.



Topic and Section	Comment
	• The grid system uses the specific location of towers; however to manage expectations it should be acknowledged that the tower locations may vary as the final designs are unlikely to be finalised at the time of the EIS.
Environmental Impact Statement, Assessment against performance objectives (Section 4.2)	 'If screening is proposed to mitigate an impact, a photomontage must be prepared to visualise the effectiveness of the vegetation' It is noted that this requirement could result in many additional photomontages at a time when the tower locations are still subject to change, and therefore would not be an efficient use of time and resources. We request that this is completed when tower locations have been finalised post EIS approval.
Environmental Impact Statement, Assessment against performance objectives (Section 4.2)	 'Where screening is proposed details of consultation with affected landowners, including evidence of how any feedback has been addressed.' General consultation with affected landowners on mitigation measures (based on worst case assumptions) is undertaken at EIS phase, however consultation on specific off-site landscape treatments is typically undertaken when the design is confirmed i.e. when the actual impacts are confirmed. This is difficult to do when tower locations are not finalised (as this can have a substantial effect on the magnitude of change – grid squares occupied as per the Guideline). Request amendment to clarify that "details of consultation on potential impacts and mitigations measures such as screening, and how feedback has been taken into account" is more appropriate. Suggest that the EIS include options for mitigation, but meaningful engagement be undertaken when there is some certainty about the need for screening vegetation. This is on the basis that the preference is to avoid the impact through measures such as alignment refinement and tower repositioning, and screening being investigated when there is no opportunity to refine the design to avoid the impact. Consider moving details on non-infrastructure design related mitigation measures, such as landscape screening vegetation on easement affected and non-easement properties, to after project approval to allow for design refinements.
Environmental Impact Statement, Setbacks (general)	The assessment of dwellings that are within the setback distance is covered in several sections and it would be clearer if it were consolidated into one section. A flow chart would also assist stakeholders to understand the process and requirements.

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