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Addendum 2 Submissions Report

Coppabella Wind Farm - Rebuild of Transmission Line 99M Installation of a Static Synchronous Compensator

February 2024



Document preparation history

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Executive summary

A Review of Environmental Factors (REF) was prepared by Transgrid for the *Coppabella Wind Farm* - *Rebuild of Transmission Line 99M* project and was determined in March 2020.

An Addendum REF (referred to as Addendum REF 1) was prepared by Transgrid and determined in November 2020 for the installation of an additional 330/132 kilovolt (kV) transformer at Transgrid's Yass 330 kV substation to support the connection of the Coppabella Wind Farm (CWF) into the Transgrid's 330 kV network.

A second modification to the proposed activity is now required. The changes include the installation of a static synchronous compensator (STATCOM) at Yass substation to meet the connection requirements of the Australian Energy Regulator and address network planning constraints due to the CWF grid connection. STATCOMs are devices which are capable of providing or absorbing reactive current and therefore regulate the voltage at the point of connection to the grid. The STATCOM would be installed on the former switchyard bench, adjacent to the new 132/330 kV transformer compound.

The assessment of the proposed modified activity is documented in the *Coppabella Wind Farm* – *Rebuild of Transmission Line 99M Addendum Review of Environmental Factors (Addendum REF 2- Installation of a Static Synchronous Compensator)* (the Addendum REF 2) prepared by Transgrid (November 2023). The Addendum REF 2 was placed on public display on Transgrid's website for 22 business days from 22 November to 22 December 2023, so that the public and stakeholders could understand the proposed modified activity and provide their feedback.

There were 10 submissions from the public and two submissions from government agencies. This report provides a summary of the issues raised in the submissions received and provides a response for each issue.

Issues raised by the public and government agencies

The majority of the issues raised by the public were generally related to the already approved portion of the project (namely the transmission line rebuild) and not specifically to the proposed modified activity (the installation of the STATCOM). This included issues such as biosecurity, impacts on biodiversity, impacts on agriculture and land use, ownership and property and access. The key issues raised which are specific to the proposed modified activity include:

- Ownership and cost
- Disturbance to contaminated land
- The need for the proposed modified activity
- Lack of transparency and consultation surrounding the need for the STATCOM
- Electromagnetic frequency and associated health impacts
- Construction program

The two submissions received from government agencies were from National Parks and Wildlife Service (NPWS) and Transport for NSW (TfNSW). NPWS raised no issues or objection to the proposed modified activity as the works are not located within or adjoining to NPWS estate. The key issues raised by TfNSW



related to oversize and over mass vehicle movements, road upgrades and anticipated construction vehicle volumes.

The proposed modified activity

With consideration to the submissions received, Transgrid does not propose to make any changes to the proposed modified activity or mitigation measures as described in the Addendum REF 2.

Conclusion

Considering the information in the Addendum REF 2 and this Submissions Report, it is concluded:

- that the proposed modified activity is not likely to significantly impact on the environment, therefore an Environmental Impact Statement under section 5.7 of the EP&A Act is not required, and as such, Division 5.2 of Part 5 of the Act is not triggered.
- that the proposed modified activity is not likely to significantly affect threatened species, populations, ecological communities or their habitats and will not be carried out on a declared area of outstanding biodiversity value and therefore a Species Impact Statement is not required.

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1. Introduction

1.1. Proposed modified activity

A Review of Environmental Factors (REF) was prepared by Transgrid for the *Coppabella Wind Farm* - *Rebuild of Transmission Line 99M* project and was determined in March 2020.

An Addendum REF was prepared by Transgrid and determined in November 2020 for the installation of an additional 132/330 kilovolt (kV) transformer at Transgrid's Yass 330 kV substation to support the connection of the Coppabella Wind Farm (CWF) into the Transgrid's 330 kV network.

The determined activity described in the REF included the rebuild of Transgrid's 132 kV Transmission Line 99M (Yass to Murrumburrah) (Line 99M) from the CWF site to Yass 330 kV substation as a double circuit line to support the connection of the wind farm to the National Electricity Market (NEM). The Addendum REF, which was determined in November 2020 (herein referred to as Addendum REF 1), included:

- Construction of a new switch Bay and installation of a 132/330 kV transformer on the former switchyard bench, located to the immediate east of the existing switchyard
- Minor realignment of Line 99M external to Yass substation to facilitate the entry of the rebuilt Line 99M into the new switchbay.

A second modification to the proposed activity is required, which was assessed in Addendum REF 2. The changes include the installation of a static synchronous compensator (STATCOM) at Yass substation to meet the connection requirements of the Australian Energy Regulator (AER) and address network planning constraints due to the CWF grid connection. STATCOMs are devices which are capable of providing or absorbing reactive current and therefore regulate the voltage at the point of connection to the grid. The STATCOM would be installed on the former switchyard bench, adjacent to the new 132/330 kV transformer compound.

The proposed modified activity would include (and shown in Figure 1):

- Removal of redundant footings, transformer bunds, conduits and tanks and demolition of three onsite buildings (largest being approximately 20 metres x 10 metres) to make way for new grid connection infrastructure
- 132 kV switchbay and a new 132 kV transformer (oil filled) and auxiliary transformer with associated compounds
- Installation of the new STATCOM equipment which includes the control, water cooling and reactor components, control / ancillary services building and ancillary equipment
- Connection of the transformer compound and switchbay to the existing spill oil and stormwater drainage network. New spill oil tank(s) (approximately 20 metres long x 6 metres wide x 3.5 metres deep), pipework and pits will be installed as required on the former switchyard bench
- Reinstatement of the earthgrid within the former switchyard
- Underground and overhead electrical connections as required to connect the new STATCOM and transformer equipment. These connections would be confined to the former switchyard bench
- Upgrades and installation of secondary systems equipment within the auxiliary services building and the existing switchyard as required
- Installation of palisade security fencing (approximately 6 metres high) around the STATCOM equipment, transformer compound and switchbays.



1.2. Addendum REF 2 display

Transgrid prepared the Addendum REF 2 to assess the environmental impacts of the proposed modified activity. Consultation has been undertaken in accordance with *Transgrid Consultation Protocol for Review of Environmental Factors (REFs) for Class 4 and 5 Activities* (Transgrid, 2021). The REF was publicly displayed for 22 business days from 22 November to 22 December 2023 on Transgrid's website (https://www.transgrid.com.au/what-we-do/projects/current-projects/yass-murrumburrah-project).

Letters were sent to key stakeholders advising them of the display of the Addendum REF 2 and how they could make a submission. The key stakeholders included landholders adjoining the Yass substation, potentially noise affected landholders, relevant government agencies and all landholders previously consulted as part of the original REF. A phone number and email address were also provided in the letter and on the website to enable stakeholders to contact Transgrid to find out more information and make a submission.

1.3. Purpose of this report

This Submissions Report relates to the Addendum REF 2 and should be read in conjunction with that document. Addendum REF 2 was placed on public display and submissions relating to the proposed activity and Addendum REF 2 were received by Transgrid.

This report summarises the issues raised in the submissions and provides responses to each issue (Section 2).

No changes are proposed to the modified activity and no revisions have been made to the environmental management measures described in Addendum REF 2, although they are reproduced in this report for reference (Section 3).

This report also fulfils the requirements as outlined in the *NSW Code of Practice for Authorised Network Operators (2015)* to document the consideration of submissions from a member of the public or a government agency.

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Impact area

1

Former switchyard

• Acacia shrub to be removed

Scale: 1: 3463.72283415836

2. Response to issues

2.1. Engagement and overview of responses

Transgrid has executed a staged engagement approach during the project planning phase to ensure stakeholder feedback has been attained and considered as part of the planning process. Transgrid executed a Community and Stakeholder Consultation Plan for Addendum REF 2. The plan identified the stakeholders to be consulted, the method of consultation and the timing of the consultation activities throughout the assessment of the proposed modified activity. It included but was not limited to seeking feedback on the proposed modified activity from key government agencies, potentially noise affected landholders, landholders adjoining Yass substation and landowners along the Line 99M rebuild area.

All communications included Transgrid's contact details and a toll free 1800 number so that stakeholders and the community could contact Transgrid to clarify questions or concerns regarding the project or wanted further information about how to make a submission during public exhibition. Communications contained links to Addendum REF 2 on Transgrid's website, which has a dedicated project page and comprehensive information about the project.

During the exhibition of Addendum REF 2, Transgrid received submissions from 12 respondents. A total of 10 submissions were from individuals and two responses were received from Government agencies (National Parks and Wildlife Service (NPWS) and Transport for NSW (TfNSW).

The submission from NPWS advised they had no objection towards the proposed modified activity.

The majority of the issues raised by the community were generally related to the already approved portion of the project and not specifically to the proposed modified activity. This included issues such as biosecurity, impacts on biodiversity, impacts on agriculture and land use, ownership and property and access.

The key issues raised which are specific to the proposed modified activity include:

- Ownership and cost
- Disturbance to contaminated land
- The need for the proposed modified activity
- Lack of transparency and consultation surrounding the need for the STATCOM
- Electromagnetic frequency and associated health impacts
- Construction program.

All 10 submissions lodged by the community were not supportive of the approved project and the proposed modified activity.

Each submission has been examined individually to understand the issues being raised. The issues raised in each submission have been extracted and collated, and responses to corresponding issues have been provided.

Where similar issues have been raised in different submissions from individuals, only one response has been provided.



2.1.1. Response to issues – submissions from individuals

A summary of the issues raised by the community and Transgrid's response is provided in Table 1. This also includes a summary of the issues raised for the approved project (rather than the proposed modified activity) and associated responses.

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Table 1 Issues raised by the community and responses

Issue	Issue description	Submitter number	Response
Ownership and cost	Who will be financing the approved activity and the proposed modified activity?	6	The approved project and proposed modified activity is being funded by Goldwind, the owner and operator the Coppabella Wind Farm. However, Transgrid would own, operate and maintain the transmission connection
	Concerns that the proposed modified activity would be borne by electricity consumers.	2	infrastructure once it is in operation. The cost of the proposed modified activity will not be borne by electricity consumers. In response to concerns regarding foreign ownership, to the extent required, all activities are compliant with Australian Foreign Investment Review Board legislation and
	Concerns regarding foreign ownership.	6	approvals.
Disturbance to contaminated land	Disturbance of contaminated land at Yass 330 kV substation as part of the proposed modified activity.	7, 10	Disturbance of contaminated land was assessed in Section 5.1 and 5.2 of the Addendum REF 2 with the outcomes summarised below. <i>Soil contamination</i> The proposed modified activity has the potential to disturb heavy metal, hydrocarbon and polychlorinated biphenyls (PCB) contaminated soil across the existing and former switchyards. Whilst the concentration of contaminants are below the adopted Site Assessment Criteria (SAC), there is some risk that areas within the impact area (i.e. particularly the former switchyard bench) not subject to previous testing may contain elevated concentrations of contaminants. As such, any unexpected soil contamination encountered during ground disturbance works would be managed in accordance with a contamination management plan (mitigation measure GS3). Providing the works are carried out in accordance with the contamination management plan, contamination related impacts can be adequately managed. The establishment of new footings, reinstatement of the earthgrid and cable connections across the former switchyard would require the removal of redundant subsurface conduit, which is known to contain asbestos. Furthermore, the existing buildings to be demolished contain asbestos in the eaves, flooring windows and roof. Prior to the demolition of onsite buildings, a suitably qualified asbestos removal contractor would inspect the buildings and remove all asbestos containing material (ACM). Providing ACM is identified and removed in accordance with an Asbestos Management Plan (as per mitigation measure GS5), potential risks to human health and the environment is considered low.



Issue	Issue description	Submitter number	Response
			Mitigation measure GS3 and GS5 are as follows:
			• GS3: As part of the preparation of the CEMP, a contamination management plan would be prepared. The plan (as a minimum shall include):
			 The requirement for any material or soil suspected of showing evidence of contamination shall be sampled and analysed by a NATA Registered laboratory and managed in accordance with the Waste Classification Guidelines (EPA, 2014), the Guidelines on the Duty to Report Contamination (EPA, 2015) and the Contaminated Land Management Act 1997. Details on how contaminated soil, if encountered, would be stored and managed as to prevent impacts to the environment and human health.
			• GS5: An Asbestos Management Plan (AMP) would be prepared, in accordance with relevant WorkCover guidelines, prior to any demolition, earthworks or ground disturbance being performed on the site where asbestos has been identified or is predicted to occur. This includes onsite buildings to be demolished and the subsurface of the former switchyard. The AMP would include the following requirements:
			 Any asbestos containing material encountered during the proposed works, which requires removal shall be undertaken by a suitably qualified licenced asbestos removal contractor and disposed of at a suitably licenced waste facility capable of accepting asbestos waste. Prior to the demolition of existing buildings, they are to be inspected by a suitably qualified asbestos removal contractor, with all asbestos containing material removed.
			Groundwater contamination
			The proposed modified activity has the potential to encounter per- and polyfluoroalkyl substances (PFAS) contaminated groundwater during excavation works. Groundwater containing PFAS, if not appropriately handled and managed, has the potential to:
			 Contaminate the surrounding agricultural grazing land, terrestrial ecology and affect livestock



Issue	Issue description	Submitter number	Response
			 Impact the aquatic ecology in surrounding watercourses including riparian vegetation and fish stocks within the broader catchment.
			To manage impacts associated with PFAS contaminated groundwater, mitigation measure HW5 would be implemented:
			• HW5 : Any groundwater encountered as part of excavation and boring works within the modified activity areas as detailed in Addendum REF 1 (Figure 2-2) and Addendum REF 2 (Figure 2) must be pumped from the excavation and appropriately stored prior to being classified in accordance with the Waste Classification Guidelines (EPA, 2014). The collected groundwater would then need to be managed and disposed of in accordance with its waste classification.
Project need and justification		6, 8	Transgrid as an Authorised Network Operator needs to make reasonable efforts to connect new generation assets to the National Electricity Market with all Connection Applications including Coppabella Wind Farm being assessed in accordance with the Australian Energy Market Commission's National Electricity Rules.
	Lack of transparency and consultation surrounding the need for the STATCOM equipment	2	At the time of preparing the original REF and the Addendum REF 1, the requirement for the STATCOM equipment was unknown. The need for the STATCOM equipment was confirmed in July 2023 from further consultation carried out with the Australian Energy Regulator pertaining to the connection requirements of CWF. Consequently, scoping for the new STATCOM equipment commenced once the need was confirmed. Upon completion of the concept design for the STATCOM equipment in August 2023, the process of preparing Addendum REF 2 commenced. All stakeholders previously consulted as part of the project were notified of the requirement for the STATCOM equipment via letters sent in November 2023. In this letter, details of the public exhibition were provided including instructions on how to lodge a submission and how to seek further



Issue	Issue description	Submitter number	Response
			information on the project.
Health impacts	Electromagnetic frequency (EMF) and potential impacts on human	6,9,10	EMF associated with the STATCOM equipment was assessed in Section 5.4 of Addendum REF 2.
	health		The addition of the STATCOM may result in a localised alteration to EMF contours in the immediate vicinity of the equipment, but no increase at Transgrid's property boundary is expected. The level of EMF in the vicinity of the new equipment is expected to be consistent with the rest of the existing substation. As the equipment is within a restricted access area, there would be no impact of raised EMF levels on the local community. The security system for the site, including existing substation palisade fencing and additional fencing around the new equipment, would be maintained (as appropriate) throughout construction and the ongoing operation, to provide safety to the public. EMF associated with the rebuild of Line 99M was assessed in the original REF. The assessment determined that EMF levels at the edge of the 45 metre wide transmission line easement were well within the general public and occupational limits set out in the <i>International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines for limiting exposure to EMF</i> (ARPANSA 2010).
Construction program	Concerns over the increased delays in commencing construction and Transgrid's grid connection works being completed prior to the completion of the CWF	8	Subject to obtaining approvals, construction of the proposed modified activity is scheduled to commence in July 2024 and would be carried out in conjunction with the rebuild of Line 99M, which is scheduled to take approximately 20 months to complete. Construction is planned to coincide with the construction of the CWF with all transmission connection infrastructure ready to connect prior to CWF being ready to operate.
Other issues raised th	at were not directly related to proposed	modified acti	vity
Agriculture and land use	Biosecurity risks	5, 8	Transgrid is committed to ensuring the risk of weed and pathogen infestation into agricultural areas is minimised as far as practicable. Transgrid would consult directly with the landholders prior to the commencement of construction to understand any specific biosecurity risks/issues on their land and incorporate any specific mitigation measures into the Construction Environmental Management Plan (CEMP).
	Damage to agricultural land and private access roads during	5	To access the transmission line easement, construction vehicles would use the existing access roads and access routes. Additionally, some new tracks



Issue	Issue description	Submitter number	Response
	construction Financial loss to landholders from disturbances to agricultural land from the proposed activity and impacts on farm operations.	5, 8	 would need to be constructed as outlined in Section 3.2 of the original REF. Disturbance to farm operations including stock movements would be minimised through consultation with individual landholders. Transgrid acknowledges that the physical presence of the construction works may cause disturbance to landholders from the movement of construction vehicles and works occurring within the transmission line easement. Transgrid is committed to undertaking any repair works of any tracks and watercourse crossings which may be damaged during construction in consultation with individual landholders. Additionally, remediation of disturbed areas at the transmission structure and brake and winch sites would be carried out in consultation with the landholder. Disturbance to farm operations including stock movements would be minimised through consultation with individual landholders in accordance with mitigation LU1. Where direct disturbance and/or crop damage has occurred as part of the construction works (e.g. crop damage/ temporary loss of agricultural land from a construction bench), Transgrid would compensate landholders for that loss. Compensation payment would be determined on a case-by-case basis in consultation with the landholder.
Property and access	Impacts on property values	3, 4, 5, 9	Aside from a minor amendment to the easement adjoining Yass substation, the remaining easements for the balance of the transmission line would remain unchanged.
	Impacts on access roads from heavy vehicles and ability for access tracks to support heavy vehicle use	4, 5,9	Transgrid acknowledges that use of existing access tracks and watercourse crossings by heavy vehicles during construction works carried out on Transgrid's transmission assets has the potential to cause damage, which may result in erosion and sedimentation impacts. Upon completion of works at each property, Transgrid is committed to undertaking any repair and restoration works of any tracks and watercourse crossings which may have been damaged during construction in consultation with the landholder. Additionally, erosion and sediment controls would be established at sites where erosion risks have been identified and would be maintained by Transgrid until the site has been adequately stabilised.
	Concerns on future development and ability to sub-divide land as a result of the rebuild of Line 99M	3, 4, 9	Aside from the requirement for approximately 0.5 ha of additional easement external to Yass 330 kV substation to support the entry of the rebuilt Line 99M in the substation (refer to Addendum REF 1), the rebuild of Line 99M



Issue	Issue description	Submitter number	Response
			would occur entirely within the existing 45 metre wide easement. As such, development restrictions within and adjoining the easement would remain unchanged.
	Easement area to facilitate construction is inadequate and the need for additional easement	5	Whilst the majority of construction activities would occur within the existing 45-metre-wide easement, there may be a requirement for some activities to occur off easement. This may include the establishment of equipment laydown areas and the setup of brake and winch sites, which are required for the stringing of the conductors. Any construction activities which are required to occur outside the existing easement would be subject to further consultation and agreement with the landholder.
	Concerns over rehabilitation of affected areas during and post construction and legacy issues of prior works carried out by Transgrid on Line 99M	2, 5	Transgrid is committed to ensuring adequate remediation of areas affected by the proposed activity is carried out in consultation with each landholder. Mitigation measure LU2 would be implemented.
Power outages	Will the project result in localised power outages during construction?	2	The approved project or the proposed modified activity is not expected to result in any localised power outages throughout the duration of construction works.
Bushfire risk	Safety concerns associated with the operation of fire-fighting machinery and equipment within the easement due to increased conductor sag	2	The rebuilt Line 99M incorporating taller transmission structures is not expected to result in any change in the ability for fire suppression vehicles and equipment to traverse or operate within the transmission line easement. The rebuilt line would be designed and constructed to comply with Transgrid's conductor ground clearance standards for a 132 kV overhead transmission line.
	Reduced ability for aerial fire suppression due to the increased	2	The increased height of the transmission structures is not expected to reduce the ability for aerial fire suppression.
height of the transmission structures		It may be a requirement for fire suppression aircraft to fly within close proximity to obstacles such as transmission lines, radio repeater towers and other obstacles within rural environments. As such, it is reasonable to expect that a trained and experienced pilot would be able to safely manoeuvre the aircraft around such obstacles including Line 99M, whereby its physical alignment would remain unchanged.	
			Aerial fire suppression that requires low level flying would require aircraft operators to carry out a risk assessment prior to each flight. This risk



Issue	Issue description	Submitter number	Response
			assessment would identify specific hazards and obstacles within the area subject to the areas requiring fire suppression. The presence of Line 99M and its proposed height increase would be treated no differently to other obstacles that would need to be considered during the pre-flight risk assessment.
	Increased risk of bushfire caused from the rebuilt transmission line due to conductor failure or clashing conductor cables	3	The rebuild of Line 99M will be designed in accordance with Transgrid's <i>Transmission Line Design Manual</i> (April, 2022), which considers all relevant engineering requirements and design standards. This includes ensuring that appropriate separation between the conductors is in place to safeguard against conductors clashing.
Geology, soils and hydrology	Increased environmental impacts and soil disturbance associated with the new taller transmission structures and access track maintenance and construction works. Concerns of how spoil from excavations would be	2, 3, 6, 5	Erosion and sedimentation risks associated with excavations for the new structures and access track construction and maintenance have been addressed in Section 6.2.2 of the original REF. Transgrid is committed to managing soil erosion and sedimentation risks during construction through the preparation and implementation of an Erosion and Sediment Control Plan, which would form part of the CEMP.
	disposed		As detailed in Section 6.2.2 of the original REF, work locations requiring construction benches or new access tracks are expected to generate the most amount of spoil, however the volume of spoil is not expected to exceed 300 m ³ at any one work location. Work locations along Line 99M requiring structure replacement works only are expected to only generate approximately 25 m ³ of spoil. Excess spoil would be disposed of at a suitable location within the easement by spreading it out flush with the ground surface or at an alternative location as agreed to with the landowner. Excess spoil may also be used as backfill in the voids left from the removal of the wooden pole structures.
Relationship of the project to the	Is the project related to the HumeLink project?	2	The project is not related to the HumeLink project.
HumeLink project	Concerns that landholders affected by the proposed HumeLink project would also be affected by the Line 99M rebuild project.	2	Transgrid acknowledge that the rebuild of Line 99M may also coincide with construction of the proposed HumeLink project. The proposed HumeLink route traverses Line 99M approximately 8 kilometres north west of Yass 330 kV substation. As such, some landholders may be affected by the construction of both HumeLink and the Line 99M rebuild project. Transgrid will consult closely with those landholders affected by both HumeLink and the Line 99M rebuild projects both prior to and during construction to



Issue	Issue description	Submitter number	Response
			discuss property access requirements, potential impacts on farm management and agricultural operations occurring on the property, biosecurity and other issues specific to the affected landholders.
Encourager assessmen impacted developmen Internationa of Nature	Increased risk of bird and bat strike associated with the increased height of the transmission structures	2	Bird strikes due to raising the height of the transmission line were not addressed in the original REF. That stated, a number of high voltage transmission lines are present in the region including the existing Line 99M, whereby the bird species recorded or expected to occur within the study area are considered to be tolerant of these. Individual bird strikes may arise, but the impact of this on the viability of the species local populations is not considered to be significant.
	developments for inclusion on the International Union for Conservation	1, 2	An assessment of potential impacts on existing threatened species and ecological communities associated with rebuild of Line 99M was carried out in accordance with relevant legislation including the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Commonwealth) (EPBC Act) and the <i>Biodiversity Conservation Act 2016</i> (NSW) (BC Act). This assessment is included in the original REF. The assessment determined that no threatened flora, fauna or vegetation communities listed under either the <i>Biodiversity Conservation Act 2016</i> or the <i>Environment Protection and Biodiversity Conservation Act 2016</i> or the <i>Environment Protection and Biodiversity Conservation Act 2016</i> or the <i>Environment Protection and Biodiversity Conservation Act 1999</i> would be significantly affected.
	Adverse impacts on biodiversity as a result of the CWF project, the rebuild of Line 99M and renewable energy projects more broadly	6	Impacts on biodiversity were assessed in accordance with the BC Act and EPBC Act with impacts identified as not being significant. The rebuild of Line 99M would occur primarily within the existing cleared easement of Line 99M. As works would occur within an existing disturbed landscape, it is unlikely it would cause any significant cumulative impact to the environment when considered in conjunction with the CWF project and other projects in the surrounding region.
Project need	Why does Line 99M between Yass 330 kV substation and the Coppabella Wind Farm site need to be rebuilt as a double circuit line 132 kV line?	2	The current line rating of Line 99M was not sufficient to accommodate the proposed generation of the Coppabella Wind Farm. While the former approved project (July, 2018) involved uprating the line by replacing the existing conductors, further network constraint studies determined that the line would still be constrained under certain operating conditions, particularly due to the introduction of new renewable generation sources in the region. Additionally, the rebuild of Line 99M would address the marginal loss factor which would have been applied to the former approved transmission line uprating project by the Australian Energy Market Operator



Issue	Issue description	Submitter number	Response
			(AEMO).
Visual impacts	Impacts on visual amenity from the taller transmission structures.	3, 4, 5, 9	A Landscape and Visual Impact Assessment was undertaken to support the original REF, which concluded that the visual impact at sensitive receiver locations (residential dwellings within 1 km) and surrounding roads would be minor. It is acknowledged that the appearance of the rebuilt section of Line 99M would be of a more modern design compared to the existing wooden pole line, however the assessed level of impact on the existing vista at the surrounding residential dwellings was assessed as minor due to distance, presence of existing vegetation and landform screening views towards the transmission line.
Noise	Concerns over elevated noise generated during construction	5	Construction noise was assessed as part of the original REF (refer to Section 6.7) and the Addendum REF 1 (refer to Section 5.5) and Addendum REF 2 (refer to Section 5.3), which determined the following:
			 Elevated construction noise may be experienced at nearby residential dwellings as part of the transmission line rebuild works, however is expected to be short term and intermittent in nature. Elevated construction noise is predicted to occur at surrounding residential dwellings as part of the construction works at Yass 330 kV substation for the new switchbay, transformer installation and STATCOM equipment.
			Although elevated noise levels are predicted, the predicted construction noise levels do not represent a constant emission that would be experienced by the community on a daily basis throughout the project's schedule of works. Potentially noise affected properties would be notified as to the timing and duration of the construction works at least 7 days prior to commencing work.

2.1.2. Response to issues – submissions from government agencies

Two responses were received from government agencies being NPWS and TfNSW. NPWS raised no issues or objection pertaining to the proposed modified activity as the works are not located within or adjoining to NPWS estate. The issues raised by TfNSW including Transgrid's response is provided in Table 2.

Category	Issues raised	Response
	The proposed OSOM route was not provided in Addendum REF 2.	The approved project and the proposed modified activity is expected to require approximately four OSOM movements associated with the delivery of the 330/132 kV transformer and STATCOM equipment. At this stage, it is unknown which port the new high mass equipment would be delivered to as the equipment has not been procured and a construction contractor has not yet been appointed. As such, an OSOM transport route was not provided or assessed as part of Addendum REF 1 or Addendum REF 2. Notwithstanding this, the proposed transport route(s) would be provided to TfNSW as part of the OSOM permit application prior to the transport of the high mass equipment.
	The assessment of traffic related impacts did not include a swept path analysis to generally indicate locations where civil works/road and bridge upgrades are likely to be required	 Once the OSOM route(s) are known, an analysis will be carried out to determine if any road upgrades are required. If the assessment determines that road upgrades and/or civil works are required, these would be subject to separate assessment and approval. Notwithstanding this, Transgrid consider it to be low risk that upgrades to the public road network would be required given that: Yass 330 kV substation is an existing site, which has been subject to previous delivery and installation of high mass equipment including transformers, which are similar in size to the proposed new equipment. Transgrid routinely transport high mass equipment of this size on the public road network without the need to carry out road upgrade works.
	TfNSW noted that given the high number of renewable energy and other large scale projects requiring haulage of OSOM components on the road network, restrictions, and limitations on OSOM movements may be in imposed. As such, it is recommended that Transgrid engage early with TfNSW's Freight Branch – Special Permits	Transgrid acknowledge of the increased movements of high mass equipment on the NSW public road network. Transgrid will endeavour to carry out early consultation with TfNSW regarding the OSOM movements and associated permitting.

Table 2 TfNSW submission and responses



Category	Issues raised	Response
	team to discuss access needs and timing	
Light and heavy vehicle movements	Request for updated information on volumes of light and heavy vehicles construction traffic routes where the routes intersect with the state classified road network.	Access within and to the study area is provided by the following classified state roads:Hume HighwayBurley Griffin Way
		As detailed in in the original REF (Section 6.8.2), it is expected that at any one time, vehicle movements to the specific structure locations subject to the Line 99M rebuild would be fewer than 30 vehicle movements per day. Construction works occurring at Yass 330 kV substation as detailed in Addendum REF 1 and Addendum REF 2 are also expected to experience similar traffic volumes. Of the 30 vehicle movements per day, approximately 20 movements are expected to comprise light vehicle movements and 10 movements comprising heavy vehicles. Light vehicle movements would be generally attributed to the construction workforce accessing Yass 330 kV substation and the work locations along Line 99M associated with the line rebuild.

3. Updated proposed activity description and environmental management

3.1. Proposed activity description

Following the display of Addendum REF 2 and consideration of the submissions received, no changes to the proposed modified activity as described in Chapter 2 of Addendum REF 2 have been made (reproduced in Section 1.1 of this Submissions Report).

3.2. Environmental management

Appendix A of Addendum REF 2 identified mitigation measures for implementation. The issues raised in the submissions have been considered and no new mitigation measure have been included. The full complete summary of mitigation measures provided in Appendix A of the Addendum REF 2 have been reproduced in Appendix A of this report.

4. Conclusion and next steps

The conclusion as described in section 8 of the Addendum REF 2 has not changed. Considering the information in the Addendum REF 2 and this Submissions Report, it is concluded:

- that the activity is not likely to significantly impact on the environment, therefore an Environmental Impact Statement under section 5.7 of the EP&A Act is not required, and as such, Division 5.2 of Part 5 of the Act is not triggered.
- that the activity is not likely to significantly affect threatened species, populations, ecological communities or their habitats and will not be carried out on a declared area of outstanding biodiversity value and therefore a Species Impact Statement is not required.

Transgrid is therefore able to make a determination of the activity's impacts based on the information in the Addendum REF 2 and this Submissions Report. Addendum REF 2 and this Submissions Report provide a true and fair review of the activity in relation to its potential effects on the environment. They address, to the fullest extent possible, all matters affecting or likely to affect the environment as a result of the activity.

Once Transgrid has completed its assessment of the Addendum REF 2 and this Submissions Report, a decision statement will be prepared which may include recommended conditions of approval. A copy of the decision statement, Submissions Report and the Addendum REF 2 will be published on Transgrid's website following a determination.

^{17 |} Addendum 2 Submissions Report | Coppabella Wind Farm - Rebuild of Transmission Line 99M

Appendix A Mitigation measures

Mitigatio	n Measures
Environmental Management and Incident Response	
EM1	A Construction Environmental Management Plan (CEMP) shall be prepared and submitted to the Environmental Business Partner/Delivery for review and endorsement four weeks prior to the commencement of works, including site establishment. The CEMP shall be prepared in accordance with Transgrid's procedure Preparation of a Construction Environmental Management Plan Procedure
EM2	All works shall be undertaken in accordance with the Transgrid Environmental Handbook.
EM3	All workers shall be inducted onto the CEMP, site environmental conditions and sensitivities identified in this REF and receive training as appropriate. All workers shall receive Aboriginal heritage awareness training. Records shall be kept of this induction and training.
EM4	An Environmental Supervisor shall be included as part of the construction staff to oversee implementation of the Environmental Management Plan and to ensure that all mitigation measures are being effectively applied.
	In addition to the Contractor's Environmental Supervisor, Transgrid shall appoint an Environmental Inspector to regularly check that the work is being carried out in compliance with all environmental approval and legislative conditions.
EM5	 The following additional environmental approvals/licences/permits are required for the activity: A Section 138 permit and Road Occupancy Licence shall be obtained from Roads and Maritime Services (RMS) prior to carrying out works in, on or over Hume Highway which is a classified road.
	 A permit is required to be obtained from NSW Department of Primary Industries- Fisheries (DPI-Fisheries) for the proposed watercourse crossing works at:
	Booroo Creek (1st order watercourse) between Structures 8-9.
	Booroo Creek (4th order watercourse) between Structures 9-10.
	• Illalong River (4th order watercourse) to access Structure 99 and 100.
	Balgala Creek (3rd order watercourse) between Structures 122 and 123.
	Bobbara Creek (5th order) to access Structure 143 from Coppabella Road.
	 Controlled Activity Approval to be sought from NSW Department of Primary Industries- Water prior to carrying out works at same locations listed above.
	Aboriginal Heritage Impact Permit for works at Structures 11 and 12 on Line 99M.
EM6	All environmental incidents and near misses shall be reported to Transgrid. All pollution incidents that threatens or harms the environment shall be reported immediately to relevant authorities, in accordance with the <i>Protection of the Environment Operations Act 1997</i> (POEO Act).
EM7	Environmental spill kits containing spill response materials suitable for the works being undertaken shall be kept on site at all times and be used in the event of a spill. Any spills shall be contained, cleaned up promptly and immediately reported to the Transgrid site representative.
EM8	All chemicals or other hazardous substances shall be stored in a bunded area and away from any drainage lines/pits. The capacity of the bunded area shall be at least 130% of the largest chemical volume contained within the bunded area. The location of the bunded enclosure/s shall be shown on the Site Plans.
EM9	Any environmentally sensitive areas shall be clearly delineated and shown on Site Plans and



Mitigation Measures	
	identified on site.
EM10	A REF Close Out Report shall be prepared at the conclusion of the construction of the proposed activity to document how and whether the conditions and measures were observed, and the nature of and reasons for any non-compliance.
Land Use	
LU1	Ongoing consultation shall occur with all affected landholders prior to and during construction to allow the planning of activities on their land which may conflict with the construction works. Landholder requirements shall be discussed on an individual basis.
LU2	On completion of the work disturbed areas shall be stabilised and returned to as close to original condition or as otherwise agreed with the landholder. Transgrid is to undertake any repair works of access tracks and watercourses which have been damaged during construction in consultation with the landholder.
Geology,	Soils and contamination
GS1	An Erosion and Sediment Control Plan (ESCP) shall be prepared as part of the CEMP. All erosion and sediment control measures shall be designed, implemented and maintained in accordance with relevant sections of " <i>Managing Urban Stormwater: Soil and Construction Volume 1</i> " (Landcom, 2004) ('the Blue Book) (particularly Section 2.2) and " <i>Managing Urban Stormwater: Soil and Construction Volume 2A – Installation of Services</i> " (DECC, 2008a)". The ESCP shall include stockpiles, stormwater run-off, trees, site boundaries, site access and storage areas. Exposed surfaces shall be kept to a minimum to limit the potential for erosion. Erosion and sediment controls shall remain in place and be monitored and maintained until such time the site has been stabilised.
GS2	Any imported fill shall be certified at source location (e.g. Quarrymaster or property owner) as pathogen and weed free Excavated Natural Material (ENM) or Virgin Excavated Natural Material (VENM) in accordance with the <i>Protection of the Environment Operations Act 1997</i> (POEO Act) and the Protection of the <i>Environment (Waste) Regulation 2014</i> (POEO Waste Regulation).
GS3	As part of the preparation of the CEMP, a contamination management plan would be prepared. The plan (as a minimum shall include):
	• The requirement for any material or soil suspected of showing evidence of contamination shall be sampled and analysed by a NATA Registered laboratory and managed in accordance with the <i>Waste Classification Guidelines</i> (EPA, 2014), the <i>Guidelines on the Duty to Report Contamination</i> (EPA, 2015) and the <i>Contaminated Land Management Act</i> 1997.
	 Details on how contaminated soil, if encountered, would be stored and managed as to prevent impacts to the environment and human health.
GS4	Access tracks off public roads shall not be used in wet weather conditions where there is a risk of damage to the tracks which could cause soil erosion and sediment control issues.
GS5	An Asbestos Management Plan (AMP) would be prepared, in accordance with relevant WorkCover guidelines, prior to any demolition, earthworks or ground disturbance being performed on the site where asbestos has been identified or is predicted to occur. This includes onsite buildings to be demolished and the subsurface of the former switchyard. The AMP would include the following requirements:
	 Any asbestos containing material encountered during the proposed works, which requires
	removal shall be undertaken by a suitably qualified licenced asbestos removal contractor and disposed of at a suitably licenced waste facility capable of accepting asbestos waste.
	 Prior to the demolition of existing buildings, they are to be inspected by a suitably qualified



Mitigatio	n Measures
	asbestos removal contractor, with all asbestos containing material removed.
Hydrolog	y and Water Quality
HW1	Spoil shall be stockpiled in a manner so as to avoid the possibility of sediments entering watercourses (including stormwater drains) or migrating off-site.
HW2	Any bulk fuel or hazardous material transport vehicles shall be parked on level ground a minimum of 40 m away from watercourses (including drainage line). No refuelling or bulk herbicide preparation shall occur within 40 metres of a watercourse.
HW3	Watercourse crossings shall be constructed in accordance with the Fisheries Management Act 1994, Policy and guidelines for fish habitat conservation and management 2013, Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (Fairfull and Witheridge, 2003), Controlled Activity Guidelines under the Water Management Act 2000 (WM Act) and the DPI - Water's Guidelines for watercourse crossings on waterfront land.
HW4	If minor dewatering is required outside the modified activity areas as detailed in Addendum REF 1 (Figure 2-2) and Addendum REF 2 (Figure 2), the management of discharge water shall be documented in the CEMP. Discharge water should be limited to vegetated, grassed areas, away from waterways, and within the transmission line easement. If the discharge water is highly turbid, dewatering through a filter sock (or similar) shall be considered, where appropriate, to minimise sedimentation.
HW5	Any groundwater encountered as part of excavation and boring works within the modified activity area as detailed in Addendum REF 1 (Figure 2-2) and Addendum REF 2 (Figure 2) must be pumped from the excavation and appropriately stored prior to being classified in accordance with the <i>Waste Classification Guidelines</i> (EPA, 2014). The collected groundwater would then need to be managed and disposed of in accordance with its waste classification.
Ecology	
EC1	Ground disturbance (including vehicle movements) and vegetation clearing shall not occur within any of the mapped areas containing White Box Yellow Box Blakely's Red Gum Woodland EECs and Derived grassland of the NSW South Western Slopes (refer to Figure 6-2 and Figure 6-3 of the REF).
EC2	Weed control mitigation and management strategies shall be documented and implemented in accordance with the CEMP. All herbicide selection and use shall be in accordance with Transgrid requirements.
EC3	Ground disturbance works and plant traversing the site shall avoid Wombat (<i>Vombatus ursinus</i>) burrows identified near Structures 10, 11 and 13 and any other burrows which may occur within the study area.
EC4	Any fallen timber, dead wood and bush rock (if present) encountered on site shall be left in situ or relocated to a suitable place nearby.
EC5	Consultation with DPI Fisheries would be carried out as part of the design of all watercourse crossings upgrade and construction works to ensure the designs meet relevant requirements and to confirm if a Part 7 Permit is required.
EC6	Consultation with the landholder would be carried out prior to any undertaking any clearing of planted vegetation along the following Spans 19-20, 21-23, 27-28, 30-31, 62A-63, 88-89, 96-98 and 114-115.
EC7	Any disturbed riparian areas would be remediated with native endemic vegetation as appropriate.
EC8	Consultation with each landholder shall occur prior to the commencement of construction to understand any biosecurity risks specific to their land. Any properties with an on-farm



Mitigation Measures		
biosecurity plan shall be complied with and specific measures incorporated in the CEMP.		
Heritage		
HE1	AHIMS 51-4-0392 (Yass River-OS1) - To manage the unavoidable impact to the site, an Aboriginal Heritage Impact Permit (AHIP) pursuant to Section 90 of the <i>National Parks and Wildlife Act 1997</i> shall be sought from Heritage NSW prior to any works occurring at Structure 11 and 12. Once obtained, all works at these locations must comply with the conditions outlined in the AHIP.	
HE2	To protect AHIMS 50-5-0027 (Booroo Ponds 1) and the associated sensitive terrace landform the following measures shall be implemented:	
	 No ground disturbance associated with improving access through the gate on the existing access track to structure 10 shall occur north of GDA Zone 55 672249E; 6142442N as shown in Figure 6-7. 	
	Works in the area should take place in dry weather to minimise ground churning.	
	• All ground disturbance works within the terrace landform (area west of the fence line) must be kept to a strict minimum	
	• As much as possible, the depression in the terrace (former erosion) should be utilised as the location of the access track/earth works as shown in Figure 6-7.	
HE3	In the event that a site or artefact (as defined by the <i>National Parks and Wildlife Act 1974</i> or <i>Heritage Act 1977</i>) is identified during construction works, works shall cease at the location and no further harm to the object shall occur. The find shall be immediately reported to Transgrid, and the regulator in accordance with legislation. No work shall commence in the vicinity of the find until any required approvals have been given by the regulator. In the event that skeletal remains are encountered during the activity, works must stop immediately, the area secured to prevent unauthorised access and NSW Police, Department of Planning and Environment and Transgrid contacted.	
Noise an	d Vibration	
NV1	Noise generating works shall be in accordance with the Interim Construction Noise Guideline (DECC, 2009):	
	 7:00am – 6:00pm Monday to Friday. 	
	• 8:00am – 1:00pm Saturdays.	
	No work on Sundays or Public Holidays.	
	Work outside normal hours, on Sundays and public holidays shall only comprise:	
	 The delivery of materials outside normal hours requested by police or other authorities for safety reasons. 	
	 Emergency work to avoid the loss of lives and/or property. 	
	 Work timed to correlate with system planning outages. 	
	Vacuum and oil filling of equipment	
	Other noise generating works outside of the standard construction hours shall require the prior formal written consent of Environmental Business Partner/Delivery and require justification in accordance with the Guideline. Impacted residents would be notified of out of hours works including out or hour deliveries in accordance with the CEMP.	
NV2	Noise affected neighbouring properties shall be notified as to the timing and duration of the construction works at least 7 days prior to commencing work. The notification shall provide details on who to contact should they have any issues or require further information. Noise affected properties in Yass include:	
	• Yeo Crescent – Numbers 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39,	



Mitigatio	n Measures
	41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63
	Merriman Drive – Numbers 67, 69, 70
	 Victoria Street – Numbers 3, 11/9, 10/9, 9/9, 8/9, 7/9, 6/9, 5/9, 4/9, 3/9, 2/9,1/9, 11, 13, 15, 19, 21, 25, 27, 31, 33, 35, 37, 45, 47, 49,51, 53
	• Cobham Street – Numbers 49. 51, 53, 55, 57, 59, 61, 54, 58, 74, 62,60
	 Perry Street- Numbers 1A, 1B, 1C, 1, 3, 5, 7, 9, 11, 13, 15, 19, 21, 23, 25, 27, 29, 31, 33, 30, 26, 24, 18, 16, 14, 12, 10 Grand Junction Road, Number 114
NI) (0	
NV3	An operational noise assessment would be carried out following detailed design to determine whether there would be potential for exceedance of the noise criteria. If so, noise mitigation measures such as noise walls would be installed to ensure operational noise levels are below the noise criteria.
Traffic ar	nd Access
TA1	Transportation and equipment delivery movements on public roads shall be in accordance with Transport for NSW and Council requirements.
TA2	Access track works shall be constructed in accordance with the Soils and Construction Volume 2C Unsealed Roads (DECC, 2008).
TA3	Traffic, transportation and access mitigation and management strategies shall be documented and implemented in accordance with the CEMP and updated as required. This shall include:
	The management of the delivery of equipment and materials.
	 Access to and from the site including nominated roads and site access tracks should be undertaken in consultation with the landholder.
	 Traffic management to be implemented for conductor, OPGW and earth wire road crossings
	Parking.
	Speed limits.
	Road occupancy licence conditions.
Air Qualit	ty and Climate Change
AQ1	If necessary, dust suppression techniques shall be implemented, and incorporated into the Environmental Management Plan, as per the techniques outlined in the "Blue Book", such as water spraying of surfaces, covering stockpiles and covering surplus soils and materials during transportation.
AQ2	Air quality mitigation and management strategies shall be documented and implemented in accordance with the CEMP. This shall include:
	Reducing vehicle speeds when in the vicinity of residences to minimise the generation of nuisance dust.
	 Progressively revegetating or otherwise rehabilitating disturbed areas as works are completed.
Visual Ar	nenity
VA1	All construction plant, equipment, waste and excess materials shall be contained within the designated boundaries of the work site and shall be removed from the site following the completion of construction.
VA2	Transgrid shall undertake further direct consultation with each landholder to identify opportunities to further minimise impacts on visual amenity.



Mitigatio	Mitigation Measures	
Waste		
WA1	Waste mitigation and management strategies shall be documented in the Construction Environmental Management Plan, and be in accordance with Transgrid Waste Procedures and associated Work Instructions.	
WA2	All waste, including surplus soils, which cannot be reused shall be classified in accordance with the <i>Waste Classification Guidelines</i> (EPA, 2014), removed from the site and disposed of at a facility that can lawfully accept the waste in accordance with the POEO Act and POEO Waste Regulation.	
WA3	Concrete trucks shall be permitted to flick wet wipe their discharge chutes with the effluent discharged into prepared bored holes, prepared excavations/formwork or a watertight receptacle for recycling or disposal. No concrete washout or agitators is permitted.	
WA4	Wooden poles, including pole butts, shall be disposed of in accordance with the Transgrid document – <i>Waste Management of Timber Poles</i> or gifted to landholders in accordance with the OEH's ' <i>Protocols for recycling redundant utility poles and bridge timbers in New South Wales</i> ' (2011) and Transgrid requirements. If gifted, Transgrid shall provide the landholder information on what the pole is treated with, how to appropriately handle treated timber, and what it can and cannot be used for.	
Electric a	Electric and Magnetic Fields	
EF1	All designs shall be in accordance with the International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines for limiting exposure to EMF (ARPANSA 2010).	
Social an	Social and Economic Considerations	
	No Additional Mitigation Measures	
Bushfire		
BF1	All works shall be undertaken in accordance with Transgrid's Hot Works and Fire Risk Work Procedure.	
BF2	Fuels and other hazardous materials shall be stored to minimise potential impacts on bushfires.	
Cumulative Impacts		
	No Additional Mitigation Measures	

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