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To whom it may concern,

Tetra Tech Coffey, on behalf of Marinus Link Pty Ltd (MLPL), have engaged Ecology Systems to prepare a supplementary letter to consider the potential impacts on terrestrial ecology values as a result of changes in project staging for the Marinus Link project (the project). This letter will support the existing Terrestrial Ecology Impact Assessment technical report prepared by Eco Logical Australia (2024), which is Technical Appendix V of the Marinus Link EIS/EES (May 2024).

Background

As background to the change in project staging, the following has been drawn from the 'Marinus Link Information Update #1 – Timing Of Stage 2', which is available on the Marinus Link website (<https://marinuslink.com.au/eis-ees-updates/>) and includes:

The project (subject to approvals) is proposed to be implemented as two stages:

- *Stage 1 will include earthworks and site preparation of the converter station site to address requirements for both converter stations, access tracks and construction laydown areas, and all HDD drilling for the shore crossings, road and river crossings for both Stages, and trenching works to install conduits and joint pits within the linear easements that will accommodate cables for both Stages. Stage 1 also includes laying the cables for the Stage 1 cable circuit (including across Bass Strait), and construction of the Stage 1 converter station at each of Hazelwood and Heybridge (and transition station, if required). Rehabilitation works would be implemented following Stage 1 works; and.*
- *Stage 2 will include installing the cables for the Stage 2 cable circuit (including across Bass Strait) and construction of the Stage 2 converter stations at each of Hazelwood and Heybridge. Final reinstatement would occur following completion of Stage 2 activities.*

The Marinus Link Environment Effects Statement under the Environment Effects Act 1978 (Vic) and the draft Environmental Impact Statement under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (the EIS/EES) has been prepared assuming that the construction period to deliver both stages will be from 2025–2030.

MLPL is seeking approvals for both Stages, but timing for delivery of Stage 2 will be subject to market demand. MLPL considers a likely scenario is that Stage 1 (including all the above Stage 1 works) would

be completed, and the Stage 1 circuit commissioned by 2030 as anticipated, followed by a potential gap in construction so that the Stage 2 circuit is laid and commissioned by 2033.

- Stage 1 works would take place in the period 2025 – 2030. Consistent with the assumptions made in the EIS/EES, when land cabling construction and installation works are taking place in Victoria, each property affected by the transmission easement would host main construction works for a period of time within that overall 5 year construction period;
- Stage 1 works on each property would include temporary reinstatement works and temporary infrastructure necessary to comply with Property Management Plans and facilitate efficient use of the land in the interim period prior to Stage 2 works. Access tracks would remain in place through the interim period; and
- The Stage 2 construction period would take place between 2031 – 2033 with commissioning in 2033. Stage 2 would include any necessary removal of temporary works, as well as the final reinstatement and rehabilitation of infrastructure and rehabilitation of access tracks and construction laydown areas as required.

Based on the above, and the instructions provided to undertake this supplementary assessment (refer Attachment 1), the following key assumptions have been made in completing this assessment:

- The type of equipment used, and the nature of the works, will be the same as those outlined in the Project Description in the Terrestrial Ecology Impact Assessment technical report.
- The Area of Disturbance (AoD), which was fundamental for determining direct and indirect impacts, will not change as a result of the proposed changes in staging.
- Locations within the AoD that are expected to be re-disturbed include:
 - joint pits
 - construction areas either side of conduits (that were constructed by trenchless construction methods in stage 1)
 - major laydown areas
 - converter station site.
- No new roads or access tracks will be created as part of the stage 2 works.
- The haul road will be removed after the completion of stage 1 works.

Nature of impacts

In considering the implications of the proposed changes to staging, a review of the nature of impacts has been completed. The Terrestrial Ecology Impact Assessment technical report identified the following potential impacts:

- **Removal or degradation of native vegetation and habitat**, includes direct impacts to native vegetation associated with the physical removal or degradation of vegetation as a result of clearing, trimming or other direct physical disturbances, and indirect impacts to native vegetation and habitat, including ‘consequential losses’ associated with soil excavation or compaction which may adversely impact the roots of trees and shrubs resulting in their potential decline in health or even death over medium to long timeframes. In addition,

important habitat resources may also be removed or degraded by the proposed works (e.g. removal of hollow bearing trees), further magnifying the severity of the impacts.

- **Collision, noise, vibration and light impacts**, including direct and indirect impacts to fauna and flora species as a result of construction activities, including operation of heavy machinery, excavations, drilling, and the movement of vehicles, supplies and people. This primarily includes:
 - the risk of injury and/or mortality through collisions with vehicles and machinery, entrapment in trenches and pits, or crushing during the removal of vegetation or movement of constructions materials wildlife may have taken harbour within, and,
 - noise, vibration or light pollution immediately adjacent to nesting and roosting habitat, which may adversely impact the natural behaviour of certain species, leading to a decline in health and/or reproductive success.
- **Pollution, sedimentation and dust**, includes direct impacts to fauna and flora species as a result of the release of pollutants, such as chemicals, contaminated water, and fine sediments in water or as dust, or indirect impacts through the decline of ecosystem processes and deterioration of habitats.
- **Introduction of noxious and environmental weeds or diseases**, can impact the health of ecosystems through competition and reduced health outcomes of associated populations. In addition, certain activities (such as vegetation removal and fragmentation) may also promote the prevalence of pest animal species within a landscape which in turn may compete or predate on native species.

It is not anticipated that the proposed changes to project staging will introduce additional impacts that are not already captured and considered in the impact assessment.

Given all vegetation and habitat removal is anticipated to occur in Stage 1, the primary impacts associated with Stage 2 works are:

- Collision, noise, vibration and light impacts
- Pollution, sedimentation and dust
- Introduction of noxious and environmental weeds or diseases.

Impacts to key ecological values

Table 1 presents a summary of the key terrestrial ecology values identified in the impact assessment report, and discusses the potential for additional impacts as a result of Stage 2 works.

Table 1. Likelihood of additional impacts as a result of Stage 2

Value	Discussion
Native vegetation	No further impacts - Stage 2 works will not require the disturbance or clearance of vegetation as this would have occurred in Stage 1.
Owls, raptors and other fauna with large ranges , including the threatened powerful owl, grey goshawk, little eagle, white bellied sea eagle, grey headed flying fox and lace monitor.	No further impacts - species determined as being unlikely to be impacted by project due to avoidance of priority habitats, which will not change for Stage 2. Ensuring impacts associated with disturbance are managed, such as noise impacts during nesting, is a key consideration.
Ground-dwelling fauna , including the threatened swamp skink, glossy grass skink, swamp antechinus, white-footed dunnart and southern toadlet.	No further impacts - whilst there is uncertainty around the presence of these species in the survey area, all major works with the potential to disturb habitats will occur in Stage 1. Ensuring impacts associated with disturbance are managed, such as noise impacts during nesting, is a key consideration.
Aquatic fauna , including the threatened dwarf galaxias, Flinders pygmy perch, growling grass frog, Narracan burrowing crayfish, South Gippsland spiny crayfish and platypus.	No further impacts - priority habitats will be avoided and indirect impacts minimised through construction controls in Stage 1, and any works in Stage 2 will follow the same approach (including the construction method e.g. horizontal directional drilling).
Shorebirds , including the threatened eastern curlew, hooded plover, sanderling, red-necked stint, doublebanded plover, red-capped plover, Caspian tern and crested tern.	No further impacts - priority habitats will be avoided through HDD and construction will not occur during sensitive periods (e.g. nesting), and any works in Stage 2 will follow the same approach. Ensuring impacts associated with disturbance are managed, such as noise impacts during nesting, is a key consideration.
Waterbirds and waders , including the threatened Australasian bittern, cattle egret, Latham's snipe and hardhead.	No further impacts - priority habitats will be avoided and indirect impacts minimised through construction controls in Stage 1, and any works in Stage 2 will follow the same approach.
Woodland birds , including the threatened gang-gang cockatoo, blue-winged parrot, satin flycatcher, rufous fantail	No further impacts - priority habitats will be avoided and indirect impacts minimised through construction controls in Stage 1, and any works in Stage 2 will need to follow the same approach. Ensuring impacts associated with disturbance are managed, such as noise impacts during nesting, is a key consideration.
Coastal flora , including the threatened coast wirilda, coast bitter-bush, coast colobanth, dune woodsorrel, coast fescue	No further impacts - Priority habitat will be avoided in both Stage 1 and 2.

<p>Waratah Bay woodland flora, including eastern spider orchid, thick-lipped spider-orchid, dense leekorchid, green-striped greenhood, leafy greenhood, silver everlasting, lizard orchid, orange-tip finger-orchid, slender pink-fingers, spurred helmet-orchid, fringed helmet-orchid, currant-wood, cobra greenhood, rush lily and small fork-fern</p>	<p>No further impacts - whilst there is uncertainty around the presence of these species in the survey area, all major works with the potential to disturb habitats will occur in Stage 1.</p>
<p>Strzelecki Ranges damp forest flora, including the threatened alpine sunorchid, slender fork-fern and, oval fork-fern</p>	<p>No further impacts - whilst there is uncertainty around the presence of these species in the survey area, all major works with the potential to disturb habitats will occur in Stage 1.</p>
<p>Strzelecki gum and Yarra gum</p>	<p>No further impacts - Stage 2 works will not require the disturbance or clearance of vegetation as this would have occurred in Stage 1.</p>
<p>Bog gum</p>	<p>No further impacts - Stage 2 works will not require the disturbance or clearance of vegetation as this would have occurred in Stage 1.</p>
<p>River swamp wallaby-grass</p>	<p>No further impacts - whilst there is uncertainty around the presence of these species in the survey area, all major works with the potential to disturb habitats will occur in Stage 1.</p>
<p>Threatened ecological communities</p>	<p>No further impacts - Threatened ecological communities will be avoided in both Stage 1 and 2.</p>

Environmental performance requirements

Given the nature of the impacts are not expected to materially change, the environmental performance requirements (EPRs) that have been developed for the terrestrial ecology impact assessment are considered adequate, noting:

- EC01: Avoidance or minimisation of native vegetation and habitat loss and degradation is unlikely to be required in stage two as the AoD will not change.
- EC02: The development and implementation of a biodiversity management plan should take into account both stages, or be reviewed and revised accordingly prior to stage 2 works. This will include ensuring actions such as the 'identification and protection of native vegetation' occurs prior to works commencing in both stages.
- EC02: Pre-clearing inspections are unlikely to be required at commencement of stage 2 as no further vegetation or habitat removal or disturbance is expected.
- EC02: Work restrictions should be reassessed prior to stage 2 works, taking into account priority habitats. Ensuring impacts associated with disturbance, such as noise impacts during nesting, are minimised should be a key consideration of stage 2 work plans.
- EC03: Measures to protect aquatic habitats are anticipated to remain the same.

Regards,



James Garden
Ecologist; Director

Attachment 1. Marinus Link supplementary impact assessment - revised timing of stage 2 scope

Marinus Link supplementary impact assessment - revised timing of stage 2

1. BACKGROUND

Marinus Link Pty Ltd (MLPL) have proposed a change to the timing of the two stages of the Marinus Link project (the project) that is different to what has been assessed in the EIS/EES. Each stage would deliver one complete 750 MW HVDC circuit between Tasmania and Victoria.

The EIS/EES assumed the stage 2 cable would be installed immediately after the stage 1 cable was completed, and this would occur between 2025 and 2030.

[REDACTED] The EIS/EES and technical reports note that the timing of stage 2 will be subject to market demand.

MLPL recently published on their website an information update regarding the timing of delivery of stage 1 and stage 2. A copy of this information update, titled *Marinus Link Information Update #1 – timing of Stage 2*, is available here: [EIS/EES updates Marinus Link](#). This information is summarised below, but all specialists are requested to read the information provided on the MLPL website.

MLPL is now seeking supplementary impact assessments from technical specialists to consider whether the change in staging timing presents any changes to the impact assessment/s completed to support the EIS/EES.

The purpose of this document is to:

- provide further description of the activities and timeframe associated with the revised timing of stage 2.
- outline the scope of the supplementary assessment required of potential impacts associated with the revised timing.

2. PROJECT DESCRIPTION

The following section provides a summary of the *Information Update #1* provided on the MLPL website, with some further description of the works proposed to be completed in stage 1 and stage 2, and the timing of stage 2.

2.1 PROJECT CONSTRUCTION ACTIVITIES

The type of equipment used, and the nature of the works would be same as those outlined in the Project Description which has informed your technical assessment for the EIS/EES.

2.1.1 Stage 1

Stage 1 will include the works as assessed in the EIS/EES:

- Earthworks and site preparation for:
 - the converter station site to address requirements for both converter stations for stage 1 and stage 2.
 - access tracks and construction laydown areas.
 - all HDD drilling for the shore crossings, road, rail, third party asset, vegetation and river crossings for both stages.
 - trenching works to install conduits and joint pits within the linear easements that will accommodate cables for both stages.
 - sea floor pre-lay grapnel run.
- Laying the cable for stage 1 across Bass Strait and along the land cable route.
- Construction of the stage 1 converter station at Hazelwood, communications building (and transition station, if required).
- Establishing major construction laydown areas and access tracks, which will remain in place through the interim period between stage 1 and stage 2.

Fences will be removed along the construction area after completion of temporary reinstatement following completion of stage 1 and land use would be able to resume. It is anticipated that the haul road along the construction corridor will also be removed at the completion of stage 1 [REDACTED].

Stage 1 works on each property will include temporary reinstatement works. This will include including temporary infrastructure necessary to comply with Property Management Plans and to facilitate efficient use of the land in the interim period prior to stage 2 works.

Stage 1 will be completed when temporary reinstatement works are completed on each property. Rehabilitation works will be done following completion of stage 1 works.

2.1.2 Stage 2

Stage 2 works will include:


- Accessing and opening joint pits (requires removing soil and storing topsoil to reinstate) to enable cable pulling between joint pits. It is assumed there will be no ground disturbance along the cable route between joint pits.
- Accessing and establishing construction areas either side of conduits (that were constructed by trenchless construction methods in stage 1) under road, rail, third party assets, vegetation, river crossings and the shore crossing.
- Delivering cable drums that will be stored at major laydown areas in stage 2, in the same manner as stage 1, then transporting drums to joint pits for installation.
- Preparing the seafloor for stage 2 with a pre-lay grapnel run, then laying the subsea cables in the same manner as stage 1.
- Laying the cable for stage 2 across Bass Strait and along the land cable route.
- Delivering the transformer to the converter station site.
- Installing (including below-ground foundations) and commissioning the second converter station.
- Final reinstatement work following completion of stage 2.

2.2 TIMING

Stage 1 will take place between 2025 and 2030. Consistent with the EIS/EES, properties along the cable alignment will host main construction works for a period of time within that overall 5 year period. The stage 1 circuit will be commissioned by 2030.

Stage 1 works will be completed in 2030 and stage 2 works will commence in 2031.

Stage 2 circuit will be laid and commissioned by 2033.



3. SCOPE OF SUPPLEMENTARY ASSESSMENT

Based on the above, Tetra Tech Coffey (on behalf of MLPL) is now seeking an assessment, supplementary to your technical impact assessment prepared to support the EIS/EES, to consider the changes in project staging.

Your assessment should address the following key questions:

1. Identify whether a change to the timing for delivery of the works for stage 1 and stage 2 in accordance with the MLPL *Information Update #1* and project description information in this document would have any material implications for the assessment or conclusions of your technical assessment report (report) published with the EIS/EES and result in:
 - a. any additional impacts to those identified in your report
 - b. any changes to impacts identified in your report
 - c. any changes to the conclusions set out in your report.
2. Identify whether, as a consequence of the changed timing for delivery of stage 2 and associated works there are:
 - a. Any mitigation measures or Environmental Performance Requirements would be recommended in addition to those set out in your report
 - b. Any changes to any mitigation measures and Environmental Performance Requirements set out in your Report would be recommended.

Your assessment must be documented in a short report/letter as a supplement to the report that you have already prepared and is published with the EIS/EES. The supplementary report/letter must be concise, document your assumptions and draw on the methods and information already documented in your report for the EIS/EES. If you make any additional assumptions to inform your supplementary report/letter these must be documented in the report/letter.

It is expected that the reports/letters will be quite short. The supplementary report/letter will be published as an information update to the EIS/EES and made available to the public on the Marinus Link website here:

[EIS/EES updates Marinus Link](#).



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