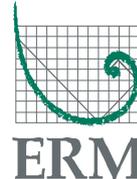


12 December, 2017

Berrybank Development Pty Ltd
c/- Global Power Generation Australia Pty Ltd
Suite 4, Level 3, 24 Marcus Clarke Street
CANBERRA ACT 2600
AUSTRALIA

Our Reference: P0124589

Dear Tim,



**RE: BERRYBANK WIND FARM - POTENTIAL IMPACTS TO
SURFACE WATER ASSOCIATED WITH OVERHEAD
TRANSMISSION LINE ALIGNMENT AND SUBSTATION
OPTIONS**

1. INTRODUCTION

This letter presents a high level review of potential impacts to surface water associated with the Berrybank Wind Farm overhead transmission line route and substation options assessment. A detailed assessment of impacts specific to the project's surface water receiving environment (including establishment of beneficial uses and water quality objectives) has not been undertaken.

The assessment acknowledges that the two proposed substation options and immediate surrounding proposed infrastructure are located within the Environmental Significance Overlays Schedule 2 'Watercourse Protection' (ESO2) as defined under Clause 42 of the Golden Plains Planning Scheme.

Schedule 2 deals with two key considerations with regards to potential surface water impacts; the maintenance of water quality and water quantity. The following sections address each of these two aspects in relation to the project at a high level.

2. WATER QUALITY IMPACTS

Changes to surface water quality (including chemical, physical, biological and aesthetic characteristics of water) arising from an activity may result in one or more of the following impacts:

- Altered habitat for flora and fauna living in or adjacent to the receiving environment;
- Siltation of receiving environments due to increased sediment loads; and,
- Reduced suitability for certain beneficial uses (e.g. stock irrigation, drinking water, contact recreation etc.).

Potential risks to water quality associated with the operational phase of the project are considered to be negligible, assuming that the transmission lines and associated infrastructure will be constructed of inert materials which will not generate significant contaminant loads.

There is potential for impacts to water quality during the construction and decommissioning phases of the project when there is likely to be exposed earth (which can generate sediment-laden runoff) and the use/storage of chemicals such as fuel associated with heavy machinery. The risks to water quality associated with these phases of the project are considered negligible provided that a construction management plan (CEMP), including erosion and sediment control measures (or a separate erosion and sediment control plan, if required) be developed and implemented. The CEMP should detail best practice methods to minimise sediment-laden runoff and reduce the risk of chemical spills during construction and decommissioning.

3. WATER QUANTITY IMPACTS

Changes to surface water quantity (such as flow volumes, velocities and duration) arising from an activity may result in one or more of the following impacts:

- Geomorphological impacts such as erosion of stream banks and beds;
- Altered habitat for flora and fauna living in or adjacent to the receiving environment;
- Flooding; and,
- Reduced suitability for certain beneficial uses.

Water quantity impacts are often associated with changes to catchment imperviousness which may arise due to altered ground cover (e.g. removing vegetation, construction of buildings and other impervious structures etc.).

Potential risks to water quantity in the ESO2 area are considered to be negligible for the construction, operational and decommissioning phases of the project

given that there will be almost no change to impervious areas as a result of these activities.

4. SUMMARY

A high level assessment has indicated that potential risks to surface water receiving environments in the ESO2 area associated with the proposed transmission line alignment and substation options for the Berrybank Wind Farm are negligible. Impacts can be appropriately managed by implementing mitigation measures such as the development and implementation of a CEMP for the project.

Yours sincerely,
for Environmental Resources Management Australia Pty Ltd



Nicky Lee
Principal Surface Water Scientist &
Project Manager



Christine Hartley
Principal Planner