



Appendix J: Visual Impact Peer Review



Rye Park Wind Farm Modification 1 Peer Review of VIA

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Introduction

1. Moir Landscape Architecture have been engaged by Rye Park Renewable Energy Pty Ltd, a wholly owned subsidiary of Tilt Renewables Ltd, to provide peer review of the Rye Park Wind Farm Modification 1 Visual Impact Assessment prepared by Green Bean Design
2. In the preparation of this report I reviewed the following documents relating to the proposed Rye Park Wind Farm (RPWF);
 - *Rye Park Wind Farm - Modification 1 – Visual Impact Assessment* - Green Bean Design November 2019 (**GBVIA**)
 - *Wind Energy Assessment Bulletin - For State Significant Wind Energy Development* - NSW Department of Planning & Environment 2016 (**The Bulletin**)
 - *NSW Planning Assessment Commission Determination Report – Rye Park Wind Farm (SSD 6693)* – NSW Planning Assessment Commission May 2017 (**PACDR**)
3. The original proposal consisted of 109 wind turbines with a maximum tip height of 157m and a hub height of up to 101m above ground. During the assessment process by the NSW Department of Planning & Environment (DPE) recommendations were made for the removal of 25 turbines primarily due to issues relating to visual impact on the Rye Park township and non-involved receptors in close proximity to the development.
4. In the PAC assessment of the proposal and the recommendations of the DPE they concluded that the issues of visual impact could be suitably resolved with the removal of 17 turbines.
5. Rye Park Wind Farm was approved by the Planning Assessment Commission (PAC) in May 2017 with the approved development consisting of 92 Wind Turbines with a maximum tip height of 157m and a hub height of up to 101m above ground level.
6. The proposal for Modification 1 involves the removal of a further 12 turbines and an increase in height of the remaining turbines to a maximum tip height of 200m and hub height of 165m above ground level.
7. This report focuses on the assessment methodologies and conclusions of the GBVIA relating to the proposed Modification 1 application to the approved RPWF. The report also makes comment on the GBVIA's response to the requirements of the The Bulletin.

GBVIA Assessment Methodology

8. The assessment of RPWF Mod 1 by Green Bean focuses specifically on the comparison between the consented RPWF and the Modification 1 utilising the approved layout and findings of the previous LVIA and supplementary reports as a baseline.
9. The comparisons are demonstrated through;
 - Zone of Visual Influence (ZVI) modelling showing the increase/decrease in the extent of theoretical visibility of the proposal;
 - Table detailing changes in distance to nearest turbine and number of visible hubs and blade tips between the approved and Mod 1 layout when viewed from receivers within 4km;

- Graphic representation of the comparison of the scale of the approved turbines compared to the proposed Mod 1 turbines;
 - Graphic representations of the comparisons of the approved and Mod 1 turbines when viewed from a distance of 2.7km and 4km;
 - Table comparing visual effect of the approved turbines (as detailed in the GBLVIA) and the Mod 1 turbines upon receivers (Table 5);
 - 40 Wire frame views comparing the approved turbines and the proposed Mod 1 turbines when viewed from receivers determined to have a Moderate or greater visual effect in the original LVIA and from a representative selection of receivers within 4km of the proposal.
 - Photomontages from 3 public viewpoints comparing views to the approved turbines with the proposed Mod 1 turbines.
10. The VIA undertakes a quantitative approach to the assessment focusing on the observable differences between the approved and Mod 1 turbines. This is appropriate considering that the impacts of the approved RPWF have been considered to be acceptable forming a baseline for the proposed modification to be assessed against.
 11. The VIA references The Bulletin in *Section 3 - Mod VIA Tasks* and describes why the Stage 1 and Stage 2 components of The Bulletin have not been addressed in the VIA. It is my opinion that excluding these stages is appropriate as described. The VIA then states that Appendix 1 of The Bulletin (Visual Assessment Process) has been considered as part of the VIA where appropriate. This is evident in the assessment of scale, magnitude and the inclusion of the categories of Receiver Location, Distance and Visual Influence Zones in Table 5.
 12. The VIA demonstrates graphically, through scale and the visual magnitude at distance, the comparison between the approved and Mod 1 turbines which informs the conclusions of effect on each receiver in Table 5. The magnitude assessment is undertaken at distances of 2.7km and 4km which is reference to Figure 5. Visual Magnitude Thresholds for Visual Assessment in The Bulletin.
 13. Table 5 introduces the application of the Category of receiver locations, Distance Zones and Visual Influence Zones in reference to requirements detailed in Appendix 1: Visual Assessment process in The Bulletin. The descriptions of the visual change between the approved and Mod 1 layout from each receiver are consistent as are the determined visual effects.
 14. The selection of wire frame views provides an appropriate comparison of the approved and Mod 1 turbines from receivers most likely to be impacted.
 15. The VIA provides a review of the potential change in cumulative impacts, specifically with the nearby Bango Wind Farm. The review notes that the approvals for both the Bango Wind Farm and Rye Park Wind Farm did not consider the cumulative impacts to be significant and that since the original assessments 20 turbines have been removed from the Bango Wind Farm proposal (8 through the PAC review and a further 12 through a Modification application). With the removal of additional turbines from RPWF and the change in magnitude likely to be difficult to discern due to distance, the VIA concludes that there will be no increase in cumulative impact. ZVI mapping comparing the cumulative visibility of the approved RPWF and BWF with the proposed Mod 1 Wind Farm are provided.
 16. The VIA undertakes a review of the Conditions of Consent in the context of the Mod 1 proposal.

17. In general the VIA concludes that the Mod 1 proposal is not considered to result in a magnitude of visual change that would significantly increase visual effects beyond those identified and considered to be acceptable in the original assessment.

Conclusion

18. During the peer review process several recommendations were made to Green Bean to provide further clarification in the VIA on the methodology for assessment. These recommendations were addressed in an updated version that I reviewed prior to finalizing this peer review.
19. It is my opinion that the methodology applied by Green Bean in the assessment and preparation of the VIA for Mod 1 is appropriate and that conclusions are well demonstrated and defended.
20. It is my opinion that the VIA prepared by Green Bean for the Rye Park Wind Farm Mod 1 reflects current best practice in visual assessment and responds appropriately to the assessment guidelines defined in the current NSW Wind Farm Visual Assessment Bulletin (2016) .