



EPL 20434/DOC18/920867-2

Mr Tim Stuckey  
Resource and Energy Assessments  
Department of Planning and Environment  
GPO Box 39  
SYDNEY NSW 2001  
(via email: [tim.stuckey@planning.nsw.gov.au](mailto:tim.stuckey@planning.nsw.gov.au))

Dear Mr Stuckey

**RE: SSD 09\_0103 – Boco Rock Wind Project (EPL 20434) – MOD 1 – Stage 2 Development**

Thank you for your email of 28 November 2018 requesting comments and advice on recommended conditions of approval for the above premises from the Environment Protection Authority (EPA). The EPA has reviewed the provided proposal documents and provides the following comments for your consideration:

Noise

- Project criteria have not been derived and predicted noise levels have not been assessed for integer wind speeds at hub height, from cut-in to rated power, in accordance with the NSW Wind Farm Guidelines (2016).
- The predicted noise level increases over Stage 1 for the two different models of WTG considered (V150 and GE 5.3) show unexpected results in light of the sound power levels for these models as shown in Table 9 of the RNA. The GE 5.3 WTG has higher sound power levels at all wind speeds, and yet the predicted noise levels for the GE 5.3 are typically slightly lower in most cases, compared with the V150. The proponent should discuss the predicted WTG noise level increases in Table 11 of the RNA for the two different WTG models.
- The proponent should discuss how the noise performance of the Project will be validated post-commissioning, and the steps that will be taken in the event of higher than expected noise levels at sensitive receivers.

Variation of EPA Licence 20434

The EPA also notes that as the premises subject to this proposal is already licensed by the EPA, if the proposal is approved the proponent will need to submit separate formal application to the EPA to vary Licence 20434. Application can be made using the EPA's eConnect online portal at: <https://www.epa.nsw.gov.au/licensing-and-regulation/licensing/econnect-epa> and selecting the 'Vary or surrender an Environment protection licence' option.

The EPA has outlined its additional information requirements for a licence variation in **Attachment 1**.

**Phone** 131 555

**Phone** +61 2 6229 7002  
(from outside NSW)

**Fax** +61 2 6229 7006

**TTY** 133 677

**ABN** 43 692 285 758

PO Box 622

Queanbeyan

NSW 2620 Australia

Level 3

11 Farrer Place

Queanbeyan NSW  
2620 Australia

**info@epa.nsw.gov.au**

**www.epa.nsw.gov.au**


### Water Pollution

The proposal includes the construction and/or operation of a temporary construction compound, concrete batching plant and unsealed roads. To prevent water pollution at the premises, any construction, commissioning and operational activities at the premises should be undertaken and managed to prevent water pollution consistent with the publications:

- *Managing Urban Stormwater: Soils and Construction, Volume 1, 4<sup>th</sup> Edition* (Landcom 2004) commonly referred to as the 'Blue Book'; and
- *Managing Urban Stormwater: Soils and Construction, Volume 2C, Unsealed Roads* (DECC, 2008).

Thank you for discussing this matter with the EPA. If you have any queries or wish to discuss this matter further, please contact Regional Operations Officer Tristan Johnston or myself on 62297002 or via email [queanbeyan@epa.nsw.gov.au](mailto:queanbeyan@epa.nsw.gov.au).

Yours sincerely



25.1.2019

**MATTHEW RIZZUTO**  
**Unit Head – South East Region**  
**Environment Protection Authority**

## **Attachment 1 - SSD 09 0103 – Boco Rock Wind Project**

### **NSW Environment Protection Authority additional information requirements**

#### **Noise**

- 1. Project criteria should be derived and predicted noise levels should be assessed for integer wind speeds at hub height, from cut-in to rated power, in accordance with the NSW Wind Farm Guidelines (2016).**

The Revised Noise Assessment (RNA) states in Section 1.1.1 that the project has been assessed in accordance with the NSW Department of Planning and Environment's Wind Energy: Noise Assessment Bulletin (December 2016) which is based on the South Australian Wind Farm Guidelines (July 2009). These guidelines specify that both criteria and predicted noise levels should be based on wind speeds at the hub height of the wind turbine generator (WTG). The wind turbine noise predictions in Section 5.2 of the RNA have been calculated for a reference wind condition of 8 m/s at 10m above ground level, which is inconsistent with the nominated guidelines.

It is also not clear whether the background noise curves in Section 1.1.3, on which the Project criteria are based, have not been derived for winds at WTG hub height. This should be clarified in the RNA.

The noise contours in Appendix C are labelled as being for wind speeds of 8 m/s at hub height, although it is unclear how these contours relate to the numerical noise predictions on Section 5.2. The numerical predicted noise levels for wind speeds at hub height for each non-involved receiver and the corresponding noise contour maps should be reviewed and checked for consistency.

The proponent should also provide discussion on the differing impacts of the change in WTG model and layout for Stage 2, as distinct from the change in assessment requirements from the 2003 SA Wind Farm Guidelines to the current 2009 version. This will assist the community in being able to understand the proposed changes to the Project and their likely impacts.

- 2. The proponent should discuss the predicted WTG noise level increases in Table 11 of the RNA for the two different WTG models.**

The predicted noise level increases over Stage 1 for the two different models of WTG considered (V150 and GE 5.3) show unexpected results in light of the sound power levels for these models as shown in Table 9 of the RNA. The GE 5.3 WTG has higher sound power levels at all wind speeds, and yet the predicted noise levels for the GE 5.3 are typically slightly lower in most cases, compared with the V150.

The EPA also note that Table 9 quotes WTG sound power levels for wind speeds at 10m above ground level. The proponent should explain how these sound power levels are appropriate when predicting noise for wind speeds at hub height.

- 3. The proponent should discuss how the noise performance of the Project will be validated post-commissioning, and what steps will be taken in the event of higher than expected noise levels at sensitive receivers.**

Post-commissioning noise performance validation should be discussed with reference to the 'Noise Monitoring' section of the NSW Department of Planning and Environment's Wind Energy: Noise Assessment Bulletin (December 2016).

#### Variation of EPA Licence 20434

As the premises subject to this proposal is already licensed by the EPA, if the proposal is approved the proponent will need to submit separate formal application to the EPA to vary Licence 20434.

Application can be made using the EPA's eConnect online portal at:

<https://www.epa.nsw.gov.au/licensing-and-regulation/licensing/econnect-epa> and selecting the 'Vary or surrender an Environment protection licence' option.

Additionally, the variation application will need to include:

- An amended premises map - at present, the licensed premises is described by the document provided by the proponent: "*Environment Protection Licence Application*" (Job No.:130603) prepared for Boco Rock Wind Farm Pty Ltd (drawn by W Stone) and dated 20 March 2014. The proponent will need to provide a new or updated premises map that includes:
  - the premises boundary;
  - all wind turbine generator (WTG) sites; and
- An amended list of compliance monitoring locations - a new/amended list of the relevant properties forming the premises (including Lot and DP) due to the scale of the project;
- Amended operational plans including:
  - Operational Environmental Management Plan (OEMP) and any sub plans;
  - Construction Environmental Management Plan (CEMP) and any sub plans;
- Comment on blasting conditions - the licence currently includes conditions relating to construction related blasting. The provided proposal documents did not indicate whether any blasting activity will be required for the Stage 2 works (or any future works) at the premises or whether all such works are now completed. The proponent is requested to provide comment on whether these conditions need to remain on the licence or are no longer required.
- An amended Pollution Incident Response Management Plan (PIRMP)  
The proponent will need to amend the existing PIRMP for the premises to include the new WTG site layout and any additional pollution risks;