RATCH-Australia Corporation
A Ratchaburi Holdings and Transfield Services Company
Level 7, 111 Pacific Highway
North Sydney NSW 2060
PO Box 1058
North Sydney NSW 2060
Telephone: +61 2 8913 9400
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www.ratchaustralia.com

9 December 2016

The Honourable Jackie Trad MP
Deputy Premier
Minister for Infrastructure, Local Government and Planning
Minister for Trade and Investment
PO Box 15009
CITY EAST QLD 4002

By email: deputy.premier@ministerial.qld.gov.au

Dear Madam,

RE: REQUEST TO CHANGE DEVELOPMENT APPROVAL PURSUANT TO SECTION 369 OF THE SUSTAINABLE PLANNING ACT 2009. MOUNT EMERALD WIND FARM, ARRIGA.

We write in reference to the Decision Notice to approve the Mount Emerald Wind Farm project, subject to conditions, on 24 April 2015 and subsequently amended under a permissible change on 18 December 2015. The Decision Notice is for the following aspects of development:

- Development Permit for a Material Change of Use for a Wind Farm comprising a maximum of 63 turbines and ancillary infrastructure.

In accordance with Section 369 of the Sustainable Planning Act 2009, we are making a request to make a Permissible Change to the Decision Notice for the Mount Emerald Wind Farm, Arriga.

The requested change concerns the following Conditions of the Decision Notice:

Acoustic Amenity

Condition 5 of the Decision Notice specifies the low frequency noise levels for the design and operation of MEWF.

It is noted, the State Development Assessment Provisions; Module 20.1 Wind farm state code does NOT contain any Acoustic Amenity provisions in relation to low frequency noise. There is also no criteria or discussion of low frequency noise within the associated Wind farm state code – Planning guideline (July 2016).

The Wind farm state code and Planning guideline came into effect in July 2016, while the permit conditions for the Mount Emerald wind farm were issued in April 2015 and further amended in December 2015. It is recognised, earlier draft versions of the state code and guidelines contained low frequency noise components and this was reflected within the Mount Emerald Wind Farm Decision Notice, the subsequent removal of the low frequency noise components from the final code and guidelines indicates this is no longer an applicable requirement.

It is proposed to remove Condition 5 from the Conditions of Approval to bring them into line with the current state planning policy.

While the reasoning for the removal of the low frequency requirements from the state code is unknown the complexities of the issue are highlighted in attachments to this letter from suitably qualified acoustic consultants.

- Attachment 1 – *Mt Emerald Wind Farm – dB(C) Noise Criteria*, AECOM, 8 December 2016
- Attachment 2 - *Mt Emerald Wind Farm – C-Weighted Noise Level Considerations,* Marshall Day Acoustics, 9 December 2016

Condition 6 of the Decision Notice outlines the requirement to submit a revised noise assessment report, demonstrating compliance with the noise limits specified in Conditions 4 & 5.

Should the requirement to address the provisions of Condition 5 be removed as per above, then references to Condition 5 should be removed from Condition 6 (a) ii and 6 (b).

In support of this request, to make a Permissible Change to the Decision Notice for the Mount Emerald Wind Farm, please find enclosed:

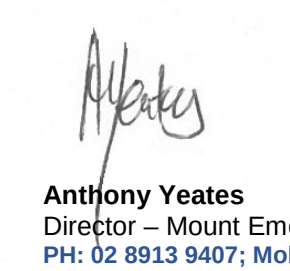
- Receipt for $1,511, being the relevant application fee;
- Owner's Consent Form;

Please note that a copy of the request has been provided to:

- Mareeba Shire Council, as the Assessment Manager for the application;
- State Assessment Referral Agency (SARA).

We trust this information is sufficient for your purposes, however should you require any further details or clarification, please do not hesitate to contact myself or Terry Johannesen on the numbers below.

Yours sincerely,



Anthony Yeates
Director – Mount Emerald Wind Farm
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e-mail: anthony.yeates@ratchaustralia.com

Terry Johannesen
Project Development Manager
PH: 07 3214 3401; Mob: 0419 714 092
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Fortitude Valley QLD 4006
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8 December 2016

Hugh Sangster
Project Development Engineer
RATCH-Australia Corporation Limited

Dear Hugh

Mt Emerald Wind Farm - dB(C) Noise Criteria

AECOM is acting as Owner's Engineer for RATCH for the Mt Emerald Wind Farm development, located approximately 50 kilometres South West of Cairns, in Queensland. The project was approved by the office of the Deputy Premier Minister for Infrastructure, Local Government and Planning and Minister for Trade and Investment (the Department) on 18 December 2015. The approval conditions require that the wind farm comply with a low frequency criteria of 60 dB(C) in addition to A-weighted criteria.

1.0 Condition

The Mt Emerald Wind Farm was approved by the Department whilst the Queensland Wind Farm State Code and associated guideline was in draft format. The Decision Notice dated 18 December 2015 contains the following requirement for low frequency noise.

3. Amend condition 5 as follows:
The wind farm development must be designed and operated to ensure that that the low frequency noise level does not exceed:
   (a) 60dB(C) for the outdoor C-Weighted equivalent noise level ($L_{Ceq,\ 10\ minutes}$) during the outdoor night-time (10pm to 6am); and
   (b) 65dB(C) for the outdoor C-Weighted equivalent noise level ($L_{Ceq,\ 10\ minutes}$) during the day-time (6am to 10pm).
The C-Weighted noise levels (LCeq) are to be assessed at all existing and approved sensitive land uses at the date of this approval for all integer hub height wind speeds from cut-in to rated power of the wind turbine generator.
Measurements operational noise from wind turbine generators for the operation shall be in accordance with Australian Standard AS4959-2010 Acoustics – Measurement, prediction and assessment of noise from wind turbine generators at any existing and approved sensitive land uses at the date of this approval.

Since the approval the Code and associated guideline has been finalized and is now legislated within the State Development Assessment Provisions Module 20. There were a number of changes between the draft and final versions of the Code and guideline, most notably that the requirement for a low frequency criterion (dB(C)) was removed.

2.0 Noise from Wind Farms

It is commonly accepted that assessing wind farms using overall noise levels (dB(A)) is sufficient to quantify the level of acoustic impact of a wind farm. Australian Standard AS4959-2010 *Acoustics – Measurement, prediction and assessment of noise from wind turbine generators* states that

> *"Low frequency noise and infrasound levels generated by wind farms are normally at levels that are well below the uppermost levels required to cause any health effects. As a result, these Guidelines do not require specific assessment of low frequency noise and infrasound..."*

In wind farms throughout Australia and the world, compliance with A-weighted noise criteria is used and considered sufficient for the protection of the health and amenity of residential locations adjacent the wind farm.

3.0 Low Frequency Noise from Wind Farms

3.1 Issues with dB(C) descriptor for low frequency noise

Low frequency noise is often categorized as sound with frequencies between 20Hz and 200Hz and is defined as such by the 2016 Planning Guideline. The dB(C) descriptor does not limit noise to the low frequencies only – noise with content above 200Hz can control the overall dB(C) noise level.

3.2 Prediction (noise modelling) of dB(C) noise levels

There is no commonly accepted methodology for the prediction (noise modelling) of noise levels from wind farms using the dB(C) descriptor. Predictions for wind farm noise using the dB(C) weighting are often used for indicative purposes only.

3.3 Measurement of dB(C) noise levels

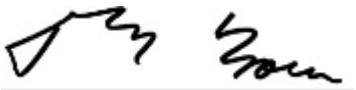
The approval conditions for the Mt Emerald Wind Farm requires that the C-Weighted noise levels are measured in accordance with Australian Standard AS4959-2010 *Acoustics – Measurement, prediction and assessment of noise from wind turbine generators*. AS4959-2010 does not provide guidance on how to measure dB(C) or low frequency noise from a wind farm. As per Section 2.0 of this letter, AS4959-2010 does not require assessment of low frequency noise. The approval conditions do not contain specific provisions or requirements for the measurement of dB(C) levels, most importantly a method to quantify actual wind farm noise from the measurement results. Therefore it will be possible to measure noise adjacent the wind farm and process a number of different ways to show either compliance or non-compliance, depending on the method used.

One of the main reasons why it is difficult to measure wind farm noise is that the wind farm noise (the signal) is often similar or lower than other background sources (noise). Because of this low 'signal to noise' ratio, determination of actual wind farm noise versus natural wind generated noise will be difficult. Furthermore wind passing over the measurement microphone has the potential to also artificially raise the measured noise levels. It is very likely that any compliance measurements taken following construction of the wind farm would be measuring a large portion of noise not associated with the wind farm.

4.0 Conclusion

Based on the above it is our opinion that the conditioning of the Mt Emerald Wind Farm with a dB(C) criterion will be impracticable and not provide any additional acoustic amenity to the receptors surrounding the proposed project.

Yours faithfully



Rhys Brown
Team Leader - Acoustics
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Direct Dial: +61 7 3553 3078
Direct Fax: +61 7 3553 2050

cc: Neil Weston

MARSHALL DAY Acoustics

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Australia
T: +613 9416 1855
ABN: 53 470 077 191
www.marshallday.com

9 December 2016

RATCH Corporation Pty Ltd
Level 7, 111 Pacific Highway
North Sydney NSW 2060

Attention: Neil Weston

Dear Neil,

MT EMERALD WIND FARM – C-WEIGHTED NOISE LEVEL CONSIDERATIONS

Condition 5 of the Mt Emerald Wind Farm Development Permit defines noise criteria for C-weighted noise levels which is a metric generally used for assessing low frequency noise.

C-weighted noise levels for wind farm development are technically problematic to assess due to the absence of well defined noise prediction and measurement procedures. This is largely as a result of Australian and international wind farm policies generally not specifying criteria in this way.

We provide herein a background to the use of C-weighted noise criteria and a summary of key technical issues associated with its assessment.

BACKGROUND

At the time when the conditions of approval in the Development Permit for the Mt Emerald Wind Farm were amended, C-weighted noise levels were being considered in the Queensland Department of Infrastructure, Local Government and Planning's Draft Wind Farm State Code released for consultation in 2015. However, when the Code and associated guideline was finalised and legislated in mid 2016 within the State Development Assessment Provisions Module 20, C-weighted noise requirements were not retained and noise criteria are only specified in terms of A-weighted noise levels.

Across other Australian jurisdictions references to C-weighted criteria in wind farm noise assessment are limited to draft NSW policy proposals which were first published in 2011, and which have been introduced into subsequent planning conditions. The introduction of C-weighted noise criteria into the draft NSW policy proposals was not based on objective data to support the occurrence of low frequency noise problems from wind farms in practice. In contrast, the justification for these proposals was based on a perception that compliance with C-weighted criteria was unlikely to represent a significant burden for new development, and that the introduction of such limits would address concerns from some sections of the community about potential low frequency from larger wind farm developments. In relation to the actual likelihood of low frequency noise problems, the 2011 draft NSW policy proposal noted:

> *Low frequency noise is present in all types of environmental noise and is particularly difficult to measure when in the presence of wind. Analysis of wind turbine spectra shows that low frequency noise is typically not a significant feature of modern wind turbine noise and is generally less than that of other industrial and environmental sources.*

Further to the above, the thresholds for C-weighted criteria in condition 5 of the Mt Emerald Wind Farm development permit correspond to levels that are equivalent to those referenced in the 2011 NSW draft policy proposal. In the latter document, the chosen thresholds appear to have been derived from work largely related to combustion power plant. Evidence to support these values as suitable thresholds for wind farms is limited. In particular, a paper by Hessler (2011)[1] indirectly referred to within the 2011 NSW draft policy proposal[2] specifically indicated design limits or regulatory goals are not warranted for low frequency noise from wind farms. Hessler further noted *"a maximum regulatory limit of 70dBC is recommended if one must have a low frequency limit",* in contrast to the 60 and 65 dB thresholds referenced in the 2011 NSW draft policy proposal and the Mt Emerald Wind Farm Permit.

Other wind farm policies and standards used in Australia do not specify C-weighted noise levels or low frequency noise limits. For example, the New Zealand Standard NZS 6808:2010 *Acoustics – Wind farm noise* referenced in Victoria notes the following with respect to low frequency sound:

> *Claims have been made that low frequency sound and vibration from wind turbines have caused illness and other adverse physiological effects among a very few people worldwide living near wind farms. The paucity of evidence does not justify at this stage, any attempt to set a precautionary limit more stringent than those recommended …*

Internationally, to our knowledge there are limited examples of such policies for wind farm noise. Denmark is noted to include a criterion[3] (Danish Statutory Order, No. 1284 dated 15 December 2011) for low frequency noise. However, the criterion does not use C-weighted criteria, and our understanding of the Danish policy is that compliance is determined by near-field testing of turbines and a desktop assessment according to strictly defined procedures, thus addressing the technical assessment complications of assessing low frequency noise levels at receptor locations (as discussed in the following section).

Notably, in the United Kingdom where wind farm noise levels are subject to very high levels of scrutiny, the policy for wind farm noise does not include requirements for low frequency noise, nor does the UK Institute of Acoustics make any reference to low-frequency noise in its publication *A good practice guide to the application of ETSU-R-97 for the assessment and rating of wind turbine noise*. Further, a 2009 publication[4] of a joint statement of UK practitioners in the field of wind farm noise assessment, including consultants routinely employed on behalf of both developers and community opposition groups, noted the following agreement with respect to low frequency noise from wind farms:

> *Sounds at frequencies from about 20Hz to 200Hz are conventionally referred to as low-frequency sounds. A report for the DTI in 2006 by Hayes McKenzie concluded that neither infrasound nor low frequency noise was a significant factor at the separation distances at which peopled lived. This was confirmed by a peer review by a number of consultants working in this field. We concur with this view.*
>
> *…*

[1] Hessler D.M.& Hessler G.F. 2011, *Recommended noise level design goals and limits at residential receptors for wind turbine developments in the United States*, Noise Control Engineering Journal, 59(1), 94-104

[2] New South Wales Department of Planning and Infrastructure 2011, *NSW Planning Guidelines: Wind Farms - Draft for consultation*

[3] Danish Statutory Order, No. 1284 dated 15 December 2011, *Statutory Order on Noise from Wind Turbines*

[4] Leventhall G., Bullmore A., Jiggins M., Hayes M., McKenzie A., Bowdler D. & Davis B. 2009, *Prediction and assessment of wind turbine noise – Agreement about relevant factors for noise assessment from wind energy projects*, Acoustics Bulletin, March-April 2009, pp35-37

From examination of reports of the studies referred to above, and other reports widely available on internet sites, we conclude that there is no robust evidence that low frequency noise (including 'infrasound') or ground-borne vibration from wind farms, generally has adverse effects on wind farm neighbours.

In the context of the above, the C-weighted criteria included in the Development Permit for the Mt Emerald Wind Farm represent uncommon requirements relating to an issue for which, to our knowledge, there is no substantive evidence of actual problems occurring in practice.

TECHNICAL ASSESSMENT ISSUES

The C-weighted noise criteria in condition 5 of the Mt Emerald Wind Farm are documented as a prescriptive test of compliance i.e. a non-compliance is deemed to exist if the levels are exceeded. This contrasts with the original C-weighted wind farm criteria instigated in NSW which uses C-weighted noise levels as a trigger for further assessment or application of penalties, rather than as a definitive assessment of compliance.

As a result of the definitive nature of the compliance criteria in condition 5, it is necessary to be able to accurately predict and measure C-weighted noise levels associated with the wind farm. However, while the 2015 Draft Wind Farm State Code proposed C-weighted criteria it did not provide detailed guidance for predicting or measuring C-weighted noise levels. Further, the finalised State Code issued in 2016 does not retain the C-weighted criteria and therefore also does not provide guidance for predicting or measuring C-weighted levels. Given this, and in the absence of C-weighted policies in other states and international jurisdictions, there is limited reference information on suitable assessment practices. In particular, C-weighted noise predictions and measurements are subject to high levels of uncertainty. The following specific considerations are noted that make C-weighted wind farm limits problematic in practice::

- Wind turbine noise emissions: manufacturer test data for A-weighted noise emissions typically exhibits uncertainty values of the order of 1 dB. In contrast, at the low frequencies which dominate C-weighted noise levels, the uncertainty margins are not well defined and example data indicates much higher uncertainty values of the order of 6 dB. This level of uncertainty in input data then carries through to the uncertainty of any predictions undertaken using this data.
- Prediction methods: a significant body of evidence exists to support the reliability of A-weighted noise prediction methods, based on comparing predictions with extensive measurements of operating wind farms. In contrast, the most widely used wind farm noise prediction methods are not intended for modelling C-weighted levels, and are subject to considerably higher uncertainty margins when used for this purpose. Conversely, advanced prediction methods which may offer better accuracy are dependent on being able to reliably define complex model input variables. However, there is limited evidence for defining suitable standardised conditions for Australian wind farm sites, particularly in relation to C-weighted noise levels. Further discussion of prediction methods is provided in Appendix A
- Measurement methods: the Development Permit refers to Australian Standard AS 4959:2010 *Acoustics – Measurement, prediction and assessment of noise from wind turbine generators* as the applicable standard for conducting C-weighting measurements. However, the scope of AS 4959 specifically excludes the measurement of low frequency noise levels that C-weighted criteria are commonly used for and there are no alternative documented procedures to our knowledge which specifically define measurement and analysis procedures for C-weighted wind farm noise levels. In the limited instances where C-weighted measurements have been carried out for wind farms, A-weighted noise measurement and analysis procedures have generally been used. However, as these methods are not intended for C-weighted measurements, increased uncertainty applies as a result of considerations relating to microphone wind screening and extraneous noise associated with turbulence at the measurement system. Additionally, the potential for alternative patterns of variation in C-weighted noise levels introduces uncertainty about applying A-weighted analysis procedures to the C-weighted measurement data. .

SUMMARY

Assessment of C-weighted noise levels during the planning and development of wind farms is uncommon and, to our knowledge, there is no substantive evidence of low frequency noise issues at receiver locations neighbouring Australian wind farms.

There are a number of technical issues related to an assessment of C-weighted wind farm noise levels which have the potential to significantly limit the usefulness of such an assessment. In particular the prediction of C-weighted wind farm noise levels, prior to construction of the wind farm, is presently subject to high levels of uncertainty as a result of both the quality of model input data and the lack of a well defined prediction procedure that has been widely corroborated with measurements.

Accordingly, an assessment of C-weighted noise levels based on predictions is only considered suitable to confirm that noise levels are expected to be comparable to the criteria in condition 5, rather than provide a definitive assessment of compliance as is required to satisfy the Development Permit.

Yours faithfully

MARSHALL DAY ACOUSTICS PTY LTD

Justin Adcock

Associate

APPENDIX A NOISE PREDICTION METHODS

The international standard ISO 9613-2 is a well established and proven model for the calculation of A-weighted wind farm noise levels. However, supporting evidence for the suitability of ISO 9613-2 for calculating C-weighted noise levels associated with wind farms is limited.

This limitation is an important consideration, as ISO 9613-2 is primarily intended for calculating A-weighted noise levels rather than C-weighted levels, with the latter involving the calculation of noise levels for lower frequencies than the validated range of the standard.

The limited studies[5,6] conducted in Australia to date indicate that the ISO 9613-2 method may yield calculated noise levels which are comparable to measured noise levels in practice, but there is insufficient information to define an approach to modelling C-weighted noise levels which could be applied to all wind farm sites. In particular, these studies do not address sound propagation in complex terrain that characterises the area around the Mt Emerald Wind Farm.

In terms of alternative methods, the CONCAWE prediction method remains in use in some states in Australia, but is generally no longer widely used internationally. The limited studies referred to above include consideration of the CONCAWE prediction method and suggest comparable results to ISO 9613-2, depending on the modelling parameters implemented for each standard.

Another alternative is Nord 2000 which represents one of the most advanced and complicated engineering noise prediction methods. This method's stated scope of validation extends to lower frequencies than ISO 9613-2, and has been investigated for the purpose of modelling low frequency wind farm noise. The standard is however based on a complex set of model input variables which can significantly influence the calculation outcomes. A key challenge to realising the potential benefits of this method is defining the site-specific ground and atmospheric condition data that will provide the best representation of site conditions. Unlike the ISO 9613-2 method, evidence of suitable standardised conditions for Australian wind farm sites is less well defined.

[5] Brown M, Mitchell A, Medina L, *Forecasting low frequency noise from wind farms*, Proceedings of Acoustics 2013 - Victor Harbor, Australia

[6] Evan T, Cooper J, Alamshah V, *Analysis of wind turbine low frequency noise prediction accuracy*, Internoise 2014 – Melbourne, Australia

Queensland Government

Department of Infrastructure, Local Government and Planning
Level 13
61 Mary Street, Brisbane
PO Box 15009
CITY EAST, QLD, 4002
ABN: 25166523889

Official Receipt

TERRY JOHANNESEN
C/- GPO BOX 149
BRISBANE QLD 4001

Receipt Number: 1400008729

Date Printed: 08/12/2016

Contact Details

Contact: Accounts Receivable Area

Phone: 07 4036 5100

Email: CNS.ARreceipting@dsiti.qld.gov.au

Payment Information	
Additional Identifier:	Head Office - SSP
Payment Mode:	Direct Bank Deposit
Drawer/Card Name/Money Order No.:	TERRY JOHANNESEN

Receipt Details

Payment Date	Account	Payment Type	Company	Reference	Total Amount Paid (inc GST)
08/12/2016	415208	Customer payment	1044	004008 EXP 04/20	$1,511.00

If you require any further information regarding this receipt, please refer to the contact details above.

Company owner's consent to the making of a development application under the *Sustainable Planning Act 2009*

I, John Herbert Morris
[insert name in full]
Director of the below mentioned company and

I, James Paul Noli
[insert name in full]

of Port Bajool Pty Ltd *[insert name of company]*

as owner of premises identified as follows:

Lot 7 on SP235244

consent to the making of a development application under the *Sustainable Planning Act 2009* by

Mount Emerald Wind Farm Pty Ltd (c-RPS Australia East Pty Ltd)
[insert name of applicant]

on the premises described above for the purposes of

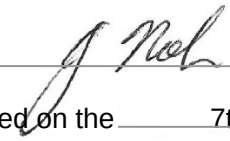
Utility Installation [Wind Farm] including ancillary infrastructure and facilities.

Material Change of Use for a Wind Farm comprising a maximum of 63 turbines.

[insert details of the proposed development e.g. material change of use for three storey apartment building]

John Herbert Morris
[signature of Director]

signed on the 7th day of December 2016



James Paul Noli
[signature of Director/company secretary]

signed on the 7th day of December 2016

Company seal *[if used]*

Daniela Walker

From: Terry Johannesen <Terry.Johannesen@ratchaustralia.com>
Sent: Monday, 9 January 2017 4:08 PM
To: Morag Elliott
Cc: Daniela Walker
Subject: Re: Permissible Change Request - Development Approval - Mt Emerald wind farm

Morag/Daniella

In addition to the below request we would also like to amend condition 7.

Condition 7 relates to Shadow Flicker and as the condition currently stands there is some discontinuity where one part allows for 30 hours/annum and another allows for 10 hours/annum.

It is requested for both parts of this condition to use the 30 hours/annum limit. It is noted the QLD wind farm code and guidelines also recommend the 30 hours/annum, thus this amendment will align the Permit Conditions with the current code.

Should you have any questions regarding this amendment please feel free to contact me.

Regards

Terry Johannesen

> On 9 Dec 2016, at 2:19 pm, Terry Johannesen <Terry.Johannesen@ratchaustralia.com> wrote:
>
> To whom it may concern,
>
> On behalf of RATCH-Australia, please find attached correspondence associated with a request to make a Permissible Change to the Decision Notice for the Mount Emerald Wind Farm.
>
> Regards
>
> Terry Johannesen
>
> RATCH-Australia
> Level 4, 231 George St
> Brisbane Q 4000
> Ph: (07) 3214 3401; Mob: 0419 714 092
>
> <20161209 Request for Permissible Change.pdf>

From:	Terry Johannesen
To:	Morag Elliott
Cc:	Daniela Walker
Subject:	RE: Permissible Change Request - Development Approval - Mt Emerald wind farm
Date:	Monday, 16 January 2017 12:02:35 PM

Morag/Daniella

Further to my previous email, we have reviewed documentation submitted to the department and have identified some other aspects that can be tidied up with amendments to the permit conditions.

Condition 10 - On-site Landscaping Plan

We have previously submitted the document *MEWF response to on-site landscape condition 30 Nov 2016,* in response to this condition.

This assessment was undertaken by a suitably qualified landscape architect and concluded that;

In our professional opinion we consider that views toward the substation and ancillary structures will be screened from all sensitive view locations located beyond and below the approved Mount Emerald Wind Farm site boundary. Given this conclusion, there is no need to prepare any form of landscape plan as required by Condition 10, as the approved Mount Emerald Wind Farm infrastructure (i.e. substation, switchyard, maintenance buildings and other associated buildings (excluding the wind turbines)) will already be screened by the existing land form and tree cover.

Given the conclusions of this report it is requested for Permit Condition 10 to be removed.

Condition 12 – Traffic Management

We have previously submitted the document *MEWF response to on-site landscape condition 30 Nov 2016,* in response to this condition.

This report was completed by a suitably qualified and experience engineering firm and was prepared in accordance with applicable standards, guidelines, procedures and practices at the date of issue.

It is noted that;

Due to the nature of this report being a compilation of information from various sources which do not require
engineering certification, therefore there has been no requirement for involvement or approval by a Registered
Professional Engineer of Queensland (RPEQ).

It is requested for Permit Condition 12 (a) to be modified to remove the requirement for it to be prepared by a RPEQ and replaced with “suitably qualified expert”.

The condition would then become;

Submit to the chief executive administering the SPA a Construction Traffic Management Plan

(CTMP) prepared by a suitably qualified expert and in consultation with the Department of Transport and Main Roads, Cairns Regional Council, Tablelands Regional Council and Mareeba Shire Council.

Should you have any questions regarding these proposed amendment please feel free to contact me.

Regards

Terry Johannesen

RATCH-Australia
Level 4, 231 George St
Brisbane Q 4000
Ph: (07) 3214 3401; Mob: 0419 714 092

-----Original Message-----
From: Terry Johannesen
Sent: Monday, 9 January 2017 4:08 PM
To: Morag Elliott <Morag.Elliott@dilgp.qld.gov.au>
Cc: Daniela Walker <daniela.walker@dilgp.qld.gov.au>
Subject: Re: Permissible Change Request - Development Approval - Mt Emerald wind farm

Morag/Daniella

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> Regards
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> Terry Johannesen
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> RATCH-Australia
> Level 4, 231 George St
> Brisbane Q 4000
> Ph: (07) 3214 3401; Mob: 0419 714 092
>
> <20161209 Request for Permissible Change.pdf>