Sinclair Knight Merz
710 Hunter Street
Newcastle West NSW 2302 Australia
Postal Address
PO Box 2147 Dangar NSW 2309 Australia

Tel: +61 2 4979 2600
Fax: +61 2 4979 2666
Web: www.globalskm.com

Mr Anthony Savenkov
TRUenergy
Level 33, 385 Bourke Street
MELBOURNE VIC 3000

27 February 2012

MDL02_Noise_Assessment.docx
EN02239.200

Dear Anthony

Re: Tallawarra Lands Noise Assessment

Further to our meeting on Tuesday 31 January 2012, this letter addresses noise issues raised in letters by DoPI (23 December 2011) and OEH (7 November 2011) relating to the Tallawarra Lands project.

Issues to be addressed:

- DoPI letter (23 December 2011) -Schedule 1 (page 2) Residential Amenity – Noise:
  - *Paragraph 1, 2 and 3: DoPI express concern at potential exceedances of noise criteria in the Tallawarra Lands of up to 5 dB(A) from the power station (Tallawarra A and B).*

  In response to this issue, TRU energy has revised the lot layout for the northern precinct residential area, such that all residential lots are now located outside of the criteria 40 dB(A) LAeq and 50 dB(A) LAmax noise impact zones (refer to **Attachment A**). That is there is not predicted to be any exceedance of external noise criteria within the Tallawarra Lands from power station noise.

  PKA Acoustic Consulting Report 211 106 R01 v2 provides details of acoustic criteria for internal occupancy of buildings within the Tallawarra Lands, in accordance with Australian/New Zealand Standard AS/NZS 2107:2000, Acoustics - Recommended design sound levels and reverberation times for building interiors.

  - *Paragraph 4: DoPI request that Rating background Noise Levels (RBLs) be established in the absence of existing operating noise from the Tallawarra Power Station.*

  In response to this it is noted that the NSW Industrial Noise Policy (INP, 2000) sets out a framework for establishing RBLs for a specific project. The RBL is defined as the overall

single-figure background level representing each assessment period (day / evening / night) over the whole monitoring period.

With respect to measuring background noise for the purposes of defining RBLs in accordance with INP, it is considered appropriate to include the influence of Tallawarra A, as this is a normal feature of the area. Section 3.1.2 of the INP provides further definition in this regard, specific to extraneous noises which are to be excluded from background noise measurements, but the noise from Tallawarra A is not considered extraneous.

It is noted that the RBLs determined as part of the Tallawarra B development assessment process, the consent for which includes noise criteria for the Tallawarra Lands, were established using background noise measurements including any influence from the Tallawarra A power station.

- OEH letter (7 November 2011) – Attachment 1 (page 7 – 8) Noise:
  - ***Industrial Noise Contribution:*** *OEH are requesting that the allowable contribution of noise levels from the proposed industrial areas be established such that acceptable noise levels not be exceeded within residential areas. It is suggested that a sound power allocation per lot be calculated to assess the impact of proposed industrial areas.*

The allocation of sound power levels per lot within industrial areas is possible where the development planning process has advanced to a stage where the size and location of individual lots within an industrial area are defined. This approach has been applied at other industrial estates for example the Steel River site in Newcastle and the proposed HEZ development area in the Lower Hunter.

With respect to Tallawarra Lands it is agreed that the allocation of sound power levels to individual industrial lots is sound approach for future noise management. However, in this regard TRUenergy have advised that development planning has not advanced to a stage where individual industrial lot layouts have been determined, that is, the only boundary definition is the perimeter of entire industrial areas. As such it is not possible to allocate sound power levels per lot at this stage of the development process because the lot sizes and locations are yet to be defined.

  - *OEH further request a cumulative assessment of noise such that noise mitigation measures can be determined and assessed for both the industrial areas and the power station site.*

As per the response above, at this stage of the development it is not possible to assess the sound power contribution of individual industrial lots within the development area. As such it is not possible to further investigate mitigation measures associated with future industrial development. This is considered to more be appropriately assessed at the time lot layouts within the industrial areas are determined, allowing for well planned industrial development within the Tallawarra Lands that protects the acoustic amenity of sensitive receiver areas.

- ***Land Use Planning Controls:*** *OEH express concern at the reliance on building design within the Tallawarra Lands residential areas to meet noise criteria outlined in the Tallawarra B approval.*

As per response to DoPI letter page 2 para 1, as above – TRUenergy have revised the lot layout for the northern precinct residential area, such that all residential lots are now located outside of the criteria 40 dB(A) LAeq and 50 dB(A) LAmax noise impact zones (refer to **Attachment A**). That is there is not predicted to be any exceedance of external noise criteria within the Tallawarra Lands from power station noise.

PKA Acoustic Consulting Report 211 106 R01 v2 provides details of acoustic criteria for internal occupancy of buildings within the Tallawarra Lands, in accordance with Australian/New Zealand Standard AS/NZS 2107:2000, Acoustics - Recommended design sound levels and reverberation times for building interiors.

Yours sincerely

Matt Davies
Senior Associate
Phone: + 61 2 4979 2616
E-mail: MDavies@globalskm.com

Attachment A Northern Precinct Lot Layout

(Ref: PKA Acoustic Consulting Report 211 106 R01 v2 – Figure 4-1)

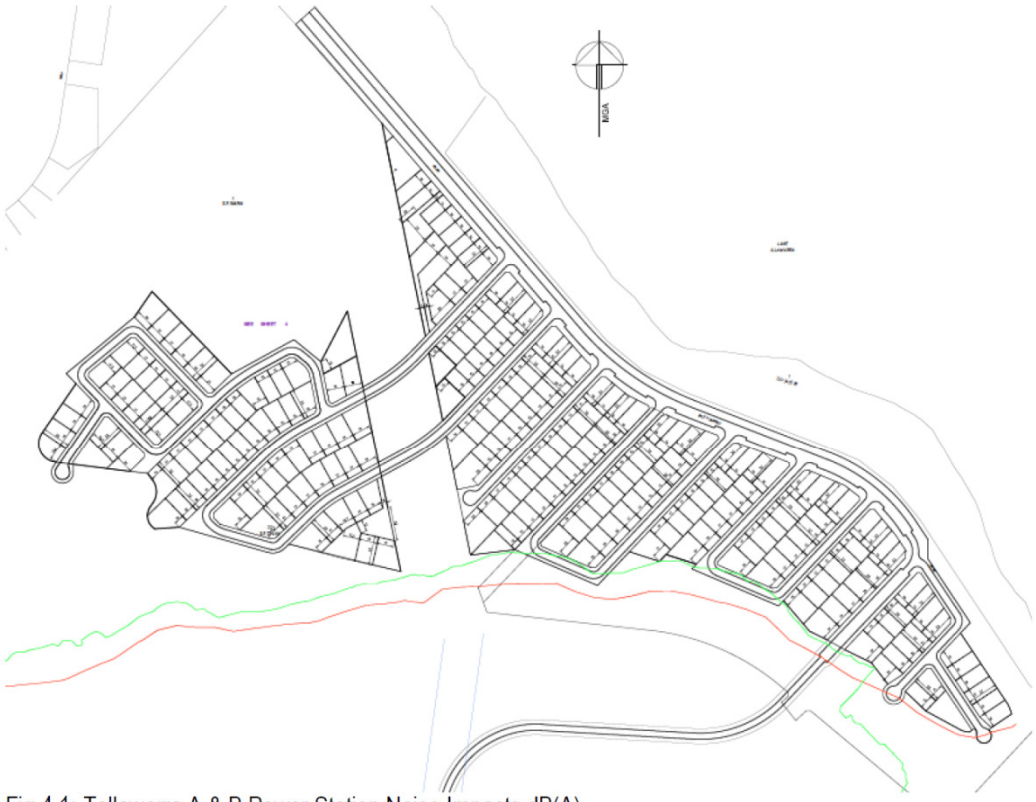

Fig 4.1: Tallawarra A & B Power Station Noise Impacts dB(A).
L_{Aeq} 40 contour shown in RED
L_{Amax} 50 contour shown in GREEN