

Our Ref: 14/03.107

26 March 2014

The Hon Brad Hazzard MP Minister for Planning and Infrastructure Level 31 [NORTH] Governor Macquarie Tower 1 Farrer Place SYDNEY NSW 2000



Dear Minister

### Nat Barton: Wellington Gas Fired Power Station Project Approval 06\_0315

Please find **enclosed** correspondence I have recently received from Mr Nat Barton of Nanima in Wellington.

As I'm sure you are aware Mr Barton has concerns regarding the proposed gas fired power station give approval to be constructed by ERM.

You will note that Mr Barton raises numerous matters which he would like to be considered, including the lack of resolution of the matters raised by him relating to ERM's management of the project so far and a lack of consultation with the community.

Mr Barton also advises that ERM have made little effort to resolve the numerous outstanding issues raised by him.

You will also note that Mr Barton indicates that he would be willing to stay on at Nanima if a number of rectification works are commenced by ERM.

I would be grateful if you could respond to the concerns outlined by Mr Barton in his correspondence.

Thank you for your assistance.

Yours faithfully ndrew Gee MP

Member for Orange

## **Rosie Pritchard**

From: Sent: To: Subject: Attachments: Nat Barton <nba43079@bigpond.net.au> Saturday, 8 March 2014 2:23 PM ElectorateOffice Orange WELLINGTON GAS FIRED POWER STN IMG\_0001.pdf

Hon Andrew Gee MP, Member for Orange, Orange NSW

Dear Andrew,

#### RE: WELLINGTON GAS FIRED POWER STATION - PROJECT APPROVAL 06\_0315 ("the Proposal")

I refer to the large volume of correspondence on this matter between ourselves and to the very generous assistance you have provided to date.

Please see attached application on exhibition Request of Modifications to the Project Approval. In effect ERM have applied for;-

1. An extension of the tapse date by 5 years to March 2019 (Condition 1.4), and

2. ERM commits to adopting only the two unit configuration (Condition 2.7).

There are a number of matters to take into consideration ;-

1. I own the most affected residence, Nanima House, that is within 700m of the proposal. I note that the closest residence to AGL's "Dalton Project" is some 2.3km away.

2. Nanima House is an Historic Property and is on the Wellington LEP, registered with the National Trust and on the Register of the National Estate,

3. None of the promises/commitments in s4.23 of the Submissions have been complied with by ERM,

4. Commitment N12 in the Statement of Commitments has not been complied with - there is no "negotiated agreement",

5. Nanima House is severely blighted by the Project Approval - there were no bids at a Public Auction and no subsequent offers,

## 6. Nanima House is non compliant with Condition 2 of the Request for Modifications (see Table 1 in Parsons Brinkeroff Memo),

7. ERM Power have made no effort to resolve the outstanding matters re Nanima despite requests from the Minister for Planning, Hon Brad Hazzard to do so and also the CEO of Wellington Council, Mr Michael Tolhurst in his letter to the Minister.

The problem of course, is to provide competition in the electricity market. However, it should be noted ;-

(i) that this Project has been on foot since 2005,

(ii) ERM have made numerous promises in the Press, on Radio and TV that the Project will be up and running by 2012 if not before,

(iii) There is no compliance by ERM with all of Condition 5.1 (a) to (d) **COMMUNITY INFORMATION**, **CONSULTATION AND INVOLVEMENT** and if (e) and (f) have been complied with they are not on the ERM website, (iv) ERM have provided no information to me or on their website on Conditions 2.21 to 2.41 (Hazards and Risk, Bunding and Spill Management, Pre-Construction Hazards Studies, Pre Commissioning Hazards Studies, Traffic and Transport Impacts, Ecological Impacts, Visual Amenity Impacts),

(v) The impact of this proposal on the saleability/marketability of the Nanima Subdivision land has been devastating. All interest has evaporated once the Gas Fired Power Station proposal has been made known to them.

(vi) Macquarie Developments lapsed their Option to purchase the Nanima Subdivision after the Project was approved which has caused me substantial damage and the associated Court proceedings are still on foot.

(vii) I am prepared to stay at Nanima and maintain its Heritage providing the works foreshadowed in the EA Submissions are done immediately by ERM namely:-

(a) the sound proofing of the roof on the Homestead, Maids Quarters and Stables and solar panelling installed and connected by ERM,

(b) the construction by ERM of the earthen wall planted with trees/shrubs around all of the buildings including the main Homestead, Maids Quarters and Stables,

(c) the upgrading of my water supply by ERM to water newly planted trees and shrubs ;

(d) ERM pay for and paint the Homestead, Maids Quarters and Stables in compliance with the Department of Heritage guidelines and Wellington Council's Heritage advisor that was commenced but not completed prior to the Project Approval,

(e) all legal expenses I have been forced to incur are paid by ERM, and

(f) an annual payment of say \$400K, paid quarterly, for the life of the Project increasing by 10% per year in recognition of the dimunition in value of the Property, the time and costs I have incurred attempting to resolve the outstanding matters and the damages already incurred - ie restitution of my financial position had the Aged Care Project proceeded and/or the Macquarie Developments proposal.

I would be most grateful, if you see fit, to write a Submission to the Department of Planning &/or the Minister for Planning that addresses the above matters.

If you require further information please let me know.

Yours sincerely,

N Barton "Nanima", 7009 Goolma Rd., WELLLINGTON NSW 2820 Email:nba43079@bigpond.net.au Ph: 02 68 451 793 New South Wales Government Department of Planning Skip to content Home > Development Assessments > Major Project Assessments > Search EA Exhibition

## **Wellington Gas-Fired Power Station**

## **Modification to Project Application - Wellington Gas Fired Power Station**

1. An extension of the lapse date by 5 years to March 2019 (Condition 1.4); and 2. The power station can be configured with either two or four gas turbine units. The propenent commits to adopting only the two unit configuration that would significantly reduce noise at the nearest residences (Condition 2.7).

Other assessments against this site:

- Project Application Wellington Gas Fired Power Station (Part3A)
- Modification 1 Wellington Gas-FiredPower Station (Part3AMod)

#### Attachments & Resources Application and Declaration(2)

- 140214 Modification Request Wellington Power Station.pdf (693.6 KB)
- 2162434B-ENV-MEM-001 RevA.PDF (22.08 KB)

#### Key dates and other information

EA Exhibition Project is currently on public exhibi submissions is available	tion and opportunity for public
Part3AMod	`~* <u>*</u>
Transport, Energy, Water & Teleco	mmunications > Electricity Generation
06_0315 MOD2	
26/02/2014	
13/03/2014	
Wellington	
NSW	
Australia	
Wellington Council	
	Project is currently on public exhibit submissions is available Part3AMod Transport, Energy, Water & Telecon 06_0315 MOD2 26/02/2014 13/03/2014 Wellington NSW

For further information, please contact the planner, Diane Sarkies on 02 9228 6370.



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## Memo

Date	20 December 2013
То	Andy Pittlik
Сору	Paul GreenHalgh
From	Aaron McKenzie
Ref	2162434B-ENV-MEM-001 RevA
Subject	Wellington Power Project - C-weighting noise analysis of Siemens 4000F units

#### 1. Introduction

Parsons Brinckerhoff Australia Pty Ltd (Parsons Brinckerhoff) has been engaged by ERM power to provide a comparative assessment of A and C–weighted noise impacts predicted for operation of Siemens 4000F Gas Turbine Units at the proposed Wellington open-cycle gas-fired power station (the power station).

This memo has been prepared with reference to the Environmental Assessment; *Wellington Gas-fired Peaking Power Station: Environmental Assessment,* (EA, Parsons Brinckerhoff document reference PR\_7345, May 2008), and supplementary noise assessment technical letter; *Wellington power project – noise assessment of Siemens 4000F units,* (Parsons Brinckerhoff document reference LT\_1716, March 2010.

### 2. Low frequency noise criteria

NSW EPA's *Industrial Noise Policy* (NSW INP, 2000) aims to apply correction factors to source noise levels at the receiver to account for additional noise characteristics such as tonality, impulsiveness, intermittency, irregularity and dominant low frequency content anticipated to cause greater annoyance to residential receivers.

Following INP guidance, a 5 dB correction factor is to be applied where predicted C- and A- weighted levels over the same time period differ by 15 dB or greater.

### 3. Assessment of operational noise impacts

Predicted noise impacts from the operation of the 255 MW Siemens 4000F gas-fired turbines modelled for the supplementary noise assessment (LT\_1716, March 2010) are presented in Table 1 below. Noise impacts were determined utilising the SoundPLAN (version 6.5) noise modelling software. Following NSW INP guidance, a correction of +5 dB(A) was added to the exhaust stack and fin fan noise source contributions to account for the low-frequency noise components.

## Table 1 Predicted A-weighted noise impacts for revised two Siemens 4000F gas-fired turbine operations including +5 dB low frequency noise penalty

Location	Received noise level (dB(A), L <sub>Aed, 160,0</sub> )						
	Neutral	Adverse conditions	Allowable noise contribution	Compliance			
1. Mount Nanima	29.5	32	39	Yes			
2. Cadonia Subdivision	26	29	35	Yes			
3. Keston Rose Garden Cafe	28	31	37	Yes			
4. Nanima House	36	37.5	35	No			

Note: Noise levels shown to the nearest 0.5 dB(A)

## 4. A and C weighting model results

To predict the A and C weighted noise levels Parsons Brinckerhoff re-ran the noise model utilising the March 2010 SoundPLAN model files for adverse meteorological conditions. No penalties were applied to any of the sources. The receiver noise impacts were predicted for both the A and C scale noise weightings. A and C weighted results were then compared to determine whether low frequency corrections are to be applied.

Results are presented in Table 2 below. The difference in A and C weighted noise predictions was greater than 15 dB at each of the receivers.

## Table 2 Predicted A- and C-weighted noise impacts for two Siemens 4000F gas-fired turbine operations without +5 dB low frequency noise penalty

Location	Received noise level (dB(A), L <sub>Aeq,16min</sub> )	Received noise level (dB(C), Leventsmin)	Difference (dB)	
	Adverse conditions	Adverse conditions		
1. Mount Nanima	30	46	16	
2. Cadonia Subdivision	26.5	42	15.5	
3. Keston Rose Garden Cafe	28	44	16	
4. Nanima House	34.5	50.5	18	

Note: Noise levels shown to the nearest 0.5 dB



## Modification to Project Approval No. 06\_0315 Wellington Gas-fired Peak Power Station Supplementary Information

The following supplementary information is provided in support of modifications to Project Approval (No. 06\_0315) wherein the Proponent requests:

- An extension of the lapse date to March 2019; and
- Changes to the power station configuration that would reduce noise at the nearest residences;

Approval for this modification is sought in accordance with Section 75W of the Environmental Planning and Assessment Act 1979 (EP&A Act).

## 1. Project Applications

## 1.1. Project Approval 06\_0315

On the 4 March 2009 by the Minister for Planning granted Project Approval No. 06\_0315 for the construction and operation of a gas fired power station at Wellington. This approval included the following:

- Construction and operation of four gas-fired turbines to generate a nominal total capacity of between 600 and 660 MW.
- Construction and operation of a natural gas pipeline connecting the power station to the Central West Gas Pipeline near Parkes.
- Associated electricity transmission infrastructure.

## 1.2. Modification MP06\_0315 MOD 1

On 7 September 2010 the Project Approval was modified to allow for greater flexibility in the selection of gas turbines and provided for the establishment of an alternative station layout comprising of either 4 X 150MW or 2 X 225MW gas-fired turbines.

This approval included a new clause 1.1 which stated the following:

"1.1 The Proponent shall carry out the project generally in accordance with the:

- a) Major Project Application 06\_0315
- b) Wellington Gas-fired Peaking Power Station: Environmental Assessment prepared by Parsons Brinckerhoff Australia Pty Ltd and dated May 2008
- c) Wellington Gas-fired Peaking Power Station: Environmental Assessment- Submissions Report prepared by Parsons Brinckerhoff Australia Pty Ltd and dated September 2008;
- d) prepared by ERM Power dated march 2010, including the following supporting documents, Wellington Power Station – Noise assessment of Siemens 4000F units prepared by Parsons Brinckerhoff Australia PTY Limited and dated march 2010 and Wellington power Project Proposed Modification Submissions report dated 1 June 2010; and
- e) The conditions of this approval. "



## 1.3. Project Approval 09\_0143

On 10 March 2011 Project Approval was granted for the construction of a related gas pipeline from Young to Wellington. An application for a Pipeline Licence was lodged in March 2012 and work continues on securing the necessary access consents to permit the issue of this licence.

### 2. Site Location and Context

The approved power station will be located at Wellington, approximately 50 kilometres south of Dubbo in Central Western NSW. The proposed site is approximately 2 kilometres north-north-east of the outskirts of Wellington along the Gulgong Road (also known as Mudgee Road) and adjacent to TransGrid's 330/132 kilovolt (kV) Wellington substation.

The land at the proposed power station site is gently undulating grazing land with some scattered paddock trees. The land is currently zoned 'Rural 1(a)' under the *Wellington Local Environment Plan 1995*.

Three residential properties are located near the approved power station site. The closest residential (and retail) properties include:

- Nanima House, approximately 700 metres to the west
- Mount Nanima, approximately 1.3 kilometres to the south
- The Keston Rose Garden Cafe, approximately 1.5 kilometres to the north-west.

The closest residence in the Cadonia subdivision is approximately 1.6 kilometres to the north-east; however, the majority of land parcels within this subdivision are approximately 2.5 kilometres away.

### 3. Proposed Modification

3.1. Modification of lapse date

### When will the Power Station be built?

Approval of the power station project coincided with the start of the Global Financial Crisis that saw a significant tightening in the availability of project financing and was followed by a major shift in national energy policy that has led to a material and sustained reduction in the demand for electricity.

The Australian Energy Market Operator's (AEMO) publishes an annual forecast of the demand for electricity in the National Electricity Market (NEM). In its latest report (2013 Electricity Statement of Opportunities) AEMO forecasts that in New South Wales, a shortage of generation, based on a medium growth forecast is not expected before 2022-2023 (refer Table 6 of Figure 1). The shortage of generation initially appears as a lack of reserve capacity that is needed to ensure there is enough generation in the event of plant failures and shut downs. The lack of reserve capacity is signalled by AEMO as a Low Reserve Condition (LRC) that could lead to a breach of the Reliability Standard that sets a limit on how much electricity is not supplied to the end users (unserved energy). Figure 1 includes a graph of New South Wales supply adequacy and shows that New South Wales' firm



generating capacity of just over 16,000MW will not be enough in the long term and end users can expect to see the level of unserved energy trending upwards by the beginning of the next decade.

The early establishment of peaking power stations is the first remedy to improving the reliability of the supply of electricity but ultimately new base load generation will be required. Given the requirement for additional peaking power would be expected at least 2 years ahead of the need for base load generation, a 5 year extension of the lapse date provides for a latest construction start date of 2019 and would allow for commercial operation in 2021, about two years ahead of the need for new base load generation as predicted by AEMO.

#### Table 6 - New South Wales supply-demand outlook summary

	Lo		ow Medi			High	
Region	LRC point	Reserve deficit (MW)	LRC point	Reserve deficit (MW)	LRC point	Reserve deficit (MW)	
San Bastowing	Beyond 2022-23		Beyond 2022-23	•	2021-22	53	



Figure 5 — New South Wales supply adequacy

Generation investment interest in New South Wales is focused on wind generation, with 27 projects proposed, dominated by the Liverpool Range, Yass Valley, Rye Park and Sapphire proposals. The Gullen Range (166 MW), Boco Rock stage 1 (113 MW) and Taralga (107 MW) wind generation projects were recently committed.

Figure 1 - \*Extract from page 9 of AEMO's 2013 Electricity Statement of Opportunities



#### Does a power station at Wellington still make sense?

There will be a need for peaking power when the demand for electricity increases. In particular peaking power will be required to compensate for the significant and rapid changes in the level of generation resulting from the increasing amount of wind generation needed to meet the RET. Gas turbines are able to respond quickly to such changes and avoid the need for load shedding and blackouts.

The criteria used in the selection of Wellington as a site for the peaking power station have not changed. Wellington 330kV substation will remain the major electricity hub for central and western NSW and provides a solid connection to the main power grid. Accordingly the power station at Wellington will service Sydney's major load centres as well as improve supply reliability to central and western NSW. The power station site is close to existing and future gas sources and there is an adequate and secure supply of water from Burrendong dam.

## Has the environment changed sufficiently to render the site as unsuitable for power generation?

Wellington Council has advised that since the initial Environmental Impact Statement there have been no significant changes to the surrounding land use, no zoning changes or material amendments to local planning instruments that would be incompatible with the proposed development. From observations and discussions with Council there are no additional near neighbours or new developments located within the vicinity of the proposed power station site.

#### Has the technology changed so as to render the proposal obsolete?

Notwithstanding technological advances with batteries and fuel cells, gas-fired turbines still remain the most commercially viable form of large scale peaking plant. Whilst gas-turbines continue to evolve and each new generation is becoming more efficient and flexible there have been no material changes to the proposed gas-turbine plant.

#### Have regulations or standards changed since the approval was granted?

The EPA has advised in their letter of 21 October 2013 that there have been no material changes to the relevant regulations, guidelines and/or policies since the original approval was granted.

#### Modification to Condition of Consent

Condition 1.4 of Project Approval No. 06\_0315 will need to be modified as hereunder to accommodate the proposed extension of the lapse date.

"The project approval shall lapse ten years after the date on which it is granted, unless the works the subject of this approval are physically commenced on or before that time."

#### 3.2. Modification of power station configuration

#### What is being proposed?

On 7 September 2010 the Project Approval was modified (MP06\_0315 MOD 1) to allow for greater flexibility in the selection of gas turbines and provided for the establishment of alternative station layout comprising of either 4 X 150MW or 2 X 225MW gas-fired turbines.



The latter configuration, based on using two 4000F gas turbines, was included to provide greater flexibility and allow the power station to be operated economically for extended periods of time (intermediate duty). It is now proposed to commit to this configuration only and abandon the four unit design.

The proposed modification does not include changes that would warrant any further approvals or impact on already approved processes.

#### Why is this design change being proposed?

The establishment of Wellington power station using two 4000F gas turbines will reduce the noise at the nearest residences.

The Noise Assessment prepared in support of the modification had regard to acoustic levels approved in 06\_0315 (in particular Condition 2.7) and the *NSW Industrial Noise Policy*. The Assessment provided the following table (reproduced as Table 3-1) comparing the acoustic impacts of the proposed modification, at key receivers to that already approved.

	Received nois	ceived noise level (dB(A), L <sub>Aeq, 15min</sub> )				
Location		Neutral conditions		Adverse conditions		
Location	noise contidurati .		Proposed 2 turbines	Original configurat ion	Proposed 2 turbines	
1. Mount Nanima	39	36	295	38.5	32	
2. Cadonia Subdivision	35	26.5	26	29.5	29	
3. Keston Rose Garden Cafe	37	34.5	28	37	31	
4. Nanima House	35	43	36	44.5	37.5	

# Table 3-1 Comparison of Siemens four V94.2 and two 4000F gas-fired turbine operations

Note: Noise levels shown to the nearest 0.5 dB(A)

Operational noise impacts for Siemens four V94.2 gas-fired turbines adopted from *Wellington Gas-Fired Power* Station, Environmental Assessment (PB May 2008)

In summary the assessment concluded that with the exception of Nanima House, operational noise impacts under neutral and adverse meteorological conditions at the nearest residences were compliant with project maximum allowable noise objectives specified in the *NSW Industrial Noise Policy*.



The assessment concluded that the modification would not warrant any changes to the approved mitigation measures stated in the Environmental Approval.

A more recent (July 2012) environmental impact assessment and approval for the Dalton Power Project included both A and C weighted noise limited for operation of a gas powered peaking plant. C weighted noise limits of 65 dB(C) day time and 60 dB(C) evening and night time were applied to ensure low frequency noise components did not adversely impact the surrounding community. To provide information on low frequency components of the Wellington power station, noise modelling has been undertaken to determine C weighted noise levels from the proposed two 4000F gas turbine configuration (cf PB Report 2162434B-ENV-MEM-001 RevA). These results are summarised in Table 3-2. Table 3-2 Predicted A and C weighted noise levels for two Siemens 4000F gas-fired turbines

Location	Received noise level (dB(A), L <sub>Aed,15min</sub> )	Received noise level (dB(C), L <sub>Ceq,15min</sub> ) Adverse conditions		
	Adverse conditions			
1. Mount Nanima	30	46		
2. Cadonia Subdivision	26.5	42		
3. Keston Rose Garden Cafe	28	44		
4. Nanima House	34.5	50.5		
Note: Noise leve	els shown to the nearest 0.5 dB			

Predicted noise levels exclude a 5 dB penalty on low frequency components.

The results show that the C-weighted noise levels are 50.5dBA at the most impacted receiver (Nanima House) and well below the limits recently applied at the Dalton project.

Does this change affect the viability of the Power Station Project?

No - as has been demonstrated more recently the 4000F gas fired turbines are proving to be both cost effective and operationally superior to the smaller 150MW V94.2 gas fired turbines even when used in a peaking applications.



<sup>2</sup>S/2/14 28/2/14

#### Modification to Condition of Consent

Condition 2.7 of Project Approval No. 06\_0315 will need to be deleted and replaced with the following:

#### "At-Receiver Noise Mitigation

The Proponent shall design, construct, operate and maintain the project to ensure that the noise contribution from the project to the background acoustic environment do not exceed the maximum allowable noise contributions specified in Table 1, at the locations and during the periods indicated. The maximum allowable noise contributions apply under wind speeds of up to 3ms-1 (measured at 10 metres above ground level), and under temperature inversion conditions of up to 30C/100 metres.

Location	Day	Evening	Night	
	7:00am to	6:00pm to	10:00pm to 7:0	0am Mondays
	6:00pm Mondays	10:00 on any	to Saturdays.	10:00pm to
	to Saturdays	day	8:00am Sunday	vs and public
	8:00am to		holidays	
	6:00pm Sundays			
	and public			
	holidays			
	LAeq (15	LAeq (15	LAeq (15	LA1 (1
	Minutes)	Minutes)	Minutes)	Minute)
Mount Nanima	35	35	35	45
Cadonia Subdivision	35	35	35	45
Keston Rose Garden Café	35	35 ·	35	45
Mount View, Alectown	35	35	35	45
Nanima House	38	38	38	45
Property A (Refer to Figure 3-5 of the document listed under	35	35	35	45
condition 1.1b)				

Table 1 - Maximum Allowable Noise Contribution 2 x 255MW turbines



28/2/14

Contact: Diane Sarkies Phone: (02) 9228 6370 Fax: (02) 9228 6355 diane.sarkies@planning.nsw.gov.au Email:

Our ref.: MP 06\_0315 MOD 2

Nat Barton 'Nanima' WELLINGTON NSW 2820

Dear Mr Barton

#### Subject: Exhibition of Modification Request for Wellington Gas Fired Power Station (MP 06\_0315 MOD 2)

1 am writing to you because you made a submission to the Department of Planning & Infrastructure during the exhibition of the above project application.

ERM Power has submitted another request to modify the project. The request may be viewed on the Department's website (http://www.majorprojects.planning.nsw.gov.au).

The modification request will be on public exhibition from Wednesday 26 February 2014 until Thursday 13 March 2014.

If you wish to make a submission on the proposed modification request you should read the submissions section of the attached document. Submissions must reach the Department by close of business Thursday 13 March 2014.

Details on where to view the modification request during the exhibition period are also overleaf.

Yours sincerely,

and have

Diane Sarkies 25/2/14 Senior Planner, Energy