

DEPARTMENT OF PLANNING

Major Projects Assessment

URANQUINTY GAS-FIRED POWER STATION

PURPOSE:

- Determination of a modification application under section 75W of the *Environmental Planning and Assessment Act 1979* (the Act) for the Uranquinty Power Station, Wagga Wagga.

BACKGROUND:

- On 10 June 2005, the then Minister for Infrastructure and Planning granted staged development consent to Wambo Power Ventures for the construction and operation of a 600 megawatt gas-fired power station at Uranquinty, south of Wagga Wagga.
- The project was acquired by Origin Energy (the consent holder) on 4 July 2008.
- The power station commenced operation on 19 January 2009. The power station is a peak electricity generator that operates on an intermittent basis (rather than a base load operator which operates on a 24 hour basis), typically for several hours at a time during cold evenings or hot summer days to coincide with peak electricity demand.
- Noise verification monitoring undertaken in accordance with condition 4.5 of the development consent, since the commencement of project operation, has identified exceedences of applicable noise limits at six residences. The noise exceedences were due to low frequency noise transmission.
- To address the noise exceedences identified, the consent holder prepared a *Noise Mitigation and Remediation Strategy* in accordance with condition 4.6 of the development consent, which was subsequently approved by the Department in June 2009.
- The *Strategy* involved a long-term (3-5 year) strategy of investigating and remediating noise transmission issues at source through design modifications at the plant and an interim strategy of entering into negotiated agreements with impacted landholders to compensate for noise impacts until the noise issues are permanently resolved at the plant (so as to no longer result in noise exceedences at surrounding residences).

CURRENT MODIFICATION APPLICATION:

- Conditions 3.11 and 3.12 of the development consent specify the operational noise limits that must be achieved by the project at surrounding residences. The current wording of condition 3.11 (and condition 3.12 through reference to condition 3.11), does not distinguish between "normal" or other operating conditions, with respect to the application of noise limits.
- More recent approvals granted for power stations of a similar nature and function as Uranquinty (such as the Marulan Power Station and Colongra Power Station project – both gas-fired peaking power plants) have specified that operational noise limits would only apply when the power station is operating under normal conditions rather than conditions such as emergencies and start up and shut down.
- On 6 September 2010, the consent holder submitted a modification application (DA-31-2-2004-I MOD 8) under section 75W of the Act seeking an amendment to condition 3.11 of the development consent to insert similar wording as found in more recent power station approvals, for operational noise limits to only apply to normal operating conditions, to provide for circumstances when noise limits would not be able to be met due to the power station operating outside of normal operating condition such as emergencies (Tagged A).
- The consent holder has identified that the modification has been sought primarily to enable noise testing to be undertaken at the power station to aid ongoing investigation of noise emissions from the plant to ultimately determine at-source noise control requirements to effect a long-term solution to noise propagation (particularly low-frequency noise) from the plant in accordance with the approved *Noise Mitigation and Remediation Strategy* (long-term strategy) for the project.
- The consent holder has identified that these noise tests would need to be undertaken during a period of the lowest practicable ambient noise levels (i.e. late at night or early hours of the morning) with the plant operating at high loads so as to be representative of the worst case sound levels that could be propagated by the power station. This would help evaluate the effect of noise reduction measures implemented to date (e.g. modification to the air emission monitors

at the top of the stacks, mufflers to the gas venting system and new fin fan cooler motors) and what additional level of attenuation is required to achieve limits at surrounding receptors.

- The consent holder has identified that the conditions in which the plant would need to operate during noise testing would not be consistent with normal operating conditions as the plant would operate at a time and output that is most conducive to noise data collection rather than in response to peak electricity demand (which would not normally coincide with these hours) or gas market conditions (which would normally place a commercial constraint on the duration of high load operations at the plant).
- Whilst seeking approval for operational noise limits to not apply in such conditions, the consent holder has stated that any such occasion of noise testing would only be implemented subject to an agreed noise management procedure as part of the Operational Environmental Management Plan (OEMP) for the project. The procedure would detail the consultation and mitigation measures that would be implemented during each occasion of noise testing. The consent holder has included an indicative noise management procedure as part of its modification application to aid in the Department's consideration of the application, however has not sought approval for the procedure itself as part of the modification application (noting that this would be submitted to the Department as part of an undated OEMP at a later stage, should the modification application be approved).
- The consent holder has identified that the noise management procedure would apply to a given period of testing, with a new or updated procedure being submitted should additional periods of testing be required. As an example, the Proponent has submitted an indicative noise management procedure covering the period September to December 2010, in which testing on no more than four occasions is proposed and with no more than two nights in a given week.
- The consent holder has also sought approval for the noise limits to not apply to emergency and start up and shut down situations (as also comprising situations not consistent with normal operating conditions), consistent with the wording of other recent power station approvals.

STATUTORY CONTEXT:

- Clause 8J(8)(c) of the *Environmental Planning and Assessment Regulation 2000* (the Regulation) allows for the modification of development consents granted by the Minister before 1 August 2005 under Part 4 of the Act in relation to State significant development, under section 75W of the Act. The development consent if so modified does not become an approval under Part 3A of the Act.
- The consent for the Uranquinty Power Station comprises a development consent granted by the Minister under Part 4 of the Act in relation to State significant development prior to 1 August 2005, and consequently pursuant to clause 8J(8)(c) of the Regulation can be modified under section 75W of the Act.
- The Minister for Planning is the approval authority for modification applications under section 75W of the Act. On 25 January 2010, the Minister delegated his powers and functions under section 75W of the Act to the Directors in the Major Projects Assessment Division, in cases where there are fewer than 10 public submissions in the nature of objections in respect of the modification application.
- It is noted that there is no statutory requirement for modification applications under section 75W to be publicly exhibited. Nevertheless, a copy of the modification application together with supporting information was placed on the Department's website.
- No public submissions were received on the application. Consequently, the Department is satisfied that the modification application meets the terms of the delegation and that the Director, Infrastructure Projects (as a Director of the Major Projects Assessment Division) may determine the modification application under delegated authority.

CONSULTATION:

- As stated above, modification applications under section 75W of the Act are not required to be publicly exhibited. Notwithstanding, in accordance with the requirements of section 75X of the Act, the Department has made the modification application publicly available on the Department's website.
- At the request of the Department, the consent holder also undertook a consultation program with surrounding residences, notifying each resident of the submitted modification application, the reason for seeking the modification with respect to noise testing at the plant, and advising

each resident to contact the Department should they have any concerns regarding the application.

- No submissions from members of the public have been received on the application. Notwithstanding, the consent holder has advised the Department that of the eight residences contacted as part of its consultation process on the application, five indicated a positive response to the proposed noise testing whilst the remainder provided a neutral response (i.e. neither positive nor negative).
- The Department also invited the Department of Environment, Climate Change and Water (DECCW) to make a submission on the project. DECCW did not raise any objection to the proposed modification in relation to the exclusion of operational noise limits for noise testing undertaken outside of normal operating hours, subject to that noise testing being undertaken in accordance with an agreed noise management procedure which included details on the duration of activity, noise levels associated with the activity and adequate notification and complaints handling procedures. The Department has taken into account DECCW's recommendations in drafting its recommended conditions of modification.

VIEWS OF THE LOCAL MEMBER:

- The Proposal is located in the Wagga Wagga electorate for which the local member is Mr Daryl Maguire MP (Liberal). The Department is not aware of Mr McGuire's views on the modification application.

KEY ISSUES/ CONSIDERATION:

- The Department notes the application of operational noise limits to developments is to regulate its day-to-day operations rather than exceptional circumstances where noise emissions from the development cannot be reasonably expected to be controlled to the same extent as under normal operations.
- In the case of the proposed noise-testing at the power station, the Department accepts that this activity would require the plant to operate under conditions not-consistent with normal operations (which are governed by peak electricity demand and gas supply) and which are likely to pose a higher risk of noise propagation at surrounding residences than under normal operations (due to high load operations under very low background noise conditions).
- The Department considers that the application of operational noise limits to these circumstances would pose an unnecessary and unwarranted risk of non-compliance with noise limits and would not be reasonable given the short-term nature of the activity and the purpose for which the activity is proposed, which is to resolve noise issues at the power station in the long-term to prevent noise exceedences during normal operating conditions.
- In consideration of the above, the Department is satisfied that plant operations for the purposes of noise testing would comprise exceptional circumstances rather than being representative of normal day-in-day-out operations, and therefore considers it reasonable for operational noise limits to not apply to this specific circumstance.
- Nevertheless, the Department accepts that the specific occasions of plant operations for the purposes of noise testing have the potential to result in adverse noise propagation including sleep disturbance at nearby residences for the duration of testing as each test could last for up to seven hours (i.e. the entire night). In this regard, the Department supports the consent holder's commitment to prepare a noise management strategy for the period of noise testing to cover landowner notification in the days coming up to testing and appropriate mitigation measures such as offers of alternative accommodation should landowners wish to re-locate for the duration of a night's testing.
- The Department considers that testing undertaken subject to such a management strategy would provide an appropriate approach for controlling any short-term noise impacts from the noise testing and has recommended conditions of modification reinforcing the consent holder's commitments in this regard as well as taking into account the recommendations of DECCW. The Department's recommended conditions framework would mean that the consent holder would need to prepare a noise management procedure to cover each period of noise testing under consideration (e.g. a given three month period) and would need to update or provide a new procedure should additional testing be required.
- The Department's recommended conditions of modification would mean that operational noise limits are only excluded from applying to noise testing, which are undertaken outside of normal