Department of
Infrastructure, Planning and Natural Resources

Submission in Reply to the Commission of Inquiry

Development Application DA-31-2-2004-i

Proposal by Wambo Power Ventures Pty Ltd to Construct and Operate a 600 MW Gas-Fired Power Station, Uranquinty, in the Wagga Wagga Local Government Area

Department of Infrastructure, Planning and Natural Resources

November 2004

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1 INTRODUCTION

In accordance with section 119 of the *Environmental Planning and Assessment Act 1979*, the Minister for Infrastructure and Planning directed that a Commission of Inquiry (COI) be held into all environmental aspects of a proposal by Wambo Power Ventures Pty Ltd (the Applicant) to construct and operate a 600 MW gas-fired power station, Uranquinty, in the Wagga Wagga local government area.

This report presents the Department's submission in reply to the Inquiry. The submission focuses on issues raised during the Inquiry process, particularly those matters the Department highlighted at the primary session of the Inquiry as requiring further consideration before its environmental impact assessment of the proposed development could be finalised (refer to section 2). The Department's responses to questions posed by various parties after the primary session are also detailed in this submission (refer to section 3).

2 MATTERS RAISED AT THE PRIMARY SESSION OF THE INQUIRY

The Department's primary submission and presentation to the Commission of Inquiry highlighted that there were six key issues that required further consideration before the Department could finalise its environmental impact assessment of the proposed development. These issues can be summarised as:

1. further details regarding project justification, specifically relating to the ancillary service network augmentations, including the electricity transmission network, the water pipeline, and the natural gas supply and infrastructure, and regional electricity transmission issues and inter-regional constraints;
2. health risk assessment from the air emissions of the proposed power station;
3. further details in relation to the visual impact of the proposed development, the proposed mitigation measures and assessment of the residual impact;
4. issues relating to the safety of local agricultural aircraft and additional details in relation to impacts on Wagga Wagga aerodrome air-traffic; and
5. clarification of the tonal nature of the noise emissions from the proposed development.

Other issues raised by the Department in its Primary Submission generally related to points of clarification or matters the Department considers would be able to be addressed by the Applicant through appropriately drafted conditions of consent (in the event that the project is approved). These issues include construction related traffic and noise impacts.

To address the outstanding fundamental issues, and points of general clarification, the Department posed a number of specific questions to the Applicant, to TransGrid and to the Civil Aviation Safety Authority. This information has been duly provided by the respective parties and reviewed in detail by the Department. Details of the information requested from the parties by the Department are provided in Attachment B.

2.1 Project Justification

At the conclusion of the primary session of the Commission of Inquiry, the Department noted that the two key outstanding issues relating to project justification were the necessity and nature of local transmission network augmentations, and the ability of infrastructure (electricity transmission and natural gas) to adequately support the proposed power station. These matters are considered below.

2.1.1 Ancillary Service Network Augmentations

Local Transmission Network

The Applicant has made a connection application to TransGrid for the initial phase of 300 MW from the proposed power station. In relation to this connection application, TransGrid has undertaken an assessment of the necessary system augmentations and established that some system augmentations would be required. In this regard, Transgrid has identified two possible options:

1. construction of a substation at Uranquinty with reconstruction of the existing network line running past the proposed development site. The reconstructed line would run predominantly along the existing line route using construction very similar to what currently exists; and

2. construction of a substation at Uranquinty with reconstruction of the existing line route using double circuit construction on single pole structures, with at least one section of approximately 5 kilometres on a new route.

The Department highlights that at least one of the above options requires implementation before the first phase of the proposed power station (300MW) can proceed. Neither of the options has been subject to assessment and approval under the *Environmental Planning and Assessment Act 1979*, and as such, it is not possible at this stage to support either on an environmental impact assessment basis. Notwithstanding, the Department highlights that both options include generally minimal physical works over and above that infrastructure already in existence. In this light, the Department considers it appropriate that both options could be supported in principle, subject to final design, assessment and approval. The scale and magnitude of the two options suggest also that both can be considered reasonably feasible, and one of the options could be implemented in reality. It is important, however, to ensure orderly development outcomes and preclude a situation in which construction of the proposed power station pre-empts or otherwise influences the assessment and approval of any proposal to upgrade transmission infrastructure. As such, the Department considers it appropriate that any approval that may be granted by the Minister in relation to the first 300MW phase of the development be framed such that the Applicant is precluded from commencing any aspect of the proposal until such time as the necessary planning approvals are granted for the infrastructure augmentation works.

The Applicant has not, at this stage, made a connection application in relation to the final capacity of the proposed development, 600 MW. As such, TransGrid has not undertaken a detailed assessment of what augmentations might be necessary for such a connection, noting that these would be dependent on a number of factors, including the standard or service required by the Applicant. TransGrid has, however, provided a preliminary consideration of this issue, identifying that connection of 600 MW would probably require either:

- establishment of a 330/132 kV substation at Uranquinty and a new 330 kV transmission line between Uranquinty and Wagga Wagga; or
- at least two high-capacity 132 kV circuits between Uranquinty and Wagga Wagga with additional transformer capacity at the Wagga Wagga substation.

As with options for connection of the first 300MW phase, options for augmentation of the transmission network to accommodate expansion to 600MW have not been subject to environmental impact assessment and approval. In contrast to relatively minor transmission upgrade works for the first 300 MW, expansion to 600MW requires significant infrastructure development with additional transmission lines between Wagga Wagga and Uranquinty requiring new or expanded easements. It is not clear that either of these options could be implemented in reality, given their respective scales and in the absence of further design and environmental impact assessment. While the Applicant and Transgrid have presented various arguments, options and points of view over possible solutions to the issue of transmission upgrades, no clearly defensible position has been presented to convincingly establish that any available is reasonable and feasible at this time. The Department, cannot, therefore, conclusively support expansion of the development to 600MW in light of the lack of certainty in relation to whether necessary transmission infrastructure upgrades can be achieved in reality.

Network Augmentations to Other Services

The Department requested details form the Applicant in relation to the certainty of supply of natural gas, and what augmentations may be necessary to the supply pipeline to maximise the certainty of the natural gas supply. The Applicant identified that the maximum power output will occur during the summer peak periods, which traditionally do not coincide with the peak demand for natural gas (which is during winter). The Applicant further identifies that, although not necessary for operation of the proposed development, extra compression units are proposed to be installed at Culcairn and Young to ensure natural gas can be supplied at a sufficient rate and in a constant and reliable manner. The Applicant notes that gas can be stored temporarily in the pipeline, and that the location of the proposed site permits access to both the Victorian gas system (which will account for the bulk of the Applicant's gas) and gas from Moomba (to be accessed during shortfalls in the Victorian system). The Applicant envisages that use of the diesel fuel (backup) would only take place in the event of significant damage to the supply infrastructure.

The Department is satisfied that there is sufficient capacity in the natural gas system to supply gas to the proposed site. In particular, the Department notes that the Australian Pipeline Trust has not raised any issue in relation to the ability of the system to supply the proposed power station. The Department understands that the potential limiting factor regarding supply of natural gas is the pressure in the system. The Applicant has proposed to address this reliability issues with the installation of precautionary additional compression at Culcairn and Young, subject to approval from the Australian Pipeline Trust.

The Applicant has consulted with Riverina Water County Council and has been advised that the water pipeline from Uranquinty to the proposed site will require upgrading as a result of the proposed development. The Applicant would fund the upgrading of this pipeline; however the works would be undertaken by Riverina Water. The Department understands that the new pipeline would follow the existing route, and would remain within the existing easement.

2.1.2 Regional Transmission and Constraints

The Department requested clarification from TransGrid in relation to regional transmission issues, including inter-regional constraints in the transmission network. The Department notes the following from TransGrid's response on these issues:

- It is unlikely that any network option for meeting growing demand in the NSW southwest will meet the market benefits limb of the ACCC's Regulatory Test. As such the "no-build" option (ie no new major transmission infrastructure) is likely to be selected by TransGrid, which will require export to Victoria to be curtailed to ensure that the growing NSW southwest demand can be met within acceptable service limits.
- Detailed power system modelling data (created by the National Electricity Market Management Company – NEMMCO) is available as input in the Applicant's detailed market modelling which is used to determine the ability of the power station to deliver power to the National Electricity Market (NEM). TransGrid is not involved in such matters to date, and in any case, the Applicant's detailed market modelling and analysis is not normally made public.
- While no detailed assessment has been undertaken, generation in the NSW southwest would relieve existing constraints on the southerly flow of electricity in the Marulan and Yass/Canberra areas. Generation in the NSW southwest would address constraints to some degree during periods of high Snowy generation and Victoria-to-NSW import when power is flowing in the northerly direction.
- The proposed power station and the Snowy Hydro Scheme are likely to compete as they both intend to target the peak electricity demand periods. The ability of the proposed power station to compete with the Snowy Hydro Scheme is unable to be determined as the detailed market modelling and analysis of such competition has not been placed in the public domain.

The Department notes, in particular, the Applicant's position to date is that there is a sufficient commercial basis for the proposed power station to compete with other electricity generators in the NEM. Further, in terms of relieving constraints in the NSW southwest, there is unlikely to be any network options available that are capable of satisfying the Regulatory Test, and as such the "no build" option is likely to be selected by TransGrid. This will have the result in a reduced rate of export of electricity to Victoria (due to transmission system constraints), as growing NSW southwest demand is met within acceptable service limits.

Transmission constraints restrict the ability for electricity to be supplied from the generators to areas of demand. This results in a scenario where the total generating capacity may be capable of meeting total electricity demand but there is insufficient transmission capacity to actually meet demand in all areas. As such it is considered an advantage of the proposed development these constraints, albeit constraints largely between the NSW and Victorian electricity regions, are alleviated to some degree through dissemination of generation capacity around transmission constraints. Further, should north-flowing transmission constraints around the Marulan and Yass/Canberra areas be addressed in the future, the proposed power station would be capable of helping to meet peak and high shoulder demand in the major metropolitan regions.

In light of these considerations, the Department considers that the proposed development would provide a net advantage in the NSW southwest region, in terms of helping to meet increasing demand in the region, and helping to alleviate transmission constraints into the region. Further, since it is unlikely that any network option to alleviate regional transmission constraints would be able to satisfy the Regulatory Test, it is considered that the proposed power station would not cause any adverse impact on any plans by TransGrid for network solutions to alleviate these constraints.

2.2 Health Risk Assessment

The Department requested additional assessment from the Applicant in relation to the assumptions and assessment of the potential health impacts associated with the use of diesel at the proposed power station. The Applicant has provided this additional risk assessment, based on the assumption that there would be 70 hours of diesel operation of the proposed power station, averaged over the year. The chronic inhalation, chronic non-inhalation and lifetime cancer risk were assessed for the pollutants identified, including those toxic compounds omitted from the health risk assessment in the EIS. Table 1 shows the diesel health risk assessment prepared by the Applicant, with the resultant risks.

Table 1: Diesel health impact assessment

Nature of Risk	Health Risk Criteria	Assessed Risk
Chronic inhalation hazard index	1	< 0.0008
Chronic non-inhalation hazard index	1	0.000096
Individual Cancer Risk	1×10^{-6}	9.75×10^{-8}

The Department is satisfied that the revised health impact assessment has satisfactorily demonstrated that there would be no significant health impacts associated with the use of diesel at the proposed power station.

2.3 Visual Impacts

Applicant's Additional Information

The Department requested additional consideration of the visual impact of the proposed development, the proposed mitigation measures and assessment of the residual visual impact. The Applicant has prepared and submitted a Landscape Concept and Design Report and a Visual Amenity Assessment.

The Landscape Concept Plan aims to complement and integrate the proposed development with the existing and surrounding landscape character, through streetscape planting, dense tree and shrub planting, individual tree planting and clumped tree planting to screen the proposed development as well as provide continuity with the surrounding character. The Plan proposes a number of *Eucalyptus* varieties with height at maturity being between 15 and 25 metres high (8-10 metres after 5 years), to be planted in linear rows, clumps and as individually standing trees. As well as providing the types of species proposed to be planted, the Plan identifies the location and density of plantings at the proposed site, and key off-site locations where plantings may occur. Regarding the colour scheme of the proposed development, the Plan proposes light grey colouring for the stacks with dark charcoal grey for the lower portion of the elements.

The Applicant has also submitted a supplementary Visual Amenity Assessment to address the issues raised by the Department, the Commission and the community in relation to the visual impact of the proposal. The Applicant's consultant indicates that the purpose of his assessment was to provide an independent assess the visual amenity impacts in relation to the existing landscape and the character and scenic qualities of the area. Mr Lamb indicates that the visual assessment undertaken in the EIS adequately identified the potentially affected properties and the extent of the visual exposure of the proposed power station. Particularly, he notes that the visual exposure is primarily determined by the topography and the land use of the area, being relatively flat and exposed. The main exposure from public roads is the Uranquinty Cross Road, with secondary exposure from Jacks Road, Rodham's Road and Kendall's Road, with distant views from two parts of the Olympic Highway. Regarding private residences, Mr Lamb identifies the elevated position of Wyrilla as providing substantial views, with the Pearce residence, Greendale, the Wallace residence and Pine Grove being other important residences. Mr Lamb notes that while there are accessible views from the Metcalfe and Mortimer properties the views from the residences on these properties are screened. He further notes distant views from the Claremont residence.

Mr Lamb concludes that, while there would be some residual visual effect on nearby properties, the overall visual amenity impact from the proposed development would be acceptable for the following reasons:

- the scenic qualities of the rural landscape is widespread in NSW with a moderate scenic quality, and as such, the proposed development would not significantly affect the scenic resource that the locality represents, when considered in a State-wide or regional context;
- there will be some residual visual visibility of the proposed development, however this is acceptable in the state and regional context;
- residual visibility of the proposed development is modest on the local level having regard to the number of likely viewers, their expectations of scenic quality, and low visibility from the highway and the township as well as not being seen in contrast of visual competition with items of high scenic significance, such as The Rock; and
- visual amenity concerns expressed by affected land owners can be ameliorated through strategic planting of vegetation off-site, providing there is goodwill between parties.

Mr Lamb recommends the following mitigation measures:

- on-site and off-site plantings to be used to screen the development;
- dark colour regime in the blue-grey to ochre range for most of the buildings with the exhaust stacks to be lighter in colour;
- a Lighting Management Plan to be prepared to ensure that correct light fittings are used, minimal illumination of structures, minimal light intensities with emergency lighting fitted to electronic timers and sensors so they switch on only when required.

Department's Consideration

The Department notes the comments made by Mr Lamb in relation to the accuracy of the photomontages. In particular, that there are a number of technical checks to ensure the scaling of the photomontage is correct. On this matter, the Department is satisfied that the photomontages have adequately represented the visibility of the proposed development from the Pearce residence and the Wyrilla residence. The Department does note that photomontages have not been prepared for any other locations, and as such it is not possible to confidently predict the visibility of the proposed power station at these other locations. However, due to the increased intervening distances, topographical features and existing vegetation it is possible to conclude that the visibility of the proposed power station would be less at these other locations.

Regarding off-site tree plantings being used as screening, the Department notes that, while conditions of consent may require the Applicant to undertake such plantings at the request of the landowner, it is not possible for the Department to require the landowner to have trees planted on their properties. As such, while there remains the possibility of off-site tree plantings being used to provide direct screening of the proposed development from specified residences, it is not possible to enforce this on the landowner. As such, this possibility is one which is at the discretion of the nearby landowners.

The Department agrees with Mr Lamb that, even with the proposed on-site (and potentially off-site) screening plantings, there would remain a residual visibility of the proposed development from selected locations. As such, there does not appear to be any disagreement regarding the residual visibility of the proposed development, even after all mitigating measures have been employed. What is contested is whether this residual visibility results in a visual amenity impact and whether this impact is acceptable or unacceptable. On this matter, the Department highlights that there are no objective guidelines or criteria for determining the acceptability, or not, of a residual visibility of a proposed development.

While the Department agrees with Mr Lamb's assessment in relation to the State and regional context of the nature of the proposed development and the surrounding scenic characteristics, it is on the local level that the Department considers most emphasis should be placed. At this level, Mr Lamb asserts that the local residents are familiar with and value the landscape at a personal and emotional level, which is greater than the general population, and that that the nature and character of the proposed development will always be evident to some degree. Notwithstanding this, Mr Lamb concludes that the residual visibility of the proposed development does not result in an unacceptable visual impact for the reasons outlined above.

The Department considers that Mr Lamb has prepared and presented a reasonably robust consideration of the potential visual amenity effects of the proposed development. However, it is not clear how the conclusion has been drawn that visual amenity impacts would be acceptable in light of the local context, public concern and reliance on off-site mitigation measures. In particular, the Department highlights that:

- the proposed development would have a residual visual amenity impact on selected locations and specific residences in close proximity to the proposed site;
- there is significant concern raised by local residences regarding the negative impacts of the proposed development on the scenic quality and character of the landscape; and
- there is relatively heavy reliance on off-site screening measures which may not be achievable in reality, without the subject landowners' agreement.

Given the intangible nature of visual amenity impacts and there being no clear criteria against which these impacts can be assessed, the Department highlights to the Commission that a balanced, project-specific merit assessment must be applied. Should the Commission form the view that the proposed development represents significant benefits, whether social or environmental (for example), it may be appropriate to accept more elevate residual visual impacts than if the proposal did not offer those benefits. This matter should be weighed against the net outcomes of the Commission's assessment of all other impacts, taking into account the on-going and clearly significant community concern that visual amenity impacts would be significant, unacceptable and inconsistent with the locality.

2.4 Civil Aviation Risks and Impacts

The Department sought clarification from the Civil Aviation Safety Authority (CASA) in relation to the impacts on the aircraft using the Wagga Wagga aerodrome. CASA (in consultation with Airservices Australia) has indicated that the following measures would be required, as a result of the plume from the proposed power station:

- the 05 GPS procedure would be required to be amended by increasing the start altitude for a descent to 4700 feet, and to restrict aircraft from their descent until 2 miles from the intermediary way point;
- the 05 VOR/DME would be impacted by making the northern arc steep to the maximum allowable limit, resulting in penalisation to craft using the northern arc and forcing them to do a reversal manoeuvre, forcing such aircraft to fly in the order of an additional 5.5 route miles.

The cost of updating the landing systems to reflect such changes is predicted to be approximately $4,500.

In relation to the use of agricultural aircraft operating from the air strip immediately to the south of the proposed site, CASA highlights that such aircraft operate under a different set of rules than that for commercial aviation. In particular, such aircraft operate under a Pilot Agricultural Operations Manual that requires the pilot to determine whether or not an area is safe for them to operate in. CASA suggests that the presence of the proposed power station would be no different from any other area where there are obstacles such as transmission lines and pylons. The Applicant has not indicated in its submission in reply that it would seek to restrict the use of agricultural or fire fighting aircraft in the vicinity of the proposed power station. As such, the Department does not consider there to be a conflict between the operation of aircraft for agricultural and/ or fire fighting purposes and the proposed power station.

2.5 Noise Impacts

The Applicant has provided the Siemens guarantee of noise emissions from the proposed development. The Department is satisfied that the noise emissions from the proposed power station would not result in impacts contrary to the limits prescribed by the *Industrial Noise Policy*.

3 QUESTIONS TO THE DEPARTMENT FOLLOWING THE PRIMARY SESSION

A number of questions were asked of the Department as a result of the primary session of the Commission of Inquiry. These questions were received from:

- Mr Jim Colman (on behalf of the Uranquinty Action Group);

- Mr Jim Rees;
- the Applicant; and
- the Commission.

These questions related to a number of issues, with some of the Department's key responses outlined below. Full copies of the Department's responses are provided as Attachment C. The key issue raised in the questions received by the Department related to how electricity transmission infrastructure augmentation would be dealt with in light of the status of the development application, the validity of the Minister's State significant declaration and development application, and strategic planning issues around Wagga Wagga.

3.1 Electricity Transmission Network Augmentation

The Department notes that the Applicant has not sought development consent for any augmentations to the electricity transmission network which may be necessary as a result of the proposed development. The Department has fully considered the augmentations which are proposed for each phase of the proposed power station in section 2.1.1 of this report. Any augmentations which may be required as a result of this development would be considered "permissible without development consent" and would be assessed in accordance with part 5 of the *Environmental Planning and Assessment Act 1979*.

3.2 Validity of the Declaration and Development Application

The following legal matters were raised as questions to the Department through the Inquiry process:

- the validity of the Minister's declaration since it does not explicitly refer to the *construction and operation* of the proposed power station, nor does it refer to the subdivision of the land, which is foreshadowed by the development application;
- the validity of the development application since it does not explicitly refer on the application form to the operation of the proposed power station, it does not include any details relating to the necessary ancillary transmission infrastructure, and it does not provide any details relating to subdivision; and
- an assertion that in light of these matters the development application is not capable of being determined by the Minister.

The Department's responses in relation to these matters can be summarised as follows:

- the declaration refers to the use of the land at the proposed site as it is currently described (i.e. not including any subdivision). Use of the land includes construction and operation of the proposed development.
- the development application includes the EIS which clearly refers to the construction and operation of the power station.
- it is agreed that the application does not provide any details in relation to subdivision of the land. The Applicant has since decided to excise the subdivision from the current application. The Applicant will seek consent from Wagga Wagga City Council for the subdivision in the event that the Minister approves the application. This does not hinder the Minister's ability to determine the power station, as any approval would relate to the power station at the site as it is currently described. If the proposed subdivision was ultimately refused by the Council, then the matter of land ownership, and whether the Applicant can purchase the entire lot, would be a commercial one between the Applicant and the land owner.
- the development application does not include any transmission network augmentations, which would be assessed in accordance with part 5 of the Act (see section 2.1.1 and section 3.1above).

As such, there is not considered to be any legal impediment to the Minister determining the DA.

3.3 Strategic Planning and Site Selection

Strategic planning issues were raised by the Uranquinty Action Group, including primarily relating to conflicts between the proposed development and the existing and likely future use of surrounding lands, including the industrialisation of agricultural land.

The Department agrees with the Department of Primary Industries that the direct loss of agricultural land would be minimal, due to the small foot print of the proposed development, and that indirect impacts on the surrounding agricultural lands have been or are being addressed during the impact assessment and Inquiry process.

In relation to the issue of site selection remains, the Department highlights that the consent authority is bound to consider a development application as lodged, including a preferred site. The environmental impact assessment process is not intended to review alternative site locations to establish the "most appropriate". Rather, it is intended to assess the environmental impacts of a proposed development at the preferred site to establish whether that option is appropriate in an environmental and safety context. Environmental Impact Statements are required to present consideration of alternatives to demonstrate that an adequate screening and selection process has been applied to possible alternatives, and to highlight any alternative that may present far superior outcomes compared with other options (should such an option exist). The Department notes that of the possible site locations considered by the Applicant, none presents far superior outcomes compared with other sites. In this regard, the Department is satisfied that the Applicant has achieved the requirement to review and establish a preferred option. The Department's responsibility is now to determine, in consultation with the community, Government bodies and the Applicant, that the proposed development can be constructed and operated to meet environmental and safety criteria at the proposed site.

3.4 Socio-economic Impacts

The Department notes that the there are likely to be impacts on certain properties in the immediate vicinity of the proposed development, that can not be completely mitigated. The Department reiterates that development of this nature can facilitate improvements in local roads, increased local employment opportunities, and modifications to the existing land use such as increased revegetation. The Department also reiterates its position that the proposed development would have important socio-economic benefits for the region and the State through increased generation of reliable peak and high shoulder electricity supply. The Department notes that gas is considered an important component of the electricity generation infrastructure, as it is more efficient than coal technology and can be used to meet the increasingly sharp peaks in electricity demand. The proposed development would also afford a reliable electricity supply to the region of Wagga Wagga, as it would allow the transmission network to cope with critical outages in the electricity transmission infrastructure, an event which would currently impose a critical burden on the remaining transmission infrastructure.

Regarding local concerns relating to land values and degradation of social structures, the Department concludes that, in the same way that the visual amenity impact is subjective, the resultant socio-economic impacts would be similarly subjective. As such, it would be difficult to reach a conclusion one way or the other as to whether there is a clear nexus between the proposed development and any impact to land values and social structures.

4 SCOPE OF RECOMMENDED MEASURES TO ADDRESS RESIDUAL IMPACTS

The Department is generally satisfied that in the context of criteria-based technical impacts associated with the proposed development (air quality, noise, water quality etc), the proposal could be constructed and operated within acceptable environmental limits. The Department recognises and appreciates, however, that the local community has on-going and important concerns in relation to the visual amenity impacts of the proposal, the appropriateness of the proposed site for the development (inconsistency with the locality) and resultant socio-economic impacts (through possible perceived and real effects on matters such as land value). As highlighted that the Primary Session of the Commission of Inquiry, the Department considers that these factors must be carefully weighed against the residual (criteria-based) environmental impacts associated with the proposal and the net position of any benefits associated with new electricity generating capacity.

Notwithstanding the outcome of the Commission's consideration of this balance, the Department has prepared a suite of without-prejudice draft recommended measures that it considers could be applied to mitigate, managed and monitor residual environmental impacts. The Commission may wish to consider these recommended measures when deliberating over the balance of the merits of the proposal, with any determination made by the Minister consequently considering these measures and additional matters that may be identified by the Commission. Provision of these measures should not be interpreted as pre-empting any recommendation made by the Commission to the Minister. Rather, the scope of measures to address residual impacts has been formulated to provide matters for consideration by stakeholders, and by the Commission, should it recommend that the Minister approve the proposed development. Full details of the Department's recommended measures for the Commission's consideration are provided in Attachment A.

4.1 Scope of Permissible Conditions of Consent

Section 80A of the *Environmental Planning and Assessment Act 1979* (the Act) provides that the Minister can only impose conditions of consent that relate to:

- the provisions of any draft or in-force environmental planning instrument, any development control plan or mandatory conditions that may be specified under the *Environmental Planning and Assessment Regulation 2000*;
- the likely impacts of the development, including environmental impacts on both the natural and built environments, and social and economic impacts on the locality;
- the suitability of the site for the development;
- matters raised in submissions;
- the public interest;
- the modification or surrender of an existing development consent;
- the modification or cessation of the subject development, or another development;
- limits to the period during which the subject development may be carried out;
- a requirement to remove buildings or works after the lapse of a specified period;
- deferred commencement or staging of the consent, as provided by sections 80(5) and 80(3) of the Act;
- the imposition of a security bond, consistent with the provisions of sections 80A(5)-80A(9) of the Act; or
- the imposition of developer contributions under section 94 or 94F of the Act.

4.2 General Approach to Recommended Measures and Conditions of Consent

In general, measures to address residual environmental and safety impacts, and the general approach applied to the drafting of conditions of consent for State significant developments, can be outlined in a series of functional groups as follows:

- ***mitigation requirements*** – additional measures, whether physical or procedural, that may need to be applied to the proposed development to address residual environmental impacts. Equally, mitigation measures committed to by the Applicant may be restated in any development consent for clarity, or to highlight specific mitigation measures that are of fundamental importance to the environmental and safety performance of the proposed development. Conditions of consent usually specify a desired outcome, such as an air quality limit, with the responsibility for application of appropriate measures to achieve the specified outcome resting with the Applicant.
- ***monitoring requirements*** – periodic or continuous monitoring may be required to ensure that mitigation measures are functioning as expected, or to confirm the environmental and safety performance of the development. While guidelines exist to define the general requirements for monitoring (for example, the EPA has specific guidance documents for air quality monitoring), the approach to monitoring is usually the responsibility of the Applicant, with relevant guidance documents, and any development consent, specifying the desired monitoring outcomes.
- ***management requirements*** – environmental management and safety management plans to ensure adequate measures are to be implemented by the Applicant to comply with the conditions of consent, and to minimise any residual environmental impacts.
- ***reporting and auditing requirements*** – reporting and auditing is usually required to provide an information and feed-back mechanism for regulators to ensure that the conditions of consent, and other approvals such as an Environment Protection Licence from the EPA, are being complied with. Reporting also provides the community with an opportunity to be informed through the open and transparent provision of monitoring and reporting data.
- ***administrative requirements*** – administrative requirements generally relate to legal or procedural matters that are included in a development consent as required by the provisions of the Act, or to clarify the scope of the development consent or how it is to operate/ be applied.

As highlighted earlier in this report, the Department considers it important the Applicant actively engage the community throughout the life of the proposed development. In the context of the types of measures listed above, this should involve provision of all monitoring and reporting data to the community to permit interested parties to formulate an informed position on the development's performance. The Applicant should also engage the community in the development of management measures, particularly where those measures relate to environmental impacts that may directly or indirectly impact on the community. The community should also expect that the Applicant open and transparently provide information in relation to the environmental and safety performance of the development, and mitigation measures that have been applied to the proposal.

4.3 Key Recommended Measures to Address Residual Impacts

To ensure the potential environmental impacts from the proposed development are minimised as much as is reasonably feasible, the Department has prepared the scope of measures that could be imposed by the Minister to mitigate, monitor and manage these impacts. Full details of these measures are provided in provided in Attachment A. Of the measures, the Department considers it important to highlight those matters that it considers of key importance to the proposed development, and those matters that should form an important component of any approval for the proposal, if granted by the Minister. These key matters are:

- air quality impacts - the Department supports the setting of stringent conditions relating to air emissions, including discharge limits, monitoring and emissions management to ensure the amenity and health of the locality is not adversely impacted. In addition, the duration of firing of liquid fuel should be restricted to no more than 70 hours in any one year, and include a requirement for this mode of firing to minimised as much as possible;
- noise impacts – any development consent that may be granted in respect of the proposed development should include restrictions to hours of construction works, and noise limits to be met during construction and operation to ensure that local amenity is protected;
- visual amenity – the Department supports the option of nearby residents attaining screening plantings from the Applicant, should the residents wish, and would recommend that the landscape plan be revised in consultation with the local community to ensure mitigating measures result in minimisation of impacts to potentially affected residents; and
- community consultation, information and involvement – the proposed development has generated a significant level of community interest and concern, which would be expected to continue throughout the life of the development, if approved. The Department has recommended a suite of provisions to ensure effective, open and transparent community information, participation and consultation. These measures include a provision of all monitoring results and reports in relation to the environmental performance of the development to be made public, and a Community Consultative Committee.

5 CONCLUDING COMMENTS

The Department has finalised its technical assessment of all matters relating to the proposed development. In relation to the tangible, criteria-based environmental impacts such as air quality, noise and water quality (for example), the Department is satisfied that the proposed development could meet relevant criteria.

The Applicant has demonstrated that upgrades to transmission infrastructure could, in principle, be achieved in reality for the first 300MW phase of the proposed development. In this light, the Department considers it appropriate that any approval that may be granted in respect of the proposal be subject to a restriction that the Applicant not commence the development until relevant environmental planning approvals are obtained for the infrastructure upgrades. This approach is considered appropriate and necessary to ensure orderly development outcomes. In contrast, the Department is not satisfied that the Applicant has demonstrated within any certainty that infrastructure upgrades required for the ultimate 600MW capacity of the development. These upgraded works may require significant physical works above those associated with the first 300MW phase, and can not be conclusively established as reasonable and feasible based on the information provided by the Applicant to date. The Department cannot conclusively support any approval to expand the proposed development from 300MW to 600MW given the uncertainty over whether the expanded development could be reasonably serviced with transmission infrastructure.

Notwithstanding that the tangible and criteria-based environmental and planning-related issues have been resolved and demonstrated as compliant with acceptable standards, the Department appreciates on-going community concern over the appropriateness of the development site and visual amenity impacts. In relation to the latter, the Applicant has provided an updated visual amenity assessment which indicates that there will be a residual impact, although there are no objective criteria against which this residual impact can be compared. The Department does, however, draw to the Commission's attention that the residual impact will be generally localised within the Uranquinty area; it is a significant on-going community concern; and a key mitigation measure proposed by the Applicant involves off-site screening, the viability of which is dictated by the affected landowners' acceptance of this approach.

In addition to residual amenity impacts, the local community is clearly and genuinely concerned that the proposed development site is not suitable for a gas-fired power station, or in fact, for industrial or quasi-industrial development. The Department highlights that there is no planning document or strategic framework that would lend weight to this argument of the unsuitability of the site, but does reinforce the significance of local concerns that the proposal would generate land use conflicts, decrease land values in the area and generally affect the social fabric of the community. The Department suggests that even with full mitigation of all environmental impacts (including visual amenity affects) associated with the proposal, there may be an on-going perception in the local community that the development is generating an adverse impact, whether or not this is the actual physical reality. This is, however, an important social impact that must be weighed against the outcomes of all other impacts associated with the proposal.

The Department suggests that, as presented in its primary submission, the Commission now has before it the merits of the proposal and must now balance the identified key aspects of the proposal to reach a concluding position on the matter:

- the proposal will provide some benefits to the State and region, through additional generation capacity and location of generation around existing transmission constraints. The benefits of the proposal in this regard are not clearly quantifiable.
- the Applicant has demonstrated within reasonable confidence levels that transmission infrastructure upgrades can be implemented, subject to relevant approvals for the first 300MW phase of the development. A similar demonstration has not been conclusively provided for the ultimate 600MW scenario.
- residual visual amenity impacts are predicted to occur, although these impacts do not have clear established objective criteria for assessment. The residual impacts will, however, be constrained within the Uranquinty area, particularly at a number of near to medium field receptors. This issue is a significant concern to the local community and its mitigation dependent to a substantial degree on feasibility of the Applicant's proposal to install off-site vegetative screens (subject to landowner approval).
- there is a significant on-going public concern that the proposed development will be inconsistent with the nature of the local area, and as a result will affect local perceptions of the area and local land prices. Regardless of the physical effects of the development, there may be on-going perception issues should the proposal proceed, which are not readily addressed with any condition that could be imposed through a development consent.

The Department has prepared a set of draft, without-prejudice recommended measures that the Commission may wish to consider if, and only if, it determines that the balance of the above issues falls in favour of the proposed development. These recommended measures should not be interpreted to imply that the Department has resolved to support or oppose the proposal at this time, nor that the measures pre-empt the Commission's consideration of the abovementioned balance.

ATTACHMENT A – SCOPE OF RECOMMENDED MEASURES TO ADDRESS RESIDUAL IMPACTS

AIR QUALITY

Recommendation 1

Issue: Air pollutant discharge limits

Rationale: To ensure that relevant air quality outcomes are met, the Department recommends that the Applicant be required to operate the proposed development to meet appropriate discharge concentration limits.

Provisions: The development must be operated and maintained to ensure that the emission of nitrogen dioxide from each of the four turbine stacks does not exceed the concentration limits specified when burning with natural gas and diesel. Draft General Terms of Approval from the DEC provide further details in relation to these limits, including specific reference conditions.

Pollutant	Fuel Type	100 Percentile limit
Nitrogen dioxide (NO_2) or nitric oxide (NO), or both (as NO_2)	Natural Gas	51 mg/m^3
	Diesel	150 mg/m^3

Recommendation 2

Issue: Air emissions monitoring

Rationale: To ensure that air emissions specified in the consent and the Environment Protection Licence are being met, the Applicant must undertake monitoring of air emissions.

Provisions: The Applicant must monitor the following pollutants from the turbine stacks. Draft General Terms of Approval from the DEC provide further details in relation to monitoring, including specific sampling requirements.

- nitrogen dioxide (NO_x) or nitric oxide (NO), or both;
- velocity;
- volumetric flowrate;
- temperature;
- moisture content in stack gases;
- dry gas density;
- molecular weight of stack gases;
- carbon dioxide in stack gases; and
- oxygen in stack gases.

Recommendation 3

Issue: Meteorological station and monitor

Rationale: Site-representative meteorological data is required in the on-going consideration of air quality impacts from the development, and forms an important part of ensuring the predications of the EIS are validated.

Provisions: The Applicant must:

- install and operate a meteorological station;
- the station must be sited, operated and maintained in accordance with *Approved Methods for Sampling of Air Pollutants in New South Wales*:
  a) AM-1 Guide to the siting of sampling units;
  b) AM-2 Guide to horizontal measurement of wind for air quality applications;
  c) AM-4 On-site meteorological monitoring program guidance for regulatory modelling applications

Recommendation 4

Issue: Dust impact outcomes

Rationale: To ensure dust generated during the construction of the proposed development is minimised.

Provisions: The proposed development must be undertaken to:

- minimise or prevent the emission of dust from the site; and
- ensure that all vehicles entering or leaving the site and carrying a load that may generate dust are covered at all times, except during loading and unloading. Any such

vehicles shall be covered or enclosed in a manner that will prevent emissions of dust from the vehicle at all times.

WATER IMPACTS

Recommendation 5

Issue: Soil and Water Management Plan

Rationale: Appropriate management measures are required to mitigate the potential impacts of contaminated water run-off from the site.

Provisions: The Soil and Water Management Plan must detail erosion and sediment controls including sediment dam sizing, prepared in accordance with *Managing Urban Stormwater: Soils and Construction* (available from the Department of Housing) and must:

- identify the management responses to activities that could cause soil erosion or result in the discharge of sediments and/or other pollutants from the site;
- specify standards/performance criteria for erosion, sediment, and pollution control including water sediment basin locations and discharge points (eg. parameters, frequency, duration, location and methods);
- describe in detail what will be implemented to minimise soil erosion and the discharge of sediments and/or other pollutants from the site; and
- describe what actions and measures will be implemented, how effective these actions and measures and how they will be monitored during the works, clearly indicating who will conduct the monitoring, how the results of this monitoring would be recorded; and, if any non-compliance is detected.

Recommendation 6

Issue: Discharges to stormwater

Rationale: The Applicant proposes to have zero discharge from the site, however overflow from the stormwater basin into a grassed spillway, and ultimately into local waterways, may occur during high rainfall conditions.

Provisions: In relation to any discharges of water from the stormwater retention basin, the Applicant must monitor the following parameters (specific sampling details provided in the DEC's draft General Terms of Approval):

- Chloride
- Conductivity
- pH
- Sodium
- Total suspended solids.

Recommendation 7

Issue: Onsite water reuse

Rationale: While stormwater from the roofs of buildings and structures can be used for any purposes at the site, other stormwater streams associated with the development may contain contaminants. It is important to ensure an appropriate system is in place to identify the quality of the collected stormwater used on-site and to ensure irreversible impact to the soil does not eventuate.

Provisions: In relation to stormwater utilisation, the Applicant must restrict activities as follows:

- stormwater quality for reuse on-site (other than roof water) must be characterised, and irrigation management practices followed;
- stormwater reuse areas may be required to be monitored to ascertain any impacts;
- water collected in the evaporation basins may not be used for any purposes at the site;
- water collected in the evaporation basins must not be permitted from leaving the site;
- effluent application must not occur in a manner which causes surface runoff or ponding;
- stormwater from undisturbed areas shall be directed away from the disturbed areas, and not collected at the site without the permission of the Director-General – permission will only be granted subject to demonstrated compliance with the NSW Farm Dams Policy; and
- spray from effluent application must not drift beyond the boundary of the utilisation area to which it is applied.

Recommendation 8

Issue: Water management plan

Rationale: Appropriate management measures are required to mitigate the potential impacts of contaminated water run-off from the site.

Provisions: The Water Management Plan must:

- provide details of measures to ensure contaminated process water is not mixed with potentially clean stormwater;
- describe the monitoring strategy to ensure reused stormwater does not contain contaminants, including sampling frequency and performance criteria for reuse water;
- provide detailed irrigation management practices for the reuse of wastewater for the purposes of landscaping at the site;
- describe the monitoring strategy to ensure there is no seepage of the waters from the stormwater basin or the evaporation basins into the groundwater.; and
- be approved by the Director-General prior to the commencement of operations.

NOISE IMPACTS

Recommendation 9

Issue: Restrictions to hours of works

Rationale: To ensure that the proposed development meets relevant noise criteria during site establishment, construction and operation, it is necessary to restriction hours of works. Restrictions to hours of works will mitigate noise impacts as well as general amenity impacts (such as traffic movements).

Provisions: The development must only be undertaken during the following hours:

- 7:00 am and 6:00 pm, Monday to Friday inclusive;
- 8:00 am and 1:00 pm on Saturdays.
- at any time if they:
  i. do not cause noise emissions to be audible at any nearby residential property;
  ii. are delivery of materials as requested by Police or other authorities for safety reasons; and
  iii. are emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

Recommendation 10

Issue: Construction noise management plan

Rationale: Appropriate management measures must be in place to minimise noise generated on the site during site establishment and construction, and to ensure that local acoustic amenity is not adversely impacted.

Provisions: The Construction Noise Management Plan must:

- identify general activities that will be carried out and associated noise sources;
- assess construction noise impacts at the relevant receivers;
- provide details of overall management methods and procedures that will be implemented to control noise during the construction stage;
- include a pro-active and reactive strategy for dealing with complaints including achieving the construction noise goals, particularly with regard to verbal and written responses;
- detail noise monitoring, reporting and response procedures;
- provide for internal audits of compliance of all plant and equipment;
- indicate site establishment timetabling to minimise noise impacts;
- include procedures for notifying residents of construction activities likely to affect their noise amenity;
- address the requirements of the EPA;
- be approved by the Director-General prior to the commencement of any works on the site.

Recommendation 11

Issue: Operation noise limits

Rationale: Noise limits must be imposed on the development to ensure that there are no unacceptable noise impacts on receptors.

Provisions: The development must meet the following noise limits during operation at the locations indicated, during the periods specified below. Conditions under which these noise limits are to be measured are specified in the DEC's General Terms of Approval.

- at all residences: 35 dB(A) ($L_{Aeq(15minute)}$) during the day, evening and night, and 45 dB(A) ($L_{A1(1minute)}$) during the night; and
- at 100 metres distance from the development: 60 dB(A) ($L_{Aeq(15minute)}$) at all times.

Recommendation 12

Issue: Heavy Vehicle traffic noise

Rationale: Heavy vehicles were not included in the night time traffic noise assessment.

Provisions: During the life of the development, heavy vehicles are restricting to accessing the site to between 7:00 am and 10:00 pm.

Recommendation 13

Issue: Operation noise management plan

Rationale: Appropriate management measures must be in place to minimise noise generated on the site during operation, and to ensure that local acoustic amenity is not adversely impacted.

Provisions: The Operation Noise Management Plan must:

- identify general activities that will be carried out and associated noise sources;
- assess operation noise impacts at the relevant receivers;
- provide details of overall management methods and procedures that will be implemented to control noise from the power station;
- include a pro-active and reactive strategy for dealing with complaints including achieving the operation noise goals, particularly with regard to verbal and written responses;
- detail noise monitoring, reporting and response procedures;
- provide for internal audits of compliance of all plant and equipment;
- indicate site establishment timetabling to minimise noise impacts;
- include procedures for notifying residents of construction activities likely to affect their noise amenity;
- address the requirements of the EPA;
- be approved by the Director-General prior to the commencement of operation.

Recommendation 14

Issue: Confirmation of noise performance

Rationale: Consistency with the noise impact predictions presented in the Environmental Impact Statement and additional information documents is required to demonstrate appropriate noise performance.

Provisions: Within 3 months of the commencement of operations of each turbine, the Applicant must:

- undertake noise monitoring, consistent with the guidelines provided in the *New South Wales Industrial Noise Policy* (EPA, 2000), to assess compliance with the noise limits imposed under the development consent and Environment Protection Licence;
- detail any entries in the Complaints Register relating to noise impacts;
- In the event that noise monitoring indicates that the operation of the development, under design loads and normal operating conditions, will lead to greater noise impacts than permitted under the consent and the Environment Protection Licence, then the Applicant shall provide details of remedial measures to be implemented to reduce noise impacts to levels required by the consent and the Environment Protection Licence.; and
- provide details of its findings to the EPA and the Director-General.

HAZARDS AND RISK IMPACTS

Recommendation 15

Issue: Construction Safety Study

Rationale: In order to demonstrate the hazards associated with the construction period of the proposed development, the Department considers that a Construction Safety Study should be prepared for the development.
Provisions: The Construction Safety Study must:
a) must be prepared in accordance with the Department's *Hazardous Industry Advisory Paper No. 7 – Construction Safety Study Guidelines*. The commissioning portion of the Construction Safety Study may be submitted two months prior to the commencement of commissioning.
b) be approved by the Director-General prior to the commencement of construction.

Recommendation 16
Issue: Fire Safety Study
Rationale: In order to demonstrate that the proposed development has been designed to minimise the risk of fires on the site, the Department considers that a Fire Safety Study should be prepared for the development.
Provisions: The Fire Safety Study must:
c) be prepared in accordance with the Department's document *Hazardous Industry Planning Advisory Paper No. 2 – Fire Safety Study Guidelines* and the NSW Government's document *Best Practice Guidelines for Contaminated Water Retention and Treatment Systems* ;
d) be approved by the Director-General and the Commissioner of the NSW Fire Brigades prior to the commencement of construction.

Recommendation 17
Issue: Hazard and Operability (HAZOP) study
Rationale: To ensure that all process design and control features have been incorporated in to the final design of the remediation process to mitigate against abnormal operation and possible resultant environmental and safety implications, the Applicant should undertake HAZOP analysis on the development.
Provisions: The HAZOP study must:
- be undertaken by an independent person or team approved by the Director-General;
- be consistent with the guidance provided in *Hazardous Industry Planning Advisory Paper No. 8 - HAZOP Guidelines*; and
- be approved by the Director-General prior to the commencement of construction.

Recommendation 18
Issue: Emergency Plan
Rationale: In the event that an incident does occur on the site, appropriate emergency management and response mechanisms must be in place
Provisions: The Emergency Plan must:
- be consistent with the guidance provided in *Hazardous Industry Planning Advisory Paper No. 1 - Industry Emergency Planning Guidelines*; and
- be approved by the Director-General prior to the commencement of commissioning.

Recommendation 19
Issue: Safety Management System
Rationale: In order to manage safety-related issues associated with the development, an-overarching Safety Management System is required.
Provisions: The Safety Management System must:
- be consistent with the guidance provided in *Hazardous Industry Planning Advisory Paper No. 9 - Safety Management*;
- specify all safety-related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to safety procedures; and
- be approved by the Director-General prior to the commencement of commissioning.

Recommendation 20
Issue: Hazard Auditing
Rationale: To ensure that the development is being undertaken in a manner conducive to safe operation, a Hazard Audit should be undertaken of the remediation process.
Provisions: The Hazard Audit must:

- be undertaken by an independent person or team approved by the Director-General;
- be undertaken within 12 months of the commencement of commissioning, and then as may be directed by the Director General;
- be consistent with the guidance provided in *Hazardous Industry Planning Advisory Paper No. 5 - Hazard Audit Guidelines*;
- be submitted for the approval of the Director-General.

VISUAL AMENITY, FLORA AND FAUNA

Recommendation 21

Issue: Enhancement of flora and fauna

Rationale: There is no reason for any existing native tree species to be removed to facilitate the proposed development. Existing trees are also important for the purposes of visual screening of the proposed development.

Provisions*:* The Applicant shall conserve, protect and revegetate the remnant trees and grass species of the endangered ecological community at the site. As part of this revegetation the Applicant shall plant local indigenous species on the site (outside of the area directly impacted by the development) including between the road reserve on the Uranquinty Cross Road and the southern boundary of the area directly impacted by the development.

Recommendation 22

Issue: Restriction to the grazing of stock

Rationale: Continued grazing of stock can have a negative impact on newly planted vegetation and regenerating native species.

Provisions*:* Grazing of stock at the site is not permitted except with the express permission of the Director-General. Grazing may only be approved by the Director-General after a grazing management plan has been prepared which details the following:

a) how the impact of grazing will be minimised during the flowering and seed production stage of the plants;

b) how the impact of grazing on the native vegetation species at the site will monitored; and

c) the procedures for ensuring that grazing is stopped before significant damage is caused to the native vegetation species at the site.

Recommendation 23

Issue: Off-site tree planting

Rationale: The Applicant should provide tree plantings to any resident who wishes to have trees planted on their property to screen the development from their residence or other important location.

Provisions*:* At the request of any nearby landowner, who has views to the development from their land, the Applicant shall provide tree plantings to screen the development from the landowner's property as much as is reasonably feasible.

Recommendation 24

Issue: Visual Amenity and Landscape Management Plan

Rationale: The visual impact of the proposed development is a key issue. Mitigation and minimisation, and management of residual visual amenity impacts are a necessary requirement of the Department. While the Landscape Concept Design Report provides a beginning point for this Plan, the Department would consider more detail be provided prior to construction, and after consultation has taken place with the local community.

Provisions*:* A Visual Amenity and Landscape Management Plan shall be prepared that includes the following:

- clear description of the residual visual amenity impacts of the proposed development;
- proposed measures to minimise those residual impacts including;
- detailed description of the proposed landscaping at the site, including details of locally sourced endemic species to be used for landscaping purposes;
- detailed description of the proposed vegetation plantings for screening purposes, including details of species to be planted and a timetable for such plantings.

TRAFFIC AND TRANSPORT

Recommendation 25

Issue: Adequate management of construction related traffic

Rationale: There may be intermittent traffic conflicts between existing traffic on the Uranquinty Cross Roads and construction traffic associated with the proposed development.

Provisions*:* The Applicant shall prepare and implement a Traffic Management Plan (TMP) to outline management of traffic conflicts associated with the construction of the development. The Applicant shall consult with the Council, NSW Police, RTA and Rail Infrastructure Corporation in the preparation of the TMP, and shall address the requirements of these organisations in the TMP, should there be any. The Applicant shall also consult with the Community Consultative Committee and surrounding neighbours who regularly use the Uranquinty Cross Roads and address any issues raised by these parties. The TMP shall include, but not necessarily be limited to:

- details of traffic routes for heavy vehicles, including any potential restriction with regards to heavy vehicles and/or oversized loads;
- detailed consideration of measures to be employed to ensure the impacts to the proposed heavy vehicle routes are minimised, including structural impacts, and impacts to other road users;
- detailed measures to be employed to ensure the safety of the intersection between the Olympic Highway and the Uranquinty Cross Road is maximised, especially with regards to other road users, and pedestrians (and particularly school children);
- measures to be employed to ensure the impacts to the level crossing (rail/road) on Uranquinty Cross Road are minimised;
- demonstration of a comprehensive system to ensure the proposed measures to mitigate and minimise potential road conflicts are communicated with the drivers of construction related traffic, and how compliance with these measures would be enforced; and
- demonstration that all statutory responsibilities with regards to road traffic impacts have been complied with.

ELECTRICITY TRANSMISSION CONNECTION

Recommendation 26

Issue: Demonstration that relevant approvals have been obtained for transmission infrastructure upgrades

Rationale: To ensure orderly development and prevent a circumstance in which the proposed development proceeds only to find that approvals for transmission upgrades will not or cannot be issued.

Provisions: The Applicant must not commence the development until it has demonstrated that relevant approvals for transmission infrastructure upgrades have been issued.

COMMUNITY INFORMATION, INVOLVEMENT AND CONSULTATION

Recommendation 27

Issue: Community information complaints handling

Rationale: The Department considers that the open and transparent provision of information to the community is necessary, and that there must be appropriate feedback mechanisms to facilitate community comments, inquiries and complaints.

Provisions: The Applicant must meet the following requirements in relation to community consultation and complaints management:

- all monitoring, management and reporting documents required under the development consent shall be made publicly available;
- provide means by which public comments, inquiries or complaints can be received, and ensure that those means are adequately publicised; and
- includes details of a register to be kept of all comments, inquiries and complainants received by the above means, including the following register fields:
  - a) the date and time, where relevant, of the comment, inquiry or complaint;
  - b) the means by which the comment, inquiry or complaint was made (telephone, mail or email);
  - c) any personal details of the commenter, inquirer or complainant that were provided, or if no details were provided, a note to that effect;
  - d) the nature of the complaint;

e) any action(s) taken by the Applicant in relation to the comment, inquiry or complaint, including any follow-up contact with the commenter, inquirer or complainant; and

f) if no action was taken by the Applicant in relation to the comment, inquiry or complaint, the reason(s) why no action was taken.

Recommendation 28

Issue: Community consultative committee

Rationale: It is important that a forum be provided in which community representatives can present concerns in relation to the environmental performance of the development and receive details of matters related to the environmental impacts and performance of the development.

Provisions: The Applicant must establish a Community Consultative Committee (CCC, or Community Liaison Group) that must:

- comprise a reasonable and representative cross-section of interested parties from the local community;
- meet regularly throughout the life of the development;
- have reasonable resource requirements provided by the Applicant;
- include occasional representation from the Department, the EPA, and Council, where relevant and agreed by each of those agencies;
- provide a forum in which information on the environmental performance can be furnished, and in which community concerns can be raised and resolved; and
- be chaired by a person from the CCC elected by the CCC.

ENVIRONMENTAL MANAGEMENT, AUDITING AND REPORTING

Recommendation 29

Issue: Construction Environmental Management Plan (CEMP)

Rationale: An over-arching environmental management system is required during site establishment and construction to ensure that all environmental matters are coordinated, and to provide relevant environmental policies and procedures relevant to the development during site establishment and construction.

Provisions: The Construction Environmental Management Plan must:

- describe all activities to be undertaken on the site during site establishment and construction of the development, including an indication of stages of construction, where relevant;
- detail statutory and other obligations that the Applicant is required to fulfil during site establishment and construction, including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
- include specific consideration of measures to address any requirements of the Department, the EPA, and the Council during site establishment and construction;
- detail how the environmental performance of the site preparation and construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts;
- describe the roles and responsibilities for all relevant employees involved in the site establishment or construction of the development;
- include all Management Plans and Monitoring Programs relevant to construction;
- include arrangements for community consultation and complaints handling procedures during construction;
- be approved by the Director-General prior to the commencement of site preparation or constructions works;
- be made available for public inspection after approval.

Recommendation 30

Issue: Operation Environmental Management Plan (OEMP)

Rationale: An over-arching environmental management system is required during operation to ensure that all environmental matters are coordinated, and to provide relevant environmental policies and procedures relevant to the development during operation.

Provisions:: The Operation Environmental Management Plan must:

- identify all statutory and other obligations that the Applicant is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations;
- include a description of the roles and responsibilities for all relevant employees involved in the operation of the development;
- include overall environmental policies and principles to be applied to the operation of the waste destruction facility;
- include specific consideration of measures to address any requirements of the Department, the EPA, and the Council during operation;
- detail standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved, where appropriate;
- detail management policies to ensure that environmental performance goals are met and to comply with the conditions of this consent;
- include the Management Plans relevant to operation;
- include the environmental monitoring requirements relevant to operation;
- be approved by the Director-General prior to the commencement of commissioning;
- be made available for public inspection after approval.

Recommendation 31

Issue: Decommissioning/ Deconstruction Environmental Management Plan (DEMP)

Rationale: Due to the dissimilarity of the proposed development with the surrounding land uses, in the event that the power station taken out of service there is considerable concern from the community of it not being adequately or necessarily deconstructed and removed.

Provisions: In the event that the proposed power station is taken out of service (in that it is no longer used for generating electricity) then the Applicant shall fully decommission and deconstruct the power station. A Decommissioning/ Deconstruction Environmental Management Plan must be prepared which:

- includes procedures for treatment of residual waste products and plant/ equipment from the development;
- includes procedures for the deconstruction of the power station, including a schedule for deconstruction activities; and
- provides details of rehabilitation and landscaping measures to be implemented after deconstruction, consistent with and expanding on the Landscape Management Plan for the site;
- include specific consideration of measures to address any requirements of the Department, the EPA, and the Council during decommissioning/ deconstruction;
- be approved by the Director-General within one year of the power station being taken out of service;
- be made available for public inspection after approval.

Recommendation 32

Issue: Environmental auditing

Rationale: An independent and transparent environmental audit can verify, or not, compliance with the Minister's consent and various approvals. Auditing also provides an opportunity for continued improvement in environmental performance.

Provisions: Within two years of the commencement of operation, and thereafter every three years an independent and suitably qualified person/team would undertake a full environmental audit. The audits would be made publicly available and would:

- be carried out in accordance with *ISO 14010 - Guidelines and General Principles for Environmental Auditing* and *ISO 14011 - Procedures for Environmental Auditing*;
- assess compliance with the requirements of this consent, and other licences and approvals that apply to the development;
- assess the development against the predictions made and conclusions drawn in the development application, EIS, additional information and Commission of Inquiry material; and
- review the effectiveness of the environmental management of the development, including any environmental impact mitigation works.

Recommendation 33

Issue: Annual Environmental Management Report (AEMR)

Rationale: Regular reporting of the environmental performance of the development is required to demonstrate that environmental outcomes are being met and that conditions of consent are being complied with. The AEMR also provides an opportunity for the Applicant to provide information to the community in relation to the environmental performance of the development.

Provisions:: The Annual Environmental Management Report must:

- detail compliance with the conditions of this consent;
- contain a copy of the Complaints Register (for the preceding twelve-month period (exclusive of personal details), and details of how theses complaints were address and resolved;
- include a comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in the Environmental Impact Statement and additional information documents provided to the Department and Commission of Inquiry;
- detail results of all environmental monitoring required under this consent and other approvals, including interpretations and discussion by a suitably qualified person;
- contain a list of all occasions in the preceding twelve-month period when environmental performance goals for the power station have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent recurrence of that type of incident;
- be prepared within twelve months of the commencement of commissioning, and every twelve moths thereafter;
- be provided to the EPA, Wagga Wagga City Council and the CCC for comment at the same time or prior to submission to the Director-General;
- be approved by the Director-General each year; and
- be made available for public inspection.

ADMINISTRATION

Recommendation 34

Issue: Scope of the development

Rationale: The Applicant has generated a number of documents relevant to the scope of the development, including the Environmental Impact Statement, Supplementary Reports relating to water management, noise and air emissions impacts, additional information, and submissions to the Commission of Inquiry. It is important that each of these documents be listed in any development consent to clearly define the scope of the proposal.

Provisions: That the Applicant undertake the proposed power station strictly in accordance with the scope of works outlined in all documents provided during the planning and assessment process for the proposed development. In the event of an inconsistency between documents, the more recent document must prevail to the extend of the inconsistency. The conditions of consent must prevail over all documents.

Recommendation 35

Issue: Scope of the development

Rationale: The environmental impact assessment of the proposed development has been based on impacts that may be generated through the routine use of natural gas as a fuel for electricity generation. The Applicant has also indicated that diesel would only be used in the case of emergency.

Provisions: The development must be constrained to routinely using natural gas as a fuel. The Applicant must take all practicable measures to ensure diesel is not required to be used at the development. In the event of emergencies, diesel may be used up to a maximum of 70 hours per year.

Recommendation 36

Issue: General Terms of Approval

Rationale: The General Terms of Approval provided by the Environment Protection Authority and the Wagga Wagga City Council must be included in any development consent issued.

Provisions: The Applicant must comply with General Terms of Approval, as well as the Department's recommended measures to address residual impacts.

ATTACHMENT B - ADDITIONAL INFORMATION SOUGHT FROM THE APPLICANT

As detailed in the Department's primary submission to the Inquiry, additional information/ clarification was required before assessment of the proposed development could be completed. Key outstanding matters are listed below and were treated as questions to be answered through the Inquiry process.

QUESTIONS POSED TO THE APPLICANT

Project Justification and Site Selection

1. TransGrid has indicated that for 600 MW to be connected, then it is likely that either additional 132 kV lines between Uranquinty and Wagga Wagga would be required, or that the existing Uranquinty to Wagga Wagga line would be required to be upgraded to 330 kV, in both cases resulting in potential additional environmental impact. Clarification is being sought from TransGrid on this matter. However, the Department requests the Applicant to provide a detailed consideration of what it considers the options available for connection of the proposed power station (600 MW) are, and how it considers that development consent could be granted in the event of uncertainty over any of these options.

2. The Department notes that supply of natural gas through the adjacent pipeline(s) can, at times, be constrained due to high demand. The Department seeks comment from the Applicant on the certainty of the natural gas supply during the peak periods, and what gas pipeline augmentation works may be necessary to ensure supply, currently and in the longer term. The Department notes that increased certainty of supply of natural gas would result in a reduced likelihood of the use of diesel.

3. Regarding potential augmentation to local infrastructure networks (natural gas, electricity transmission and water supply), the Department requires that the Applicant provide comment on any augmentation requirements, the options for that augmentation, the preferred approach and the timeframes for any augmentation.

Air Quality Impacts and Health Risks

4. The Department considers that the Applicant needs to review the presentation of its consideration of health impacts from the use of diesel fuel, to more adequately justify and defend the assessment approach applied, focusing on:
   i. further justification that carcinogenic and chronic non-carcinogenic health impacts do not need to be considered under diesel fuel scenarios;
   ii. the appropriateness of compounds considered as contributing to health effects from diesel combustion (both acute and chronic, carcinogenic and non-carcinogenic), particularly in relation to heavy metals. For example, the California Air Resources Board and California Office of Environmental Health Hazard Assessment has published risk assessment values for arsenic (acute inhalation, chronic inhalation, chronic ingestion and carcinogenic risk), although the Applicant has only considered this contaminant in the context of acute inhalation effects; and
   iii. in light of the above considerations, update of the health risk assessment, as may be necessary.

Impacts of Visual Amenity

5. The Department maintains concerns regarding the visual impact of the proposed development. In particular, there are a number of nearby residences which will potentially be visually impacted by the proposed development. Clear details of the actual measures to be implemented (planting, colours etc), demonstration of the practicalities for implementation, assessment of residual impact and timeframes for implementation must be provided.

Hazards and Risk Impacts

6. Significant community concern has been raised regarding the local impacts of the proposed power station via restriction of the use of small aircraft on surrounding agricultural land, for the purposes of spraying. In the EIS, the Applicant alludes to such an aircraft restriction zone, but does not specify the extent of such a zone. While clarification is being sought from the Civil Aviation Safety Authority on this matter, clarification of the Applicant's views is also sought.

Specifically, what are details regarding the nature and extent of any aircraft restriction zone in the immediate vicinity of the proposed development?

Noise Impacts

7. Regarding the on-going operational noise of the proposed power station, the Department requests that the Applicant provide the following information:
   i. provision of the tonal characteristics of the proposed plant and equipment to support the Applicant's claims that the noise characteristics from the power station are not tonal, and would therefore be considered continuous noise; and
   ii. provision of the noise guarantee (or extract) from Siemens.

QUESTIONS POSED TO TRANSGRID

Connection of Proposed Development to 132 kV Network

1. The Department notes that, as requested by Wambo, TransGrid is currently assessing Wambo's application for connection of 300 MW to the existing 132 kV network. The Department understands that there are currently two options for this proposed connection, being reconstruction of the exiting 132 kV lines to high capacity 132 kV lines, or reconstruction of one of the 132 kV lines to a double circuit line. The Department also understands that both of these options would not require additional easements to be sought, nor would they result in any significant visual impact to the surrounding landscape. Could you please confirm if this is the case?

2. The Applicant has indicated that in the future it would seek connection of 600 MW to this 132 kV network. In Transgrid's submission it is stated that this is not appropriate as it may require construction of new 132 kV transmission lines between Uranquinty and Wagga Wagga. TransGrid's preferred options are to connect the proposed power station directly to the 330 kV network, and upgrade the 132 kV line between Uranquinty and Wagga Wagga to 330 kV. In any case, the Department notes that there is likely to potentially be a substantial impact in that:
   a. additional 132 kV lines between Uranquinty and Wagga Wagga would require new easements; and
   b. upgrading the 132 kV line between Uranquinty and Wagga Wagga would require the existing easement to be extended, and may require re-routing of this line in some locations.

   Firstly, could TransGrid confirm that the Department's understanding of this issue is accurate?

   Secondly, the Department requests TransGrid's advice as to whether there is likely to be any possible alternative network augmentations which are likely to have lower potential for impacts.

Reliability of Supply to the NSW Southwest

3. TransGrid has indicated in its submission to the Inquiry, as well as being detailed in the 2004 Planning Report, that there is a restriction in the transmission system regarding electricity supply to the NSW southwest. The Department understands that this is a critical issue when the Lower Tumut – Wagga Wagga 330 kV line is interrupted. TransGrid indicates that consultation with VENCorp (Victoria) has identified that use of the market benefits limb of the Regulatory Test should be applied. Further, VENCorp has indicated that it is willing to allow Victorian import to be reduced such that increased demand at Wagga Wagga can be met. As such, it is not clear as to whether any augmentation to increase reliability of supply to Wagga Wagga would meet the Regulatory Test, or is, at this time, speculative. Comment is sought as to the likelihood of the upgrade of the Yass – Wagga Wagga 132 kV line being able to meet the market benefits limb of the regulatory Test.

4. The Department understands that the nature of the NSW southwest transmission system is such that in the event of no network augmentations to the region, to ensure increased demand

is able to be supplied to the NSW southwest, Victorian import would be required to decrease over time. Even with this consideration, the Department would consider that any additional electricity generation in Wagga Wagga would permit the electricity demand in Wagga Wagga to be met, with no decrease in Victorian import. This has led to concern in the local community that the bulk of electricity would be directed towards Victoria. While the Department considers that some electricity would be directed to Victoria, there are advantages regarding the supply of Wagga Wagga and the NSW southwest by having local generation in the region. TransGrid's comment is sought on this issue.

5. In the event of a critical outage of the Lower Tumut to Wagga Wagga transmission line the Department understands that the supply of electricity to Wagga Wagga and the NSW southwest is required to be superposed on the Victorian import via the Upper Tumut to Dederang lines. As such, the Department would consider that under such a scenario, the presence of the generation in the NSW southwest would relieve the constraints on this part of the transmission network. TransGrid's comments on this consideration are sought.

Networks Constraint between the NSW southwest and the Sydney and South Coast Regions

6. While TransGrid's submission refers to the constraints in transfer between the NSW southwest and Sydney during high generation in the Snowy and import into NSW from Victoria, it does not refer to the constraint for transmission into the NSW southwest. In the 2004 Planning Report, TransGrid states that the transmission system between Sydney/ Marulan and the NSW southwest is expected to need support to supply the growing NSW southwest load, and that reinforcement of the transmission network would also aid in the transfer of electricity between NSW and Victoria (page 67). In light of this is it possible that generation in the NSW southwest would help to alleviate this constraint?

QUESTIONS POSED TO THE CIVIL AVIATION AUTHORITY

7. CASA's submission to the Inquiry indicates that the Applicant would be required to pay for the re-configuration of the landing procedures as a result of impacts from the proposed power station on the flight paths into and out of Wagga Wagga airport. The Department would like to have a more detailed understanding of the impacts to flight paths as a result of the proposed power station, and the nature and extent of the measures which CASA considers necessary to be undertaken.

8. A concern of the local community is that the use of small aircraft, for the purposes of agricultural spraying on rural lands surrounding the proposed power station, would be restricted as a result of the power station. The Department requests CASA's view with regards to this matter, in particular whether CASA would support a restriction zone of this nature, and if so what the extent of such a restriction zone would be.

ATTACHMENT C – RESPONSES TO QUESTIONS

RESPONSES TO QUESTIONS POSED BY MR JAMES COLMAN (ON BEHALF OF THE URANQUINTY ACTION GROUP)

1. Electricity Infrastructure Augmentation

i. Under the heading *Department's position* on p.11 of the DIPNR primary submission, reference is made to the electricity transmission network, to the need to ensure that the network has the capability of transmitting power during peak demand times. Is DIPNR satisfied that the capacity of the local network is sufficient to accommodate the extra power which will be generated by the Wambo proposal without the need for augmentation?

No. At the Applicant's preferred level of redundancy, the Department understands that the local electricity transmission network (being the network between the proposed site and the Wagga Wagga substation) is not sufficient to accommodate the Applicant's proposed initial generation of 300 MW without transmission augmentation(s). The Department understands that further augmentation(s) may be necessary for the proposed ultimate generation of 600 MW.

ii. Evidence presented to the Commission to date suggests that the development of the GFPA at any one of the 3 alternative sites (Uranquinty, Boman, Gregadoo) would require some augmentation works to the existing electricity infrastructure. In the light of this information, will DIPNR review its p.11 "position" regarding the Wambo proposal?

The Department understands that the alternative sites would also require electricity transmission augmentation(s). This fact does not affect the Department's merit assessment of the subject development application undertaken to date.

2. Comparison of Alternatives

Table 5.1 on p.14 of the DIPNR primary submission purports to provide a comparison of the advantages and disadvantages of the sites at Uranquinty, Bomen and Gregadoo. the table is highly selective, and omits to mention that the Bomen site lies within an existing industrial estate (Park); is fully services; and has few if any environmental disadvantages (compared to Uranquinty). Why has this omission occurred?

Table 5.1 in the Department's primary submission summarises the Applicant's comparison of the alternative sites. Responsibility for selecting, justifying and applying selection criteria rests with the Applicant. As highlighted in its primary submission to the Inquiry, the Department considers that a reasonable process has been followed by the Applicant in selecting a proposed development site, although it is recognised that this process has not included detailed consideration of environmental planning issues. These issues, however, are the subject of the current environmental impact assessment process and will be considered in detail before any determination of the development application is made.

3. Planning Process

What statutory planning processes would be triggered if an upgrade to the electricity infrastructure became necessary as a result of an approval for the Wambo proposal?

Development of electricity transmission infrastructure by TransGrid is likely to be characterised as "permissible without development consent" and would be assessed in accordance with Part 5 of the *Environmental Planning and Assessment Act 1979*.

4. Strategic Planning in Wagga Wagga Area

On p3, s1.4 of the DIPNR primary submission, reference is made to the issue of "consistency with strategic planning objectives and compatibility with surrounding land uses" and related matters. It is also claimed (erroneously) at the foot of p.15 that

the location is 'rural residential' which is far from the case. UAG submits that in addressing strategic planning objectives and land use relationships, DIPNR must surely acknowledge that the subject locality has very high scenic value, that the area is rich prime crop and pasture land; that Wagga Wagga city's industries have located mainly to the north and east of the city centre; that Bomen is a designated industrial park; and that development of a 4-unit GFPW at Uranquinty would signal a major change of strategic direction for this highly productive broad-acre farming sector of the city. UAG requests DIPNR to comment on this possibility and its implications for the future growth of urban Wagga Wagga. On this matter, UAG seeks input from the DIPNR Queanbeyan Office on the strategic and regional planning aspects, given UAG's clear understanding that the Queanbeyan office (along with the Wagga Wagga office) has a significant advisory role in the Murrumbidgee-Murray region.

As highlighted in the Department's primary submission, the Department considers that issues of visual impacts, compatibility with surrounding land uses and possible land use conflicts have yet to be resolved to a point where an informed position of the acceptability of the proposal could be reached. In a strategic planning context, these matters must be weighed against the benefits and drawbacks of the proposal, the absence of similar developments in the area and the potential for the development to conflict with or otherwise impede orderly and economic development of surrounding land. There is currently no formal strategic or regional planning policy that dictates locational requirements for power station developments, or the longer-term vision for the locality. The strategic planning implications of the proposal must therefore be considered in the context with local environmental planning instruments, the requirements of the *Environmental Planning and Assessment Act 1979* and the environmental impacts of the proposal (including those matters yet to be resolved, such as visual amenity impacts).

5. Compliance with Director-General's Requirements

The DIPNR representative at the Wagga Wagga hearing claimed in his presentation that the EIS "generally and substantially complies with the Director-General's requirements". UAG disputes this claim. UAG asks DIPNR to provide evidence to support the claim having particular regard to the coverage of visual impact (including vapour plumes), site alternatives, support electrical infrastructure, and project description.

The Department is satisfied that the Applicant has substantially complied with the Director-General's requirements. With reference to your particular concerns:

i. Visual impact: The Applicant has undertaken a visual amenity impact assessment that takes into account sensitive and elevated receptors, as required to be included in the EIS. Notwithstanding, the Department considers that greater depth of assessment is required to inform an appropriate level of environmental impact assessment and has sought additional information from the Applicant in this regard. The Department understands that the proposal will not generate visible vapour plumes.

ii. Site alternatives: The EIS identifies a number of sites for its proposed development, based on the provision of natural gas, proximity to transmission infrastructure and other services. The Department is satisfied that an appropriate site selection process has been undertaken. It is the purpose of the assessment process to determine the level of any impacts, and the acceptability of those impacts, for this particular site.

iii. Support electrical infrastructure: This infrastructure lies outside the scope of the subject development proposal, and is therefore not considered in detail in the EIS. The Department recognises, however, that this matter requires further information from the Applicant to permit ad adequate level of assessment of the proposal, and has sought this information from the Applicant.

iv. Project description: The Department considers that the development application and EIS provide a reasonable description of the works for which development consent is sought.

6. Future Development at Uranquinty

i. At p.16 (2nd para) of DIPNR's primary submission, the Department notes that "there may be attractions to new industry in the Uranquinty area". What are these attractions, and why were they not specified in the submission?

Regarding the attractions for new industry in the Uranquinty area, the Department refers to infrastructure that may be required by such development, including proximity to electricity transmission and gas infrastructure, and the proximity to the regional road network. This issue is not explored in more detail in the Department's submission because it lies well outside the scope of the environmental impact assessment of the subject development proposal.

ii. Conversely, on p16, DIPNR offers that the Wambo proposal would not increase the attractions of the area for industry since there would be "no real advantages in locating industry directly adjacent to the development". UAG rejects this view, given the strongly industrial nature of the Wambo proposal, the fact that it is a 'first' in the valley, that it will be a potent reminder of the immediate availability of gas and power, and that it will be seen as a major symbol of technical progress – inviting more of the same. UAG believes that Wambo will set a precedent which will be difficult to resist. DIPNR is invited to comment on UAG's position.

The Department appreciates that there is a perception that the proposed development would attract future industrial development to the area, but considers that there is no technical argument to support the assertion that the proposal would increase the attractiveness of the area for industrial development, over and above its current state.

iii. Reference to NSW Agriculture's letter to DIPNR of 23 April suggests that NSW Ag is indifferent to the prospect of prime land at Uranquinty being lost to industry, notwithstanding that the an alternative site existing at Bomen. What is the DIPNR position on this issue, given that protection of prime crop and pastureland must surely be seen as central to planning for sustainability in the rural sector?

The Department agrees with the Department of Primary Industries (Agriculture) that the direct loss of prime agricultural land would be minimal due to the small footprint of the proposed development. Indirect impacts on agricultural land, through environmental impacts and strategic planning considerations, are currently the subject of a Commission of Inquiry.

7. Status of the Declaration by the Minister for Infrastructure and Planning on 20 January 2004 that Certain Development Described in the Declaration is State Significant Development

i. The purported development described in the Schedule 1 to the Declaration does not appear to be "development" as defined by the Environmental Planning and Assessment Act 1979. Rather, what is described appears to be the outcome of the construction of the proposed faculty referred to, with no mention of construction or operation. Please comment.

The declaration refers to the development in the context of the use of land for the purposes of a 600 MW open-cycle gas-fired power station and ancillary infrastructure. The use of the land for this purpose would necessarily require the construction and operation of such a facility.

ii. The site of the purported development is described as Lot DP 754573 and Lot 782 DP 878179 whereas the owner's consent attached to the DA refers to "a portion of those parcels" which portion is not particularised but apparently described in a Deed of Option dated 3 November 2003. Please comment.

The development application has been made in respect of the land described, and the Department notes that the Applicant intends only to affect part of that land in undertaking the proposed development.

iii. The development described in the Schedule to the declaration does not cover subdivision of Lots 76 DP 754573 and 782 DP 878179. Please comment.

Refer to point i) above. The Applicant may rely on the operation of section 76A(8) of the *Environmental Planning and Assessment Act 1979* for consideration of other aspects of the proposal.

8. Status of the Development Application

i. See Q.7 ii. above.

See response to 7. ii. above.

ii. Consent has not been sought in the Development Application to:

- **operate the proposed power station, notwithstanding Wambo's primary submission to the Commission of Inquiry that application was for consent for the construction and operation of the proposed power station; or**
- **construct the necessary electricity transmission infrastructure.**

The development application includes the supporting Environmental Impact Statement (EIS). The Department considers that the development application, including the EIS, clearly indicates that the Applicant intends to construct and operate the proposed power station. The Department agrees that the development application includes provision of transformers and switchgear to connect to the transmission network, but does not include augmentations to that network.

iii. On page 2 of the DA it is indicated thast onsent is sought for subdivision of Lot 76 DP 754573 and Lot 782 DP 878179 into two allotments. However, nor detail has been provided and no plan of proposed subdivision accompanies the DA. Furthermore, the specific parcel of landto be developed is nowhere identified. Please comment.

The Department agrees that the Applicant has not included any details in relation to the subdivision of the relevant lots.

iv. There are no plans, architectural or engineering cross sections or elevations, to a scale which enables proper assessment, included in the EIS. The site plan is dubious as its contours do not appear to match those of the immediate locality. Please comment.

The Department agrees that clearer details of these matters could be provided and specifically sought additional consideration by the Applicant of the measures to reduce any visual impact, and identification of any residual visual impact from the proposed development.

v. Examination of DIPNR's primary submission to the Commission of Inquiry does not reveal that any request has been made by DIPNR to Wambo for any information about the additional infrastructure which would be required to enable connection to be made to the 330 kV network, upon the construction of the proposed second pair of turbines. There can be no doubt that transmission infrastructure for connection to the 330 kV network would be likely o have an additional visual impact. Please comment. If such a request has been made, please provide a copy.

The Department has sought additional information from the Applicant in relation to visual amenity impacts associate with all works covered by the subject development application.

vi. See Q.8. ii.

As subdivision of Lots 76 DP 754573 and 782 DP 878179 is not covered int eh development described in the Schedule to the Minister's Declaration, the

development application is not capable of determination by the Minister in relation to such subdivision.

Refer to response at 7. iii.

9. Legal Consequences
Depending upon your responses to Question 6 and 7 above, what legal consequences follow?

The Department notes that, while the development application form refers to subdivision, the EIS does not provide any information detailing the nature of the subdivision, nor does it address the relevant additional clauses in the *Wagga Wagga Rural Local Environmental Plan 1991*. This matter must be resolved before the Minister could determine any proposal including subdivision of the land. Alternatively, the Applicant may wish to exclude subdivision from the subject development application. The Department considers that any decision made by the Applicant in this regard should be comprehensively and publicly assessed through the Commission of Inquiry process.

RESPONSES TO QUESTIONS POSED BY MR JIM REES

What research was done by DIPNR on demand management, distributed generation & energy efficiency alternatives to the UGFPS? (please quote docs). What role does DIPNR have in assessing the ESD section of the EIS & how much time was devoted to it in this case? How long did the total EIS assessment process take DIPNR? And finally, an EIS is a complex document, are there weightings for different sections & if so how are they determined?

- The Department used the analysis and findings from the following documents in considering the justification of the proposed development: TransGrid's *Planning Report 2004* (and 2003), NEMMCO's *Statement of Opportunities 2003*, and the former Ministry of Energy and Utilities' (now Department of Energy, Utilities and Sustainability) *Statement of System Opportunities 2002*. These documents model the short to medium term demand and supply balance for electricity, and include various assumptions relating to predicted changes to both supply of electricity (including increasing renewable energy) and demand patterns (including impacts from demand management initiatives).
- The Department is responsible for undertaking an assessment of the proposed development in accordance with the relevant provisions of the *Environmental Planning and Assessment Act 1979*. This includes consideration of ESD. The Department has not kept of record of how much time has been devoted to different parts of the assessment.
- The Department has not kept a record of the amount of time spent on the assessment of the proposed development. The subject assessment has been on-going since the application was lodged in February 2004.
- The Department does not specify any formal weighting of different sections of the EIS. The level of the assessment provided for any particular issue reflects the significance of that issue in the context of both environmental planning and community interest and concern.

RESPONSES TO QUESTIONS POSED BY MR ANDREW PETERSEN (PRICEWATERHOUSECOOPERS LEGAL)

In respect to the permissibility of the zoning of land for the proposed Wagga Wagga power station, does the Department agree that the appropriate interpretation of the zoning objectives is on the basis of the following words, "not inconsistent with"?
The Department does not agree with your assertion that the appropriate interpretation of the requirement for consistency with the zone objectives in the *Wagga Wagga Rural Local Environmental Plan 1991* (the Plan), is on the basis of being "not inconsistent with" the objectives of the zone. The Department's position is based on clause 9(3) of the Plan, which requires (Department's highlighting added):

" *…except as otherwise provided by this plan, the Council shall not grant consent to the carrying out of development on land to which this plan applies unless the [consent authority] is of the opinion that the carrying out of the development* ***is consistent with*** *the objectives of the zone within which the development is proposed to be carried out*"

In respect to the use of diesel fuel as an emergency back-up fuel supply source in the event that gas supplies are not available for the proposed Wagga Wagga power station, does the Department require the proponent to provide a health assessment relating to the use of diesel fuel for around 70 hours per annum? If so, does the Department agree that the appropriate methodology for such a health assessment be on the basis of an average emission rate of each pollutant, and conduct dispersion modelling to estimate the annual average ground-level concentration?

The Department considers it is the Applicant's responsibility to select, justify and apply adequate and appropriate assumptions and methodologies to the assessment of potential environmental health impacts. The Department recognises that a number of different, yet equally applicable assessment approaches may be applied to demonstrate whether the proposal can be constructed and operated within acceptable health limits. You may wish to consider guidance presented in the Department's document *Multi-Level Risk Assessment* in determining the level and detail of risk assessment that may be appropriate in this circumstance.

RESPONSES TO QUESTIONS POSED BY THE COMMISSION

Please submit in writing the DIPNR's comments to the Commission concerning a draft SEPP for energy.

The Director-General has endorsed the development of an Energy Sector Strategy as a key Flagship Project for the Department. The ultimate aim of the Strategy is to form the key statutory and planning policy underpinning the Department's assessment and management of development and infrastructure relating to the stationary energy sector. It would also form part of the Government's broader energy policy platform. While the Department has undertaken considerable consultation with industry and within Government to scope the important issues confronting the stationary energy sector, at this stage, no formal recommendation or request to prepare a draft SEPP has been made under section 37 of the *Environmental Planning and Assessment Act 1979* (the Act). As such, there is no draft environmental planning instrument for consideration in the context of the proposed development, and within the meaning of section 79C of the Act.

Please describe the process for assessing upgrading which may be required to the transmission grid if the proposal is approved.

Development of electricity transmission infrastructure by TransGrid is likely to be characterised as "permissible without development consent" and would be assessed in accordance with Part 5 of the *Environmental Planning and Assessment Act 1979*.