

## **Appendix E**

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Statement of Commitments



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## Schedule 1: Description of the Activity

The Activity is the Munmorah Gas Turbine Facility as described in the:

- *Munmorah Gas Turbine Facility Environmental Assessment* prepared by Parsons Brinckerhoff for Delta Electricity dated November 2005
- *Munmorah Gas Turbine Facility Submissions Report* prepared by Parsons Brinckerhoff for Delta Electricity dated **[date to be inserted]**
- *Munmorah Gas Turbine Facility Preferred Project Report* (if required) prepared by Parsons Brinckerhoff for Delta Electricity dated **[date to be inserted].**

## Schedule 2: Statement of Commitments

### **Definitions**

*Acid sulfate soils*

naturally acid clays, mud and other sediments usually found in swamps and estuaries. These may become extremely acidic when drained and exposed to oxygen, and may produce acidic leachate and run-off which can pollute receiving waters and liberate toxins

*Activity*

the Activity is as described in Schedule 1

*Ancillary Facility*

temporary facility for Construction that does not form part of the Activity. Examples are an office and amenities compound, batch plant (concrete or bitumen), materials storage compound

*Construction*

includes all work in respect of the Activity other than survey, acquisitions, fencing, investigative drilling or excavation, building/road dilapidation surveys, minor clearing (except where threatened species, populations or ecological communities would be affected), establishing site compounds (in locations meeting the criteria of the Conditions), or other activities determined by the EMR to have minimal environmental impact (e.g. minor access roads, minor adjustments to services/utilities, etc.)

*Council*

Wyong Shire Council

*Department, the*

the NSW Department of Planning

*Director-General, the*

Director-General of the Department of Planning (or delegate)

*Director-General's Agreement*

a written advice from the Director-General (or delegate)

*Environmental Assessment*

means the environmental assessment for the Munmorah Gas Turbine Facility prepared by Parsons Brinckerhoff dated November 2005

*EMR*

an independent environmental auditor appointed with the approval of the Director-General to audit The Proponent's performance in implementation of the CEMP. Refer to Schedule 2, Clause 13.

*Minister, the*

NSW Minister for Planning

*Operation*

means the Operation of the Activity, but does not include commissioning trials of equipment or temporary use of parts of the Activity during Construction

*Proponent, the*

Delta Electricity

*Publicly Available*

available for inspection by a member of the general public (for example available on an internet site or at a display centre)

*Reasonable and Feasible*

consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. Feasible relates to engineering considerations and what is practical to build. Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and nature and extent of potential improvements

*Sensitive Receiver*

residence, education institution (eg school, TAFE college), health care facility (eg nursing home, hospital), religious facility (eg church), public theatre and public art gallery

*Site*

the land to which this Statement of Commitments applies

*Statement of Commitments*

refers to this document

*Submissions Report*

Munmorah Gas Turbine Submissions  
Report prepared by Parsons  
Brinckerhoff for Delta Electricity  
**[date to be inserted]**

### **Abbreviations**

dBa	decibel, 'A' weighted scale
CEMP	construction environmental management plan
DEC	Department of Environment and Conservation. Also includes the Environment Protection Authority and the National Parks and Wildlife Service
EMP	environmental management plan
EMR	environmental management representative
L <sub>A90</sub>	the noise level exceeded for 90% of a monitoring period, also referred to as the background noise level
L <sub>A10</sub>	sound pressure level exceeded for 10% of a monitoring period
L <sub>A10, 15 min</sub>	sound pressure level exceeded for 10% of the time over a 15 minute period
OEMP	operation environmental management plan
RTA	NSW Roads and Traffic Authority

## **Administrative**

### ***The Activity***

1. The Proponent will carry out the Activity consistent with:
  - a) the procedures, identified plans, safeguards and mitigation measures identified in the Environmental Assessment prepared by Parsons Brinckerhoff and dated November 2005, as modified by the Submissions Report
  - b) this Statement of Commitments.

This Statement of Commitments prevails in the event of any inconsistency with the requirements for the Construction and Operation of the Activity arising out of the documents described in (a) above.

2. The Proponent acknowledges that this Statement of Commitments does not relieve it in any way from its obligations under any other Act.

### ***Statutory requirements***

3. The Proponent will ensure that all licences, permits and approvals are obtained and kept up-to-date as required throughout the Construction and Operation of the Activity. This Statement of Commitments does not remove any obligation of the Proponent to obtain, renew or comply with such licences, permits or approvals.

### ***Compliance***

#### *General*

4. The Proponent will ensure compliance with all of this Statement of Commitments and will implement any measures arising from this Statement of Commitments.
5. The Proponent will bring to the Director-General's attention any matter that may require further assessment by the Director-General.
6. The Proponent will comply with any requirements of the Director-General arising from the Director-General's assessment of:
  - a) any reports, plans or correspondence that are submitted to satisfy this Statement of Commitments
  - b) the implementation of any actions or measures contained in such reports, plans or correspondence.

#### *Pre-Construction Compliance Report*

7. The Proponent will prepare and submit a Pre-Construction Compliance Report to the Director-General at least four weeks before Construction commences (or within any other time agreed to by the Director-General).



The Pre-Construction Compliance Report will include:

- a) details of how the Commitments required to be addressed before Construction were complied with
- b) the time when each relevant Commitment was complied with, including dates of submission of any required reports and/or approval dates
- c) details of any approvals or licences required to be issued by government departments before Construction commences.

The Pre-Construction Compliance Reports will be made Publicly Available.

*Construction commencement*

- 8. The Proponent will notify the Director-General and all relevant authorities in writing at least four weeks prior to the commencement of Construction.

*Construction Compliance Reports*

- 9. The Proponent will provide the Director-General, Council and any other government department nominated by the Director-General with Construction Compliance Reports. The Environmental Management Representative will review the Construction Compliance Reports before they are submitted to the Director-General and bring to the Director-General's attention any shortcomings.

The first Construction Compliance Report will report on a time interval agreed to by the Director General. The second, and subsequent, Construction Compliance Reports will be submitted within agreed intervals from the date of submission of the first Construction Compliance Report for the duration of Construction and the final Construction Compliance Report will be submitted prior to demobilisation of the civil construction workforce.

The Construction Compliance Reports will include information on:

- a) compliance with the CEMP and this Statement of Commitments
- b) compliance with any approvals or licences issued by the RTA, the DEC or other government departments for Construction
- c) the implementation and effectiveness of environmental controls. The assessment of effectiveness will be based on a comparison of actual impacts against performance criteria identified in the CEMP
- d) environmental monitoring results, presented as a results summary and analysis
- e) the number and details of any complaints, including a summary of main areas of complaint, action taken, response given and intended strategies to reduce recurring complaints
- f) details of any review and amendments to the CEMP resulting from Construction during the reporting period

- g) any other matter relating to compliance with the Statement of Commitments or as requested by the Director-General.

The Construction Compliance Reports will be made Publicly Available.

*Pre-Operation Compliance Report*

- 10. The Proponent will submit a Pre-Operation Compliance Report to the Director-General at least four weeks before Operation commences (or within any other time agreed to by the Director-General).

The Pre-Operation Compliance Report will include:

- a) details of how the Commitments required to be addressed before Operation were complied with
- b) the time when each of the relevant Commitments was complied with, including dates of submission of any required reports and/or approval dates
- c) details of any approvals or licences required to be issued by government departments before Operation commences.

The Pre-Operation Compliance Report will be made Publicly Available.

*Operation commencement*

- 11. The Proponent will notify the Director-General and all relevant authorities in writing at least four weeks prior to the commencement of Operation.

***Environmental impact audits***

*Environmental Impact Audit Report - Construction*

- 12. The Proponent will prepare an Environmental Impact Audit Report - Construction and submit it to the Director-General at a time interval agreed to by the Director-General. The Environmental Impact Audit Report – Construction will also be submitted to other government departments upon the request of the Director-General.

The Environmental Impact Audit Report – Construction will:

- a) identify the major environmental controls used during Construction and assess their effectiveness
- b) summarise the main environmental management plans and processes implemented during Construction and assess their effectiveness
- c) identify any innovations in Construction methodology used to improve environmental management
- d) discuss the lessons learnt during Construction, including recommendations for future Activities.

### **Construction Environmental Management Plan**

13. The Proponent will prepare and implement a CEMP in accordance with this Statement of Commitments and all relevant Acts and Regulations. The Proponent will obtain the Director-General's approval for the CEMP before Construction commences or within any other time agreed to by the Director-General. The CEMP will be reviewed by the EMR before the Proponent seeks the Director-General's approval for the Plan. The EMR will be required to bring to the Director-General's attention any shortcomings.

The Proponent will ensure that the mitigation measures identified in the Environmental Assessment, Submissions Report and in this updated Statement of Commitments are incorporated into the CEMP.

The CEMP will:

- a) state how the Construction related mitigation measures identified in the Environmental Assessment will be implemented
- b) include a Construction program, identifying Construction activities and their location and timing
- c) cover any relevant environmental elements identified in any environmental due diligence investigations undertaken by, or on behalf of, the Proponent
- d) contain the following Sub-plans prepared in accordance with this Statement of Commitments:
  - i. a Flora and Fauna Sub-plan.
  - ii. an Indigenous Heritage Management Sub-plan.
  - iii. a Construction Noise Management Sub-plan.
  - iv. an Acid Sulfate Soil Management Sub-plan
  - v. an Erosion and Sediment Control Sub-plan
  - vi. a Surface Water Management Sub-plan
  - vii. a Dust Management Sub-plan
  - viii. a Traffic Management Sub-plan
  - ix. Waste Management and Re-use Sub-plan(s)
- e) be Publicly Available
- f) include a community consultation and notification strategy (including local community and businesses and Council) that is prepared in accordance with this Statement of Commitments and which includes a Construction program that describes:

- i. details of any traffic disruptions and controls
  - ii. construction of temporary detours
  - iii. details of any passenger rail disruptions and alternative transport arrangements
  - iv. work approved to be undertaken outside standard Construction hours, in particular noisy works, before such works are undertaken
  - v. a complaints management system
- g) include environmental management details such as:
- i. identification of statutory obligations that the Proponent is required to fulfil during Construction, including all approvals and licences
  - ii. an environmental management structure indicating the responsibility, authority and accountability of personnel relevant to the CEMP
  - iii. the role of the EMR and identification of Construction activities requiring EMR attendance
  - iv. details of the Construction personnel induction and training program
  - v. emergency response procedures
- h) include implementation details such as:
- i. identification of relevant environmental elements
  - ii. measures to avoid and/or control environmental impacts
  - iii. the tools to be used to implement the CEMP such as plans, schedules and work instructions
- i) include monitoring and review details such as:
- i. performance criteria
  - ii. performance monitoring methods
  - iii. auditing and corrective actions procedures
  - iv. CEMP review procedures.

### ***Operation Environment Management Plan***

14. The Proponent will manage Operation of the Activity in accordance with its own environmental management system, which is aligned with international standard ISO14001:2004, to the extent that it is applicable to the Activity. The Proponent will provide details of this system to the Director-General to demonstrate its applicability to the Activity.

15. Alternatively, should the Proponent decide not to operate the Activity in accordance with its own environmental management systems, it will prepare and implement an OEMP in accordance with this Statement of Commitments and all relevant Acts and Regulations. Any OEMP prepared will
- a) identify the Operation activities
  - b) cover relevant environmental elements arising from any environmental due diligence investigations or as required to satisfy any licence or approval
  - c) be made Publicly Available
  - d) include environmental management details such as
    - i. identification of statutory obligations which the Proponent is required to fulfil during the Activity's Operation, including all approvals and licences
    - ii. an environmental management structure indicating the responsibility, authority and accountability of personnel relevant to the OEMP
    - iii. details of a personnel induction and training program
    - iv. emergency response procedures
  - e) include implementation details such as:
    - i. identification of relevant environmental elements
    - ii. measures to avoid and/or control environmental impacts
    - iii. the tools to be used to implement the OEMP such as plans, schedules and work instructions
  - f) include monitoring and review details such as:
    - i. performance criteria
    - ii. performance monitoring methods
    - iii. auditing and corrective actions procedures
    - iv. OEMP review procedures.

### ***Environmental management system***

16. The Proponent will ensure that any appointed Construction and/or Operation head contractor(s) have an environmental management system that is aligned to the requirement of AS/NZS ISO 14000 series and/or have a proven environmental management performance record.

### ***Environmental Management Representative***

17. The Proponent will request the Director-General's approval for the appointment of an EMR at least four weeks before Construction commences (or within any other time agreed to by the Director-General). In its request, the Proponent will provide the:
  - a) qualifications and experience of the EMR including demonstration of general compliance with relevant Australian Standards for environmental auditors, including AS/NZS ISO 14012:1996 *Guidelines for Environmental Auditing: Qualification Criteria for Environmental Auditors*
  - b) role and responsibility of the EMR
  - c) authority and independence (from the Proponent or its contractors) of the EMR, including details of the Proponent's internal reporting structure
18. The EMR will be available:
  - a) for sufficient time to undertake the EMR role. This timing will be agreed between the Proponent and the EMR and advised to the Director-General in the request for approval
  - b) at any other time requested by the Director-General
  - c) during any Construction activities identified in the CEMP that require the EMR's attendance
  - d) for the duration of Construction.
19. The EMR will have responsibility for:
  - a) considering and advising the proponent on matters specified in this Statement of Commitments and compliance with such
  - b) certifying all activities defined by the proponent as not constituting Construction as having minor environmental and/or community impacts
  - c) periodically monitoring the Proponent's environmental activities to evaluate the implementation, effectiveness and level of compliance of on-site Construction activities with the CEMP and associated plans and procedures, including carrying out site inspections at least fortnightly
  - d) recording and providing a written report to the proponent on non-conformances with the CEMP and requirements of the Proponent to undertake mitigation measures to avoid or minimise any adverse impacts on the environment including reporting required changes to the CEMP
  - e) directing the Proponent to stop work immediately where considered necessary, if in the view of the EMR an unacceptable impact on the environment is likely to occur, or require other reasonable steps to be taken to avoid or minimise any adverse impacts

- f) reviewing corrective and preventative actions to ensure the implementation of recommendations made from the audits and site inspections
23. The Proponent understands that the Director-General may at any time immediately revoke the approval of an EMR appointment by providing written notice to the Proponent. Interim arrangements for EMR responsibility following the revocation will be agreed in writing between the Director-General and the Proponent.
24. The Proponent understands that the Director-General may at any time conduct an audit of any actions undertaken by the EMR. The Proponent will:
- a) facilitate and assist the Director-General in any such audit
  - b) include in the conditions of the EMR's appointment the need to facilitate and assist the Director-General in any such audit.
25. The Proponent will authorise the EMR to:
- a) consider and advise the Director-General and the Proponent on matters specified in the Statement of Commitments and compliance with such
  - b) determine whether work falls within the definition of Construction where clarification is requested by the Proponent
  - c) review the CEMP
  - d) periodically monitor the Proponent's activities to evaluate compliance with the CEMP. Periodic monitoring will involve site inspections of active work sites at least fortnightly
  - e) provide a written report to the Proponent of any non-compliance with the CEMP observed or identified by the EMR. Non compliance will be managed as identified in the CEMP.
  - f) issue a recommendation to the Proponent to stop work immediately if in the view of the EMR an unacceptable impact on the environment is occurring or is likely to occur. The stop work recommendation may be limited to specific activities causing an impact if the EMR can easily identify those activities. The EMR may also recommend that the Proponent initiate reasonable actions to avoid or minimise adverse impacts
  - g) review and monitor corrective and preventative actions arising from the implementation of recommendations made from Environmental Impact Audits or any other site inspections
  - h) reviewing and approving minor revisions
  - i) certify that minor revisions to the CEMP are consistent with the approved CEMP

- j) provide regular (as agreed with the Director-General) reports to the Director-General on matters relevant to carrying out the EMR role, including notifying the Director-General of any stop work recommendations.

The EMR will immediately advise the Proponent and the Director-General of any incidents relevant to this Statement of Commitments resulting from construction that is not dealt with expediently or adequately by the Proponent.

## **Communication and consultation**

### ***Contact telephone number***

- 26. Prior to the commencement of Construction, the Proponent will institute, publicise and list with a telephone company a 24 hour toll-free complaints contact telephone number, which would enable any member of the general public to reach a person who can arrange an appropriate response to the complaint.

### ***Advertisement of activities***

- 27. Prior to the commencement of Construction, the proponent will undertake consultation with Council and the local community, including all affected landowners and occupiers along the route. As a minimum, the Proponent will, prior to the Commencement of Construction, and then at three-monthly intervals during Construction, advertise in relevant local newspapers the proposed works for the forthcoming three months, the areas in which these works are proposed to occur, the hours of construction and the 24 hour toll-free complaints contact telephone number. The Proponent will ensure that the local community is kept informed of the progress of the Activity, including but not limited to prior notice of:

- a) the nature of the works proposed for the following period
- b) the 24 hour toll-free complaints contact telephone number
- c) any traffic disruptions or controls or changes to property access
- d) any irregular work practices such as the use of helicopters
- e) individual's rights under the Statement of Commitments
- f) the Activity internet site.

- 28. The Proponent will establish an Activity internet site (that may be part of the Proponent's existing internet site) prior to the commencement of Construction and maintain the internet site until 12 months after commencement of Operation of the Activity. This internet site will contain:

- a) periodic updates of work progress, consultation activities and planned work schedules. The site will indicate the date of the last update and the frequency of the internet site updates



- b) a description of relevant approval authorities and their areas of responsibility
- c) a list of reports and plans that are Publicly Available under this Statement of Commitments and details of how these can be accessed
- d) contact names and phone numbers of relevant communications staff
- e) the 24 hour toll-free complaints contact telephone number.

The Proponent will provide updates of work progress, Construction activities and planned work schedules where significant changes in noise or traffic impacts are expected.

29. The Proponent will consult adjacent property owners about implementing mitigation measures that affect their property. Mitigation measures will be implemented according to a program derived from that consultation if consistent with this Statement of Commitments.

### ***Dispute resolution***

30. In the event that a dispute arises between the proponent and Council or the proponent and a public authority other than the Department in relation to a specification or requirement applicable under this Statement of Commitments, the proponent will refer the matter to the Director-General or, if not resolved, to the Minister. The Proponent will regard the determination of the dispute as final and binding.

### ***Construction Complaints Management System***

31. The Proponent will prepare and implement a Construction Complaints Management System before Construction commences and maintain the System for the duration of Construction. The Construction Complaints Management System will be consistent with AS 4269 *Complaints Handling* and include:
  - a) a 24 hour, toll-free telephone number listed with a telephone company and advertised
  - b) a system to receive, record, track and respond to complaints within a specified timeframe. When a complaint cannot be responded to immediately, a follow-up verbal response on what action is proposed will be provided to the complainant within two hours during night-time works and 24 hours at other times
  - c) a process for the provision of a written response to the complainant within 10 days, if the complaint cannot be resolved by the initial or follow-up verbal response
  - d) a mediation system for complaints unable to be resolved.

Information on all complaints received, including the means by which they were addressed and whether resolution was reached with or without mediation, will be

included in the Construction Compliance Reports and will be made available to the Director-General on request.

## **Air quality**

### ***Dust Management Sub-plan***

32. The Proponent will prepare a Dust Management Sub-plan as part of the CEMP. This Sub-plan will include:
- a) potential sources of dust
  - b) dust management objectives consistent with the DEC guidelines
  - c) mitigation measures to be implemented, including measures during weather conditions where high level dust episodes are probable (such as strong winds in dry weather)
  - d) a progressive rehabilitation strategy for exposed surfaces with the aim of minimising exposed surfaces.

### ***Construction***

33. The Proponent will maintain Construction vehicles using sealed roads to prevent any loss of load, whether dust, liquid or soils. Facilities will be provided at exit points of all Construction sites/compounds to minimise tracking mud, dirt or other material onto a public road or footpath. In the event of any spillage, the Proponent will remove the spilled material as soon as practicable within the working day of the spillage.
34. The Proponent will ensure that all plant and equipment used in Construction of the Activity is:
- a) maintained in a proper and efficient condition
  - b) operated in a proper and efficient manner.

### ***Operations***

#### *Monitoring and discharge points*

35. For the purpose of this Statement of Commitments, air monitoring/air discharge points shall be identified as provided in *Table D.1*.

**Table D.1 Identification of air emissions monitoring points**

<b>Monitoring/discharge point identified</b>	<b>Monitoring/discharge point description</b>
1	Turbine Stack 1
2	Turbine Stack 2
3	Turbine Stack 3
4	Turbine Stack 4

*Odour*

36. The Proponent will design, construct, operate and maintain the Activity to prevent the emission of any offensive odour from the Site that is attributable to Construction and Operation of the Activity. For the purpose of this commitment, 'offensive odour' has the same meaning as defined under the NSW *Protection of the Environment Operations Act 1997*.

*Dust emissions*

37. The Proponent will design, construct, operate and maintain the Activity in a manner that minimises dust emissions from the Site. The Proponent will prepare a Dust Management Sub-plan as part of the CEMP. The Sub-plan will be prepared in consultation with the DEC and Council and will include details of all procedures to be implemented during Construction to suppress dust generation.

*Discharge limits*

38. The Proponent will design, construct, operate and maintain the Activity to ensure that at the monitoring points identified in Table D.1, the concentration of pollutants does not exceed the maximum allowable discharge concentration limit specified in any Environmental Protection Licence issued by the DEC for the Activity under the *Protection of the Environment Operations Act 1997*.

39. The Proponent will:

- a) undertake a review of stack emission data and modelled predictions of air emissions during detailed design of the Activity once actual plant specifications and characteristics are known to confirm compliance with the Activity's air quality goals
- b) undertake stack monitoring during commissioning of the Activity to verify the stack parameters and air emission estimates used in the Environmental Assessment
- c) fit each of the four exhaust stacks with in-stack monitoring equipment linked to the continuous emissions monitoring systems that will form part of the Activity's automated process control system
- d) use existing ambient air quality monitoring sites at Lake Munmorah and Wyee to set baseline ambient air levels for NO<sub>x</sub>, SO<sub>x</sub> and PM<sub>10</sub>. The Proponent may establish additional ambient air quality monitoring sites should adverse monitoring trends be observed during Operation of the Activity that require

the collection of additional ambient air quality monitoring data to determine the cause of any such adverse monitoring trend

- e) design the air quality monitoring system to meet the requirements of any Environmental Protection Licence issued by the DEC to regulate the operation of the Activity.

## **Flora and fauna**

### **Construction**

- 40. The Proponent will prepare a Flora and Fauna Management Sub-plan as part of the CEMP. The Sub-plan will be prepared in consultation with the DEC and Council and will include:

- a) plans showing terrestrial and aquatic vegetation communities; important flora and fauna habitat areas; locations where threatened species, populations or ecological communities were recorded (including *Angophora inopina*); and areas to be cleared. The plans will also identify vegetation adjoining the Activity where this contains important habitat areas and/or threatened species, populations or ecological communities
- b) methods to manage impacts on flora and fauna species (terrestrial and aquatic) and their habitat which may be directly or indirectly affected by the Activity. These will include:
  - i. procedures for vegetation clearing, soil management and managing other habitat damage (terrestrial and aquatic) during Construction. Specific tree clearing protocols will be documented, including the following:
    - ▶ minimise clearing and soil disturbance, especially near *Angophora inopina*, a threatened species
    - ▶ except for trenching, vegetation clearing to remove only above-ground tree parts, leaving soil profile and root systems undisturbed
    - ▶ shaking the tree using a bulldozer
    - ▶ slowly pushing the tree to the ground so that it largely remains intact
    - ▶ leaving the tree in place once felled for at least one day/night before removing to allow animals to relocate to nearby vegetation
    - ▶ ensuring all contractors have the contact numbers of wildlife rescue groups should animals be injured during clearing
    - ▶ where possible, undertaking vegetation clearing during September/October or March/May to avoid summer breeding seasons and the winter hibernation for hollow dependent species.
  - ii. a protocol for clearing in Squirrel Glider Habitat, similar to the following measures:

- ▶ Squirrel Glider habitat trees in the area to be cleared are to be identified by survey and marked
  - ▶ marked habitat trees, and corridors of retained trees linking marked habitat trees with the nearest uncleared (secure) habitat areas, to be left standing after initial vegetation clearing, for a period of at least three weeks (to encourage gliders to disperse into adjacent uncleared habitat)
  - ▶ after the three week waiting period standing habitat trees and corridors may be felled commencing with the most distant trees from secure habitat
  - ▶ where possible, clearing should be undertaken in the Spring to Autumn period to facilitate survival of displaced animals
  - ▶ if habitat trees are in short supply (< 4 suitable trees per hectare) artificial nest sites (nest boxes) may be installed in adjacent (secure) habitat before clearing
- iii. methods to protect vegetation both retained within, and also adjoining, the Activity from damage during Construction, including:
- ▶ colour tape or 'parawebbing' be used to delineate the maximum work area, to be implemented before starting work. Tape to be immediately replaced if disturbed
  - ▶ limiting soil disturbance and installing sediment control devices before clearing vegetation, to prevent impacts on surrounding vegetation and creeks
  - ▶ avoid compaction within the root zone by not parking or storing construction equipment or stockpiling materials under trees
- iv. a habitat tree management program including fauna recovery procedures and habitat maintenance (e.g. relocating hollows or installing nesting boxes), such as:
- ▶ dead logs within the development footprint should be moved to an adjacent area outside the footprint, thus minimising habitat loss
- v. where possible, and where consistent with the DEC or NSW Fisheries requirements, strategies for re-using in rehabilitation works individuals of any threatened plant species that would be otherwise be destroyed by the Activity
- vi. use directional drilling under creeks, wetlands of local significance, and wetland buffers to limit impacts on amphibians
- vii. cover trenches at the end of each workday to prevent accidental trapping of animals
- viii. restrict access for workers, their equipment, and vehicles, to the powerline easement and designated access tracks only. No access to surrounding bushland.

- ix. performance criteria against which to measure the success of the methods
- c) rehabilitation details, including:
  - i. identification of locally native species to be used in rehabilitation and landscaping works, including flora species suitable as a food resource for threatened fauna species
  - ii. where possible, seed of locally native species within the Activity will be collected before Construction commences to provide seed stock for revegetation and landscaping works
  - iii. methods to re-use topsoil (and where relevant subsoils) and cleared vegetation:
    - ▶ vegetative material removed along the easements should be retained in the area it was removed from, to maintain the nutrient balance. The material is to be chipped or mulched and spread around the towers to reduce regrowth, unless otherwise requested or agreed to by the DEC.
    - ▶ weeds should not be mulched, but bagged and removed from site
  - iv. measures for the management and maintenance of all preserved, planted and rehabilitated vegetation (including aquatic vegetation)
- d) a Weed Management Strategy including:
  - i. identification of weeds within the Activity and adjoining areas
  - ii. weed eradication methods and protocols for the use of herbicides
  - iii. methods to treat and re-use weed infested topsoil
  - iv. strategies to control the spread of weeds during Construction, including:
    - ▶ thoroughly cleaning soil, seeds and plant material from vehicles and other equipment (including boots) before entering or leaving a site
- e) a program for reporting on the effectiveness of terrestrial and aquatic flora and fauna management measures against the identified performance criteria. Management methods will be reviewed where found to be ineffective.

## **Indigenous heritage**

41. Prior to the commencement of Construction, the Proponent will undertake the following:
- a) submit site cards for sites IA1, IA2 and IA3 in area E (Thompson Vale Road to the Main Northern Railway Line) to the DEC for registration under the Aboriginal Heritage Information Management System (AHIMS) database

- b) arrange for the issue of a preliminary research permit by the DEC in accordance with Section 87 of the NSW *National Parks and Wildlife Act 1974* for preliminary archaeological test excavations in the vicinity of artefact scatter sites AS1 and AS2 and, following the issue of this permit, arrange for a suitably qualified archaeologist to design and undertake the excavations in partnership with representatives from the Darkinjung Local Aboriginal Land Council. On completion, lodge site cards with updated information and site descriptions with the DEC.
  - c) following the preliminary archaeological test excavation, if destruction or disturbance of artefact scatter sites AS1 and AS2 is found to be unavoidable during the detail design of the Activity, lodge a request with the DEC for a Section 90 Consent permit.
42. The Proponent will invite the Darkinjung Local Aboriginal Land Council to have a representative present on the Site during those Construction activities in which the Darkinjung Local Aboriginal Land Council has previously expressed an interest.

### ***Indigenous heritage management***

43. The Proponent will prepare an Indigenous Heritage Management Sub-plan as part of the CEMP. This Sub-plan will be prepared in consultation with the DEC and will include:
- a) details of any archaeological investigations to be undertaken and any associated licences or approvals required
  - b) procedures to be implemented if previously unidentified Aboriginal objects are discovered during Construction. If such objects are discovered, the Proponent will cease all work in the vicinity of the discovered objects and will inform the DEC and the Darkinjung Local Aboriginal Land Council in accordance with the *National Parks and Wildlife Act 1974*
  - c) an awareness program for Construction personnel on their obligations for Aboriginal cultural materials, which will be incorporated into site induction training, including a briefing on the potential of uncovering archaeological objects around swamps and wetlands and their marginal areas
  - d) specific procedures for the management of earthworks in area D (The Link Road to Thompson Vale Road) that include the following:
    - i. arranging for a suitably qualified archaeologist to undertake archaeological monitoring and testing in partnership with the Darkinjung Local Aboriginal Land Council prior to the commencement of earthworks and also during earthworks
    - ii. assigning the archaeologist the authority to halt Construction works in this area in order to undertake further investigation or detailed recording of any Aboriginal archaeological remains exposed during the monitoring process

- iii. lodging a request with the DEC for a Section 90 Consent permit should disturbance of the Aboriginal archaeological remains be determined by the Proponent to be unavoidable, and only re-commencing Construction works following the issue of a permit.

## **Noise**

### ***Construction Noise Management***

44. The Proponent will prepare a Construction Noise Management Sub-plan as part of the CEMP. This Sub-plan will include:
- a) an awareness program for construction personnel on noise minimisation, which will be incorporated into site induction training
  - b) identification of each Construction activity, including Ancillary Facilities, and their potential for generation of noise, including noise from Construction vehicles and any traffic diversions
  - c) identification of all potentially affected Sensitive Receivers
  - d) the Construction noise criteria specified in this Statement of Commitments
  - e) determination of appropriate noise criteria for each identified Sensitive Receiver
  - f) noise monitoring, reporting and response procedures
  - g) a description of management methods and procedures and specific noise mitigation treatments that will be implemented to control noise during Construction
  - h) justification for any activities outside the Construction hours specified in this Statement of Commitments. This includes identifying areas where Construction noise would be audible at any Sensitive Receiver
  - i) procedures for EMR approval of out of hours works
  - j) procedures for notifying residents of Construction activities that are likely to affect their noise amenity
  - k) contingency plans to be implemented in the event of non-compliances and/or noise complaints.

### ***Construction hours***

45. The Proponent will restrict Construction to between the hours of 7:00 am to 6:00 pm (Monday to Friday), 8:00 am to 1:00 pm (Saturday) and at no time on Sundays and public holidays except:



- a) for the delivery of materials required outside these hours by the Police or other authorities for safety reasons
- b) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm
- c) where works are required due to traffic management and safety reasons, subject to relevant traffic management approvals, as verified by the EMR

The Proponent will inform local residents and the Department of the method, timing and duration of Construction work approved under items (a) to (c) at least 48 hours before that work commences.

### **Construction noise criteria**

46. The Construction noise criteria for the Activity is to manage noise from Construction activities (as measured by an  $L_{A10}$  descriptor) so it does not exceed the background  $L_{A90}$  noise level by more than 5 dBA wherever possible.

The Proponent will identify and manage any activity that has the potential for noise emissions that exceed the criteria in accordance with the Construction Noise Management Sub-plan. The Proponent will implement all Reasonable and Feasible noise mitigation and management measures with the aim of achieving the Construction noise criteria.

If the noise from a Construction activity is substantially tonal or impulsive in nature (as described in Chapter 4 of the *NSW Industrial Noise Policy*), 5dBA will be added to the measured Construction noise level when comparing the measured noise with the Construction noise criteria.

### **Operation noise criteria**

47. The Proponent will design, construct, operate and maintain the Activity to ensure the noise emissions from the facility do not exceed the noise criteria specified in any Environmental Protection Licence issued by the DEC for the Activity under the *Protection of the Environment Operations Act 1997*

The Proponent will identify and manage any activity that has the potential for noise emissions that exceed the Operation noise criteria in accordance with their own EMS or OEMP. The Proponent will implement all Reasonable and Feasible noise mitigation and management measures with the aim of achieving the Operation noise criteria.

## **Soils and geology**

### **Acid sulfate soils management**

48. During the detailed design of the Activity, the Proponent will undertake a detailed acid sulfate soil investigation in areas where soils are proposed to be disturbed to ascertain the location and extent of any acid sulfate soils.

49. The Proponent will prepare an Acid Sulfate Soil Management Sub-plan as part of the CEMP. This Sub-plan will be prepared in consultation with the Department of Natural Resources and will:
- a) be consistent with the *Acid Sulfate Soils Manual* (Acid Sulfate Soil Management Advisory Committee 1998) or update
  - b) include a contingency plan to deal with the unexpected discovery of actual or potential acid sulphate soils
  - c) include a water quality monitoring program.

### ***Foundation hazards and aggressive soils***

50. The Proponent will undertake a detailed geotechnical site investigation of the Site during the detailed design of the Activity to assess soil reactivity, aggressivity and bearing capacity of foundation soils and bedrock and will incorporate the findings of this assessment into the design of the Activity.

### ***Mine subsidence***

51. The Proponent will consult the Mine Subsidence Board during the detailed design and Construction of the Activity and design and construct the Activity in accordance with the Mine Subsidence Board's specifications.

### ***Erosion and sediment control***

52. The Proponent will prepare an Erosion and Sediment Control Sub-plan as part of the CEMP. This Sub-plan will be prepared in consultation with Council and will:
- a) where relevant, be consistent with the Landcom guideline *Managing Urban Stormwater - Soils and Construction* (2004 or as updated), and the RTA's *Guidelines for the Control of Erosion and Sedimentation in Roadworks*.
  - b) identify the Construction activities that could cause soil erosion or discharge sediment or water pollutants from the site
  - c) describe management methods to minimise soil erosion or discharge of sediment or water pollutants from the site including a strategy to minimise the area of bare surfaces during Construction. These will include:
    - i. stockpiling of soil removed while trenching will occur nearby, within the easement, and be replaced once the pipe is laid
    - ii. actions to avoid transferring soil between areas
    - iii. limiting soil disturbance and installing sediment control devices before clearing vegetation, to prevent impacts on surrounding vegetation and creeks
  - d) describe the location and capacity of erosion and sediment control measures

- e) identify the timing and conditions under which Construction controls will be decommissioned
  - f) include contingency plans to be implemented for events such as fuel spills
  - g) identify how the effectiveness of the sediment and erosion control system will be monitored, reviewed and updated.
  - a) include the locations of major (defined as a volume greater than 500 cubic metres) spoil stockpiles
  - b) include the source of imported fill material and where it will be stockpiled and used
  - c) include methods to re-use or dispose of excess or unsuitable spoil material including estimated volumes and disposal sites.
53. During Construction, the Proponent will consult an appropriately qualified soil scientist according to a schedule identified in the Erosion and Sediment Control Sub-plan to:
- a) undertake inspections of temporary and permanent erosion and sedimentation control devices
  - b) ensure that the most appropriate controls are being implemented
  - c) check that controls are being maintained in an efficient condition
  - d) check that controls meet the requirements of any relevant approval and/or licence condition.

The Proponent will report the results of these inspections and any follow-up actions in the Construction Compliance Reports.

54. The Proponent will re-use or recycle all material excavated from Construction unless otherwise approved in the Erosion and Sediment Control Sub-plan. The Proponent will ensure that the re-use of material generated from Construction is maximised in preference to importing fill.

## **Surface water**

### ***Surface water management***

55. The Proponent will prepare a Surface Water Management Sub-plan in consultation with the Department of Primary Industries (Fisheries) and the DEC and will:
- a) be developed in accordance with *Managing Urban Stormwater: Soils and Construction* (Department of Housing 1998, revised by Landcom 2004)

- b) be consistent with the Erosion and Sediment Control Sub-plan and Acid Sulfate Soil Management Sub-plan
- c) include requirements for regular inspections of temporary and permanent erosion and sediment control devices by suitably qualified personnel
- d) require the retention of grassed drainage lines and minimisation of vegetation removal in drainage lines
- e) require the retention of topsoil in areas of the Site not excavated
- f) include drainage management practices and procedures for their implementation

### **Operation**

56. The Proponent will treat on-Site all wastewater discharges to remove oil and grease prior to discharging the wastewater to the wastewater treatment system at Munmorah Power Station. The Proponent will bund and contain the distillate storage tank and entire facility to prevent contaminated run-off from reaching the stormwater management system at the Munmorah Power Station and outlet canal.

### **Traffic**

57. The Proponent will appoint haulage contractor(s) with the necessary over-weight and over-sized cargo haulage experience and equipment to transport the gas turbine facility infrastructure to the Site under licence. The Proponent will direct its haulage contractor(s) to undertake the following in consultation with Wyong Shire Council, Newcastle City Council, Lake Macquarie City Council and the RTA:
- a) select the haulage route, mode and timetable
  - b) organise any necessary or required modifications to infrastructure, including any improvements to roads, temporary removal of street furniture and temporary modifications to existing infrastructure (eg roundabouts)
  - c) obtain all necessary haulage permits
  - d) comply with the haulage permits, including any requirements for pilot vehicles, police escorts and staging of delivery to satisfy travel time and route restrictions
  - e) phasing of delivery to satisfy Construction requirements and to ensure that transport infrastructure is not overwhelmed
  - f) alerting other transport users of the haulage activities by installing suitable warning signs and signage at appropriate locations along the route.

- g) a community information and awareness program to ensure that residents along the haulage route for the gas turbine facility infrastructure are informed of the haulage prior to its commencement
58. The Proponent will prepare a Transport Management Plan in consultation with Wyong Shire Council, Newcastle City Council, Lake Macquarie City Council and the RTA specifically for the haulage of the gas turbine facility infrastructure that will include the following:
- a) the exact location for delivery of gas turbine facility infrastructure on arrival at the Site
  - b) design and construction requirements for Site entry and exit points for the vehicles transporting the gas turbine facility infrastructure
  - c) a Site track network that is safe and suitable for the transportation of the gas turbine facility infrastructure
  - d) a community information and awareness program to ensure that residents along the haulage route for the gas turbine facility infrastructure are informed of the haulage prior to its commencement
59. The Proponent will prepare a Traffic Management Sub-plan as part of the CEMP. The Sub-plan will be prepared in consultation with Council and the RTA and will meet all reasonable requirements of Council and the RTA. The Sub-plans will be prepared in accordance with the RTA's *Traffic Control at Work Sites* guidelines and Australian Standard 1742.3 *Manual of Uniform Traffic Control Devices, Part 3: Traffic Control Devices for Works on Roads* and will include:
- a) identification of all public roads to be used by Construction traffic, in particular roads proposed to transport large quantities of Construction materials (other than the gas turbine facility infrastructure referred to in clause 40). The expected timing and duration of road usage will be stated
  - b) management methods to ensure Construction traffic uses identified roads
  - c) identification of all public roads that may be partially or completely closed during Construction and the expected timing and duration of these closures. Consideration will be given to programming Construction works to minimise road closures during peak hours and/or holiday periods
  - d) impacts on existing traffic (including pedestrians, vehicles, cyclists and disabled persons)
  - e) temporary traffic arrangements including property access
  - f) designating speed and load limits for heavy vehicle routes
  - g) identifying areas for Construction vehicle parking, turning, loading and unloading

- h) access to Construction sites including entry and exit locations and measures to prevent Construction vehicles queuing on public roads and to satisfy Council safety standards
  - i) a response plan for any Construction traffic incident
  - j) controls and management measures to ensure farm stock (sheep and cattle) are unable to escape from the Site through Construction entry and exit points.
  - k) monitoring, review and amendment mechanisms.
60. The Proponent will prepare road dilapidation reports for all roads that are proposed to be used by Construction traffic, to the extent the Traffic Management Sub-plan indicates that Construction is likely to have a substantial impact on them. These reports will be prepared before Construction commences and after Construction is complete. Copies of the reports will be provided to the relevant roads authority. Any damage resulting from Construction, except that resulting from normal wear and tear, will either be repaired at the Proponent's cost or an alternative arrangement for road damage negotiated with the relevant roads authority.

## **Waste management**

61. The proponent will store and dispose of all hazardous and industrial waste (as defined by *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes* (Department of Environment and Conservation, 2004) that may be generated on the Site in a manner that minimises the impacts of the waste on the environment, including appropriate segregation for storage and separate disposal by a waste transporter licensed by the DEC.
62. The Proponent will prepare Waste Management and Re-use Sub-plan(s) as part of the CEMP. The Sub-plans will address the management of wastes during the Construction and Operation stages respectively in accordance with the NSW Government's Waste Reduction and Purchasing Policy. The Sub-plan(s) will identify requirements for:
- a) the application of the waste minimisation hierarchy principles of avoid/reduce/re-use/recycle/dispose
  - b) waste handling and storage
  - c) disposal of wastes. Specific details will be provided for cleared vegetation, contaminated materials, glass, metals and plastics, hydrocarbons (lubricants and fuels) and sanitary wastes
  - d) any waste material that is unable to be re-used, re-processed or recycled will be disposed at a facility approved to receive that type of waste.

## **Hazard and risk**

### ***Pre-construction activities***

63. The Proponent will undertake a series of pre-construction studies to ensure the construction, commissioning and operation of the Activity is implemented in a safe manner without undue risks to the community and the environment. The studies will be included in the CEMP. The following studies will be undertaken:

- a) a Fire Safety Study for the Activity that addresses all aspects of the Department's publication Hazardous Industry Planning Advisory Paper No. 2 – Fire Safety Guidelines and the NSW Government's Best practice Guidelines for Contaminated Water Retention and Treatment Systems. The study will include a maintenance schedule for essential services and other safety measures. The study will also include an assessment of potential bushfire hazards and risks and a schedule of safeguard measures to mitigate these risks. The Proponent will submit the study to the Commissioner of the NSW Fire Brigades and the Department of Planning for approval prior to inclusion in the CEMP
- b) a Hazard and Operability Study (HAZOP) for the Activity prepared by an independent, qualified person or team approved by the Director-General. The study will be carried out in accordance with the Department's publication Hazardous Industry Planning Advisory Paper No. 8 – HAZOP Guidelines. The Proponent will submit the study to the Major Hazard Unit of the Department of Planning for approval prior to inclusion in the CEMP.
- c) a Construction Safety Study for the Activity, prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 7 – Construction Safety Study Guidelines. The Proponent will submit the study to the Major Hazard Unit of the Department of Planning for approval prior to inclusion in the CEMP.

### ***Bunding and spill management***

64. The Proponent will store and handle all combustible liquids and dangerous goods (as defined by the Australian Dangerous Goods Code) in accordance with:

- a) all relevant Australian Standards
- b) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund
- c) the DEC's Environmental Protection Manual Technical Bulletin *Bunding and Spill Management*.

In the event of an inconsistency between the requirements listed from a) to c) above, the most stringent requirement will prevail to the extent of the inconsistency.

### ***Aviation hazards***

65. At least six months prior to the commencement of Operation, the Proponent will consult with the Civil Aviation Safety Authority to include an appropriate warning notice in pilot documents.

### **Land use and property**

66. Where the Proponent obtains an easement over land for the Activity, the Proponent will negotiate conditions and compensation with affected landowners to offset any land use impacts.
67. The Proponent will undertake Construction activities in the vicinity of railway lines and roads in consultation with RailCorp and the RTA respectively.