

Glossary and abbreviations

AADT	Annual average daily traffic
ABS	Australian Bureau of Statistics
AEP	Annual exceedance probability
AERMOD	American Meteorological Society/ Environmental Protection Agency Regulatory Model
AGL	Above ground level
AGO	Australian Greenhouse Office
AHD	Australian height datum
AHIMS	Aboriginal heritage information management system
AMBS	Australian Museum Business Services (subconsultant that undertook the heritage assessments)
ANZECC	Australian and New Zealand Environment and Conservation Council
Aquaculture	The cultivation of aquatic organisms under controlled conditions
ARI	Average recurrence interval
ARTC	Australian Rail Track Corporation
AS	Australian standard
AUR	Auxiliary right turn (intersection treatment)
BAL	Basic left turn (intersection treatment)
Bentonite	A non-toxic, naturally occurring clay that is used in a slurry for directional drilling of pipelines
Biodiversity	The biological diversity of life, which is commonly regarded as comprising the following three components: - genetic diversity – the variety of genes (or units of heredity) in any population - species diversity – the variety of species - ecosystem diversity – the variety of communities or ecosystems.
Bioregion (region)	A bioregion defined in a national system of bioregionalisation. For this study this is the NSW South-western Slopes Bioregion as defined in the <i>Interim Biogeographic Regionalisation for Australia</i> (Thackway and Cresswell 1995).
BoM	Bureau of Meteorology
CASA	Civil Aviation Safety Authority
CEEC	Critically endangered ecological community
CEMP	Construction environmental management plan
Central West region	Region of NSW covered by the LGAs of Lachlan, Parkes, Cabonne, Orange, Bathurst, Lithgow, Bland, Forbes, Weddin, Cowra, Blayney, and Oberon
CH ₄	Methane
Compressor station	Also referred to as the 'pipeline inlet facility'
CO	Carbon monoxide
CO ₂	Carbon dioxide
CORTN	Calculation of road traffic noise
Critical habitat	The whole or any part or parts of an area or areas of land comprising the habitat of an endangered species, an endangered population or an endangered ecological community that is critical to the survival of the species, population or ecological community (Department of Environment and Conservation 2004). Critical habitat is listed under both the <i>Threatened Species Conservation Act 1995</i> and the <i>Environment Protection and</i>

	<i>Biodiversity Conservation Act 1999</i> and both the State (Department of Environment and Climate Change) and Federal (Department of the Environment, Water, Heritage and the Arts) Directors-General maintain a register of this habitat. Capitalisation of the term 'Critical Habitat' in this report refers to the habitat listed specifically under the relevant State and Commonwealth legislation.
CSIRO	Commonwealth Scientific and Industrial Research Organisation
dB	Decibel
dB(A)	A-weighted decibel
Department of Energy, Utilities and Sustainability (DEUS)	Department of Water and Energy was created in 2007, incorporating most of the functions of the former Department of Energy, Utilities and Sustainability. Some of the functions of the former DEUS, such as the Energy and Water Savings Funds and Action Plans, have been transferred to the new Department of Environment and Climate Change. The Accredited Service Provider program was also transferred to the Office of Fair Trading.
Department of Environment and Climate Change (DECC)	The NSW Department of Environment and Climate Change formed on 27 April 2007 incorporating the former NSW Department of Environment and Conservation in addition to some functions of the former Department of Natural Resources, the Department of Energy, Utilities and Sustainability and The Greenhouse Office.
Department of Environment, Water, Heritage and the Arts (DEWHA)	The Commonwealth Department of the Environment and Water, Heritage and the Arts (formerly the Department of the Environment and Water Resources) develops and implements national policy, programs and legislation to protect and conserve Australia's environment and heritage and to promote Australian arts and culture.
Department of the Environment and Water Resources (DEWR)	Now called the Commonwealth Department of the Environment and Water, Heritage and the Arts (DEWHA)
Department of Water and Energy (DWE)	The NSW Department of Water and Energy formed on 27 April 2007 and incorporates most of the functions of the former Department of Energy, Utilities and Sustainability, water-related functions of the former Department of Natural Resources and the Metropolitan Water Directorate from the former NSW Cabinet Office.
DGRs	Director-General's Environmental Assessment requirements
DOC	Depth of cover
DoL	The NSW Department of Lands
DoP	The NSW Department of Planning
Ecological community	An assemblage of species occupying a particular area
ECRTN	Environmental criteria for road traffic noise
EEC	Endangered Ecological Community
Environmental weed	Any plant that is not native to a local area that has invaded native vegetation
EP&A Act	The NSW <i>Environmental Planning and Approvals Act 1979</i>
EPA	The former NSW Environment Protection Authority
EPBC Act	The Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPBC Regulations	Environmental Protection and Biodiversity Conservation Regulations 2000
ERM Power	The proponent
ESD	Ecologically sustainable development
FHA	Final Hazard Analysis
Fugitive dust	Dust derived from a mixture of sources (non-point source) or not easily defined sources. Examples of fugitive dust include dust from vehicular traffic on unpaved roads, materials transport and handling, and un-vegetated soils and surfaces.
GGAS	NSW Government's Greenhouse Gas Abatement/Reduction Scheme — a greenhouse gas emissions trading scheme using project-based activities to offset the production of

	greenhouse gas emissions
GHG	Greenhouse gas
GIS	Geographic information systems
GLC	Ground level concentration
GPS	Global positioning systems
Goolma Road	Location of the proposed power station; also known as Gulgong Road and Mudgee Road
Green Paper	<i>Energy Directions Green Paper</i> . Written by the NSW Government in 2004
Gulgong Road	Location of the proposed power station; also known as Goolma Road and Mudgee Road
GWh	Gigawatt-hour
ha	Hectare. A measure of area equivalent to 10,000 square metres
Habitat	An area or areas occupied, or periodically or occasionally occupied by a species, population or ecological community, including any biotic or abiotic components
HAZOP	Hazard and operability
HIPAP	Hazardous Industry Planning Advisory Paper
IBC	Intermediate bulk containers
INP	Industrial Noise Policy (NSW)
Horticulture	The cultivation of plants
Key threatening process	A process that threatens, or could threaten, the survival, abundance or evolutionary development of native species, populations or ecological communities (Department of Environment and Conservation 2004). Key threatening processes are listed under the <i>Threatened Species Conservation Act 1995</i> , the <i>Fisheries Management Act 1994</i> and the <i>Environment Protection and Biodiversity Conservation Act 1999</i> .
kL	Kilolitre
km	Kilometre. A measure of length equivalent to 1,000 metres
Km ²	Square kilometres
kV	Kilovolt. A measure of electric potential difference equivalent to one thousand volts
kVA	Kilovolt-amps
kW	kilowatt
kW/m ²	Kilowatts per square metre
L _{Aeq}	Equivalent noise level (average)
L _{A1}	Noise level 1% of the time
L _{A10}	Noise level 10% of the time
L _{A90}	A-weighted sound pressure level exceeded for 90% of the time (background)
LEP	Local Environment(al) Plan
LGA	Local government area
Likely	Taken to be a real chance or possibility (Department of Environment and Conservation 2004)
Local population	The population that occurs within the study area, unless the existence of contiguous or proximal occupied habitat and the movement of individuals or exchange of genetic material across the boundary can be demonstrated (as defined by NSW National Parks and Wildlife Service 1996)
Locality	The area within a 10 kilometre radius of the study area
LoS	Level of service
m	Metre. A measure of length

m/s	Metres per second
mg/m ³	Milligrams per cubic metre
Migratory species	Species listed as Migratory under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> .
ML	Megalitre. A measure of volume equivalent to one million litres
ML/year	Megalitres per year
MLV	Mainline valve
MPa	Megapascal. A unit of pressure
MR 233	Main Road 233 (Regional Road); known as Goolma Road, Gulgong Road and Mudgee Roa
Mt	Megatonne
Mudgee Road	Location of the proposed power station; also known as Gulgong Road and Goolma Road
MW	Megawatt. A measure of power equivalent to one million watts
MWh	Megawatt-hour. A measure of power equivalent to 1,000 kilowatt-hours
NEMMCO	National Electricity Market Management Company
NEPM	National Environment Protection Measure
NES matters	Matters of National Environmental Significance under the <i>Environmental Protection and Biodiversity Conservation Act 1999</i>
NHMRC	National Health and Medical Research Council
N ₂ O	Nitrous oxide
NO	Nitrogen monoxide
NO ₂	Nitrogen dioxide
NO _x	Nitrogen oxide
NR	Not reached
NSW	New South Wales
O ₃	Ozone
OCGT	Open-cycle gas turbine
OEMP	Operation environmental management plan
Orana region	A region of NSW covered by the LGAs of Bourke, Brewarrina, Walgett, Cobar, Bogan, Warren, Coonamble, Gilgandra, Warrumbungles, Narromine, Dubbo, Wellington, and Mudgee
Owen Inquiry Report	<i>Inquiry into electricity supply in NSW</i> . Written by Professor Owen in 2007
PAH	Polyaromatic hydrocarbons
PB	Parsons Brinckerhoff (consultant that prepared this report)
PCV	Pressure control valve
PHA	Preliminary Hazard Analysis
Pipeline inlet facility	Also referred to as the 'compressor station'
PJ	Petajoules. A measure of energy equivalent to a thousand trillion joules
PM _{2.5}	Particulate matter less than or equal to 2.5 µm in aerodynamic diameter
PM ₁₀	Particulate matter less than or equal to 10 µm in aerodynamic diameter
POEO Act	<i>Protection of the Environment operations Act 1997</i>
ppm	Parts per million
PRCI	Pipeline Research Council International

Proponent	The person proposing to carry out development comprising all or any part of the project (ERM Power)
Proposed power station site	The proposed power station site is located adjacent to an existing TransGrid substation on a road known as Goolma Road, Gulgong Road and Mudgee Road. It is approximately 2 kilometres from the outskirts of the Wellington township.
Protected species	Those species defined as protected under the <i>National Parks and Wildlife Act 1974</i> . Includes all native animals, and all native plants listed on Schedule 13 of the <i>National Parks and Wildlife Act 1974</i>
QRA	Quantitative risk assessment
Recovery plan	A plan prepared under the <i>Threatened Species Conservation Act 1995</i> or the <i>Environment Protection and Biodiversity Conservation Act 1999</i> to assist the recovery of a threatened species, population or ecological community
RL	Relative level
RNE	Register of the National Estate
RTA	NSW Roads and Traffic Authority
SCADA	Supervisory, control and data acquisition
SCC	Stress corrosion cracking
SEPP	State Environmental Planning Policy
SIDRA	An intersection simulation program that assesses the performance of intersections based on intersection layout and traffic flows
Significant (ecology)	Important, weighty or more than ordinary (as defined by NSW National Parks and Wildlife Service 1996)
SISD	Safe intersection sight distance
SO ₂	Sulfur dioxide
SO _x	Oxides of sulfur
SPL	Received sound pressure level
Subject site (Ecology)	The area to be directly impacted by the construction and/or operation of the proposal. For the Wellington Gas-fire Power Station and Gas Pipeline project the subject site is taken to include a 25–30-metre wide corridor necessary for construction of the gas pipeline as well as the footprint of the power station itself
Study area (Ecology)	The subject site and an additional area of investigation around the study site that could potentially be affected by the proposal indirectly. This is taken to include a 1 kilometre buffer around the subject site
SWL	Source sound power level
TAPM	The Air Pollution Model
t CO _{2-e}	Tonnes of carbon dioxide equivalent
TCP	Traffic control plan
TEOM	Tapered Element Oscillating Meter
Threatened biodiversity	Threatened species, populations or ecological communities, or their habitats as listed under either the <i>Threatened Species Conservation Act 1995</i> or the <i>Environment Protection and Biodiversity Conservation Act 1999</i>
Threatened species, populations and ecological communities	Species, populations and ecological communities listed as vulnerable, endangered or critically endangered (collectively referred to as Threatened) under the <i>Threatened Species Conservation Act 1995</i> , <i>Fisheries Management Act 1994</i> or the <i>Environment Protection and Biodiversity Conservation Act 1999</i> .
TSC Act	<i>Threatened Species Conservation Act 1995</i>
TSP	Total suspended particulates
µg/m ³	Micrograms per cubic metre

US EPA	United States Environmental Protection Agency
VCE	Vapour cloud explosion
VENM	Virgin excavated natural material
Viable local population	A population that has the capacity to live, develop and reproduce under normal conditions, unless the contrary can be conclusively demonstrated through analysis of records and references (as defined by NSW National Parks and Wildlife Service 1996)
Viticulture	The cultivation of grapevines
WDI	Wellington Development Inc
White Paper	<i>Energy White Paper</i> . Written by the Commonwealth Government in 2004